

**GOVERNING THE “OBESITY EPIDEMIC”:
PUTTING PREVENTATIVE PUBLIC HEALTH TO WORK IN
LONDON AND AUSTIN.**

Clare Beatrice Herrick

**Department of Geography
University College, London**

**Submitted for the degree of PhD in
the University of London**

July 2007

UMI Number: U591602

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI U591602

Published by ProQuest LLC 2013. Copyright in the Dissertation held by the Author.
Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against
unauthorized copying under Title 17, United States Code.



ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106-1346

I declare that this PhD is my own work.

Clare Herrick

Abstract

Recent calls for a critical geographical approach to public health have facilitated an engagement with a new range of research topics and methodologies, of which obesity is a particularly prescient example. This thesis aims to first, examine and compare obesity's historical emergence in the UK and US through three conceptual spheres: governmentality; the political economy of food; and cultural anthropologies of consumption. Second, this work questions what obesity, as both a biomedical epidemic and one of meanings, reveals about the tensions inherent within neo-liberal governance in the two countries through examples of obesity prevention measures in London and Austin, Texas.

This work charts and critically interrogates the emergence of a global epidemic of obesity in the last two decades with reference to the 'obesity studies' literature. This discussion then backgrounds an analysis of relevant policy documents and newspaper coverage showing how the biomedical epidemic has been rhetorically employed to create an "epidemic of signification", legitimating public health intervention. The UK Labour government has recently promised to "support informed choice", while in the US, the doctrine of "personal responsibility" with regards to health has been at the fore of obesity prevention policy. These epistemological differences are explored through findings from semi-structured stakeholder interviews, health survey data, censuses and market research.

In the light of such discussions, the three conceptual spheres are revisited to compare and contrast the case study findings and investigate the tensions at work within UK and US neo-liberal governance. The thesis concludes that obesity is not a universal or generalisable global epidemic, but exhibits distinct and localised risk factors, health outcomes and costs that are inextricable from the wider systems of governance that both frame and manage the condition.

Table of contents

Abstract.....	2
Table of contents	4
Table of Figures	6
Acknowledgements	10
List of Acronyms	11
Chapter One – Introduction to the thesis	12
1.1 Introduction	13
1.2 Aims of the thesis	16
1.3 Research themes and methodology	18
1.4 Conceptual framework	23
1.5 Structure of the thesis	27
Chapter Two – Paradigmatic shifts in medical geography	32
2.1 Introduction	32
2.2 Traditional or Positivistic Medical Geography.....	34
2.3 Contemporary Medical Geography	37
2.3.1 The humanist turn.....	44
2.3.2 The Marxist turn.....	48
2.3.3 Health and Place	50
2.3.4 The Cultural Turn.....	52
2.3.5 A ‘Critical’ Geography of Public Health.....	58
2.4 Conclusion.....	63
Chapter Three: Obesity as a geographical research agenda	68
3.1 Introduction	68
3.2 Classifying and defining obesity as an ‘epidemic of signification’	73
3.3. Governmentality	76
3.4 The political economy of food.....	83
3.5 Cultural anthropologies of consumption	93
3.6 Conclusion.....	100
Chapter Four: The multiple epidemics of obesity.....	104
4.1 Introduction	104
4.2 Obesity in a comparative historical context.....	108
4.3 Epidemiology and the emergence of an “obesity ‘epidemic’”.	112
4.4 Gluttony or sloth?.....	120
4.5 Beyond the energy balance equation	136
4.6 The consequences of obesity	142
4.7 Conclusion.....	144
Chapter Five: Health inequalities, informed choice and obesity prevention policy in England	149
5.1 Introduction	149
5.2 Conceptualising health inequalities 1980-2001.....	153
5.3 Calculating the cost of obesity 2001-2004	158
5.4 Taking responsibility 2004 – present.....	163
5.5 Moving from policy to practice in place	177
5.6 Conclusion.....	179

Chapter Six: Priority area, personal responsibility and the development of US obesity prevention policy	184
6.1 Introduction	184
6.2 Legitimising prevention 1979–2000.....	187
6.3 Structural capacity building 2001-2004	198
6.4 Putting the federal into state practice 2004 – present	205
6.5 Placing Texas.....	213
6.6 Conclusion.....	218
Chapter Seven: Preventing obesity through informed choice in London.....	223
7.1 Introduction	223
7.2 Camden and Islington.....	226
7.3 Supporting informed choice	238
7.4 The London Food Strategy (LFS)	241
7.5 The “Consciousness Industries”	255
7.6 Active Travel	265
7.7 Conclusion.....	274
Chapter Eight: Personal responsibility and the “fit city” in Austin	279
8.1 Introduction	279
8.2 Austin, Texas.....	281
8.3 Creating a personal responsibility culture	288
8.4 Explicating the “Hispanic Paradox” and targeted intervention	291
8.5 Social marketing the Steps programme	304
8.6 Branding urban fitness.....	310
8.7 Conclusion.....	323
Chapter Nine: Theory, practice and the plausibility of prevention	328
9.1 Introduction	328
9.2 Governmentality	331
9.3 Political economy of food	339
9.4 Cultural anthropologies of consumption	346
9.5 Preventing obesity – practically possible or conceptually unobtainable?	354
9.6 Conclusion.....	360
Chapter Ten: Conclusion	365
10.1 Introduction	365
10.2 Limitations to the research	365
10.3 Avenues of further research.....	368
10.4 Conclusion.....	374
Appendix.....	377
1. Bibliography	377
2. Methodologies	411

Table of Figures

Figure 1 - Obesity rates for selected countries (Source: OECD, 2006)	15
Figure 2 - The three conceptual spheres, their relation to the problematisation of obesity, central tenets and chief proponents.....	71
Figure 3 –National Institutes of Health BMI table used to calculate obesity (Source: http://www.nhlbi.nih.gov/guidelines/obesity/bmi_tbl.pdf).....	74
Figure 4 – US state obesity prevalence 1985-2005 (CDC, 2005).....	115
Figure 5 - BMI by race and gender in England (HSE, 2004)	118
Figure 6 - Socioeconomic status and BMI by gender in England (HSE, 2004)	118
Figure 7 - Waist-hip ratio (central obesity) and race in England (HSE, 2004).....	119
Figure 8 - An 'Ecological' model of obesity (after Eggar and Swinburn, 1997:478).....	121
Figure 9 - Aetiological theories of obesity (after Lang and Raynor, 2005).....	122
Figure 10 - Environmental/ structural causes of obesity, theories and proponents.....	140
Figure 11 - 2005 USDA food pyramid graphic now accompanied by more detailed dietary advice, tailored pyramids to different ethnic diets and proscriptions for activity (USDA, 2005).....	195
Figure 12 - Small Step print advert.....	207
Figure 13 - Health care spending by country as a % of GDP and per capita (Source: OECD Statistics, 2006).....	208
Figure 14 - Texas state map	213
Figure 15 - Texas and USA census data showing population size, racial composition and average incomes in 2000 (US Census Bureau, 2001).....	214
Figure 16 - US % Overweight and Obese, 2000 (Ogden et al, 2006:1552).....	214
Figure 17 - Overweight and Obesity by race and gender in Texas, 2000 (TDH and USDA, 2003)	215
Figure 18 - Texas 'Fat and Fit City' rankings (of 25) by <i>Men's Fitness</i> magazine 2001-2006	217
Figure 19 - Camden ward map (Camden PCT, 2006)	230
Figure 20 - Islington ward map (Islington Borough Council, 2006)	231

Figure 21 - Camden and Islington racial composition (from Census 2001 data)	232
Figure 22 - % with a long term limiting illness by race in London (Health Survey, 2003)	232
Figure 23 - % with a long term limiting illness by race in Camden (Health Survey for England, 2004).....	232
Figure 24 - % with a long term limiting illness in Islington (Health Survey for England, 2004).....	232
Figure 25 - Self reported health status in London by race (Health Survey for England, 2004)	233
Figure 26 - Self-reported health status by race in Camden (Health Survey for England, 2004).....	233
Figure 27 - Self reported health by race in Islington (Health Survey for England, 2004)	233
Figure 29 - Camden and Islington ward socioeconomic status (Census, 2001)	234
Figure 30 - Ward variations in self-reported health by housing tenure in Camden and Islington (Census, 2001)	235
Figure 31 - Overweight and obesity rates by original London SHA 2002 (HSE, 2004)	236
Figure 32 - New Strategic Health Authority map	237
Figure 33- Gentrified Exmouth Market in Islington with local authority housing behind (photo, author's own)	238
Figure 34 Campaign graphic from the Mayor's 'We are One'	244
Figure 35 - Affordable fruit and vegetables at Chapel Market, Islington (photo, author's own)	246
Figure 36 - Adult care pathway for obesity (NHS, 2006).....	250
Figure 37 - Local Halal food store in Bangladeshi south Camden (photo, author's own)	254
Figure 38 - Everyday Sport creative (Sport England and Team Saatchi)	263
Figure 39 - Transport for London cycling promotion campaign poster summer 2006 (TfL, 2006).....	269
Figure 40- Satellite imagery of Chapel Market, Islington (Google Earth)	272
Figure 41 - Signage for walkers in central London (photo, author's own)	274

Figure 42 - Map of Austin city neighbourhoods with East Austin marked (City of Austin 2006).....	283
Figure 43 - Austin and East Austin Income Levels (US Census, 2001).....	286
Figure 44 - Austin and East Austin racial composition (US Census, 2001).....	286
Figure 45 - Austin and East Austin English language use (US Census, 2001).....	287
Figure 46 - Austin and East Austin Poverty Status (US Census, 2001)	287
Figure 47 – City zip codes with <i>Steps</i> intervention zip codes shown below (map, personal correspondence, Lyn Davis [51])	295
Figure 48 - East 6th Street, East Austin cheque cashing and liquor stores (Photo, author's own)	296
Figure 49 - East 6th Street looking towards downtown - dive bars (Photo, author's own)	297
Figure 50 - I-35 freeway seen to the left of the photo. Shot captured in East Austin heading south (Photo, author's own)	298
Figure 51 - Wendy's , East 6th Street (Photo, author's own)	302
Figure 52 - food retailers in Austin (mapped from store addresses from corporate websites)	303
Figure 53 - i thrive logo (www.ithriveaustin.org).....	307
Figure 54 - Downtown Austin (circled), with I-35 to the East, Colorado river to the south and residential areas to the west, east and north (Google Earth)	313
Figure 55 - Downtown Austin (photo, author's own)	314
Figure 56 - Cherrywood, Austin. Red line indicates the quickest route from house A to nearest supermarket (circled) on foot. Green line indicates route on foot to circled retail area across freeway (image, Google Earth, 2007)	315
Figure 57 - Austin Town Lake hike and bike trail (shown dashed around perimeter of lake) (Austin Parks and Recreation Department, 2005)	316
Figure 58 - Town lake Trail downtown and its well-maintained environment.....	317
Figure 59 - Zilker Park (photo, author's own).....	317
Figure 60 - Town lake Trail east of I-35 – note how the condition of the trail and the surroundings deteriorate in comparison to the west side	318
Figure 61 - Paul Carrozza, founder of RunTex and member of the President's Council on physical fitness.....	318

Figure 62 - Sainsbury's local format, Camden (photo, author's own).....	343
Figure 63 - "L'obésité tue" - a campaign poster from the French Group the National Collective of Associations for the Obese (CNAO).....	350

Acknowledgements

My sincere thanks must first go to Professor Matthew Gandy, without whose advice, time and ever-critical eye, this thesis would still be a work in endless progress. I could not have wished for a more engaged, efficient and dedicated supervisor. I also owe Nicola Shelton huge thanks for her support and essential input as second supervisor.

This work would have not been possible without the enthusiasm and time of interviewees in London and Austin. Of these, Kim Bandalier at the Texas Department of Health, Lyn Davis at Steps to a Healthier Austin and Paul Davis at Camden Borough Council deserve special mention for going out of their way to help and involve me in their own work. Thanks are also due to the ESRC for funding this research, the fieldwork trip to Texas and my overseas institutional visit to the National University of Singapore.

Finally, my gratitude Kirsten Gray for her friendship in Austin and beyond. My passion for the city and for Texas is, without doubt, due to her. My family and friends have listened to me talk endlessly about this research and I struggle to place a value on their patience and encouragement. I also owe a particular debt to Lou Henderson, Denise and Brian Herrick for their generosity of time and proof-reading skills. Last, but never least, to David Reubi. I could not wish for more.

List of acronyms

AUSD – Austin Unified School District
BME – Black and Minority Ethnic
BMI – Body Mass Index
BRFSS – Behavioral Risk Factor Surveillance System (US)
CDC – Centers for Disease Control (US)
CGF – Clinical Governance Framework (CGF)
CHD – Coronary heart disease
CHI – Committee for Health Improvement (UK)
CMO – Chief Medical Officer (UK)
CSR – Corporate Social Responsibility
CVD – Cardiovascular disease
DCMS – Department for Culture, Media and Sport (UK)
DE – Department of Education (US)
DEFRA – Department of the Environment, Farming and Rural Affairs (UK)
DfES – Department for Education and Skills (UK)
DH - Department of Health (UK)
DHHS – Department of Health and Human Services (US)
DoT – US Department of Transportation
DTLR – Department of Transport, Local Government and the Regions (UK)
DWP – Department for Work and Pensions (UK)
EFS – Expenditure and Food Survey (UK)
EIA – Environmental Impact Assessment
FDA – Federal Drug Agency (US)
FSA – Food Standards Agency (UK)
HAZ – Health Action Zones (UK)
HDA - Health Development Agency (UK)
HEA – Health Education Authority (UK)
HIA – Health Impact Assessment
HSE – Health Survey for England (UK)
IASO – International Association for the Study of Obesity
LA – Local Authorities (UK)
LAA – Local Area Agreements (UK)
LEA – Local Education Authorities (UK)
LHC - London Health Commission
LHO – London Health Observatory

LIDNS – Low Income Diet and Nutrition Survey (UK)
LSP – Local Service Partnerships (UK)
MAFF – Ministry of Agriculture, Fisheries and Food (UK)
NAO – National Audit Office (UK)
NCC – National Consumer Council
NCD – Non-communicable diseases
NDNS – National Diet and Nutrition Survey
NHANES – National Health and Nutrition Examination Survey
NHS – National Health Service
NICE – National Institutes for Clinical Excellence (UK)
NSF – National Service Framework (UK)
NSMC – National Social Marketing Centre
ODPM – Office of the Deputy Prime Minister (UK)
PCT – Primary Care Trust (UK)
PHO – Public Health Observatories (UK)
PPP – Public-Private Partnerships
SHA – Strategic Health Authority
TDH – Texas Department of Health (US)
WHO – World Health Organisation
USDA – United States Department of Agriculture (US)
VCS – Voluntary and Community Sector (UK)

Chapter One – Introduction to the thesis

1.1 Introduction

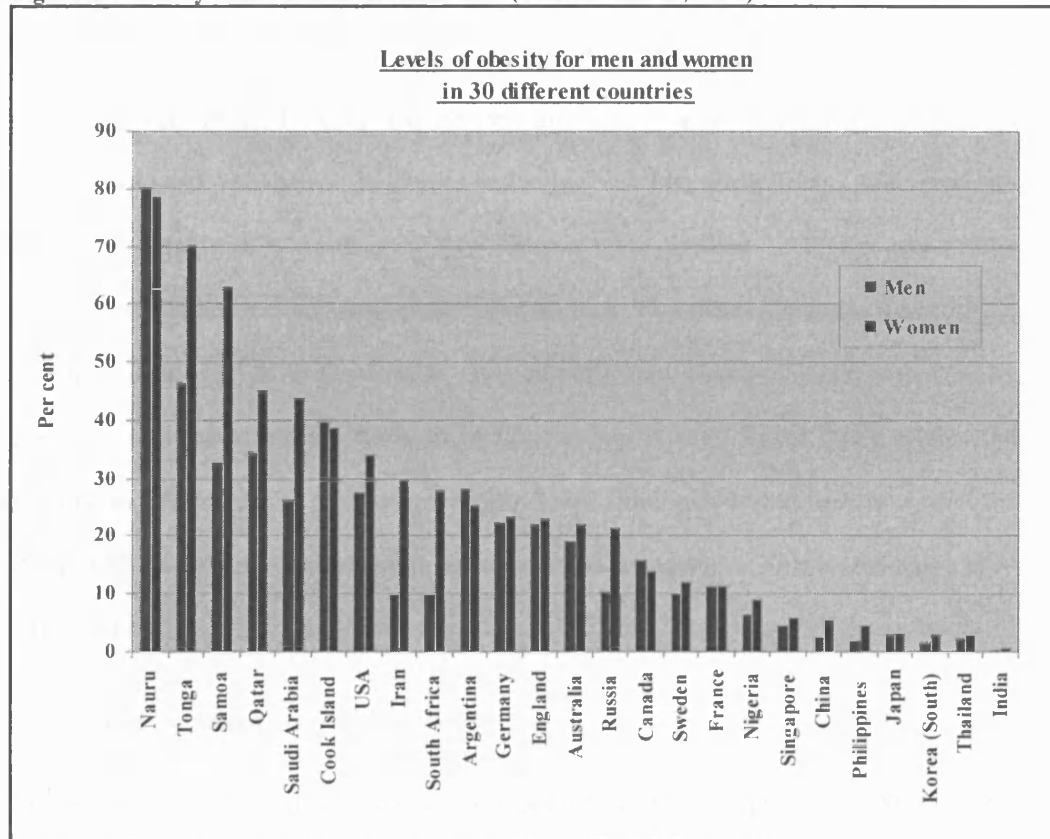
This thesis was born in the “year of obesity” (Lemonick, 2004b) when the topic occupied centre stage in the world’s press, policy makers’ agendas, best-seller book charts and even found fame on the big screen. The global success enjoyed by Morgan Spurlock’s documentary *Supersize Me* and Eric Schlosser’s exposé of the scale of industrialised agriculture in *Fast Food Nation* highlight the degree to which the topic has captured and permeated the public imagination. Yet, despite this fascination, or maybe because of it, at that time obesity still seemed to court very limited attention by social scientists. The irony of this disinterest seemed glaringly apparent while I was searching for innovative ways to expand upon an earlier research project examining how and why the practices justifying the controversial trade in genetically modified organisms (GMOs) from the United States to developing countries were predicated on their ability to alleviate global malnutrition (Herrick, 2005). Indeed, the discourses repeatedly used to sanction the use of new technology - in spite of fears over the possible long term environmental and health risks - to an often hostile public frequently hinge on the strategic use of statistics such as, for example, the fact that over a billion people worldwide are estimated to be food insecure (or without sufficient food for survival) and suffering from chronic hunger (Senauer and Sur, 2001). Yet, the logic of this argument becomes more difficult to justify when the World Health Organisation (WHO) estimate that 1.6 billion adults are overweight or obese (WHO, 2005).

Malnutrition as a result of food insecurity can therefore be manifest in two ways: hunger and over-satiation. This seemingly contradictory situation does not simply mark out developing countries from developed or poor from rich, but the two conditions rather exist in a complex synchronicity at a variety of geographic scales. Moreover, situations of hunger or over-satiation are rarely, as Amartya Sen (1981) suggests and as my

previous research has shown (Herrick, 2005), apolitical. Furthermore, the issues of health and disease that inevitably accompany food production and consumption are linguistically and discursively powerful, further adding to their political salience and the accompanying politicisation of individuals and groups of bodies. It therefore seemed a logical and illuminating new direction to undertake a critical comparative study of overweight and obesity from the somewhat paradoxical-sounding starting point that over-nutrition now represents as significant a public health challenge as malnutrition. With the geographical and social science literature just starting to take hold of these ideas, the field was consequently wide open for original empirical research underpinned by a novel combination of theoretical approaches.

In 2002, 31% of the US population were obese (CDC, 2004: 176) and 21% of Britons were also facing elevated health risks as a result of being obese (HSE, 2004). In 1992, the WHO International Conference on Nutrition linked dietary and lifestyle factors with the rise in non-communicable diseases (NCDs). Indeed, with 46% of the global burden of disease currently apportioned to NCDs (WHO, 2003a:4), and the prevalence of obesity rising annually, there is little surprise that the WHO classified overweight as a “chronic” NCD (2003: 2). Furthermore, as figure 1 shows, high obesity prevalence is not borne solely by developed countries, but exhibits a distinct global geography with some South Pacific and Middle Eastern nations claiming rates far exceeding those of the US and Iran, South Africa and Argentina exceeding those of the UK (Bassett and Perl, 2004; Carroll, 2004; OECD, 2006). The WHO’s reclassification of body weight as a disease raised public and political interest in personal dietary and lifestyle choices and their health effects, the structural conditions governing these and the legitimacy of intervention.

Figure 1 - Obesity rates for selected countries (Source: OECD, 2006)



At root obesity is “a major risk factor for coronary heart disease and is associated with increased risk of hypertension, dyslipidemia [an elevation of blood lipids], diabetes, certain cancers and other disorders” (Daviglius *et al*, 2004: 2743). However, the relationship between exposure to obesity’s risk factors (e.g. diet and physical activity) and individual body weights remain less certain. As a result, designing the obesity prevention policy and programmes that form the main focus of this empirical research is fraught with uncertainty, not least as it raises questions as to the justifiable limits of governance. Given that the risk of obesity has social, political, economic, genetic, psychological environmental and cultural determinants, the conceptual framework for this work is necessarily interdisciplinary, while at the same time remaining mindful of the contribution that a geographical approach to the study of obesity could make.

This introduction sets out the structure and rationale for this thesis. The three core aims of the work will first be outlined before setting out the four research themes and briefly describing the methodologies chosen to interrogate these. This work uses both quantitative and qualitative methods, reflecting its interdisciplinary goals and an increasing trend within health geography to draw upon detailed qualitative research to supplement, deepen and augment quantitative sources. This thesis compares the rationale and techniques for governing health and, in particular, obesity in UK and US, by drawing upon more detailed research in London and Austin, Texas that explores the practice and discourses of obesity prevention. These findings are then used to re-visit the theoretical discussions set out within the conceptual framework. This introduction ends with brief chapter summaries of the thesis.

1.2 Aims of the thesis

This thesis aims, in the first instance, to respond to Robyn Longhurst's (2005) call for attention to the topic of obesity by geographers. The work thus aims to be contemporary and prescient in the context of ongoing public health policy debates in order to help geography claim a stake in an increasingly interdisciplinary field. Recent theoretical developments within medical geography have been accompanied by support for qualitative research methods such as participant observation, interviews, detailed ethnographies and discourse/ narrative analysis. This work consequently aims to contribute to current work in this field, while at the same time remaining mindful of the importance of quantitative data in public health. Policy proceeds from an analysis of risk groups and risk areas, and for this reason, the work will synthesise data from public health surveys from the United Kingdom and United States with qualitative interview findings, policy and media analysis to re-visit theoretical debates in the light of empirical findings.

Second, this work aims to contribute to the burgeoning field of obesity studies by “bringing a spatial perspective to bear on the social relations surrounding fatness” (Longhurst, 2005: 248). It is notable that accounts of obesity (including biomedicine, nutritional science epidemiology, physiology, anthropology, social history and sociology) very rarely draw upon specific place-based examples. This seems an important omission given that developing effective prevention policy is being highlighted as urgent at a range of scales from the supranational to community, and in both the UK and US, the local is recognised as one of the most effective scales for public health interventions. Even more revealing than a single case study, a comparative analysis can lend new depth and complexity to what is now being referred to as the “obesity debate”. Examples of obesity prevention measures from a range of stakeholders in central London and Austin, Texas, set within their national policy, political and healthcare contexts and analysed with reference to the neo-liberal rationales of personal responsibility and choice should offer a new and insightful take on the topic.

Third, this work endeavours to interrogate the practice of public health in the light of changing burdens of disease, the rationalisation and restructuring of healthcare systems and shifting modes of governance. What has been termed the ‘new public health’ (MacKian *et al*, 2003) is not only prevention-orientated and facing tightening budgets, but also struggling to retain the legitimacy of its utilitarian roots given the shift towards personalised healthcare systems based on individual responsibility and choice. Obesity poses a number of challenges to public health, especially in the US where rapid demographic changes mean that Hispanics¹ are overtaking Anglos as the majority ethnicity in states such as Texas. With public health models of disease risk predicated on Anglo data, these new racial landscapes mean that many are calling for a reworking of

¹ The term Hispanic and Latino are used in this text interchangeably to denote persons of Central or South American origin living in the US. While it is acknowledged that the two terms have slightly different political and cultural connotations, represented in a substantial body of literature dedicated to the topic, for the purposes of this work, the two terms shall be used as unproblematic synonyms.

the discipline. This critical approach to public health through the lens of obesity should help contribute to such debates.

1.3 Research themes and methodology

To respond to the aims of this thesis and address the gaps identified in the health geography literature and within the broad field of obesity studies, this work draws on both quantitative and qualitative sources, with primary and secondary data collection and analysis driven by four research themes:

- 1. An exploration of the critical utility of understanding obesity as a public health “crisis” in a biomedical sense and also as an attendant set of discourses and meanings framed through wider social, economic and political processes.*
- 2. The strategic use of these framings to legitimate public health intervention as a governmental technique to prevent further rises in obesity upon individual lifestyle choices.*
- 3. The forms and rationales of the obesity prevention measures currently in place and under development in the UK and US.*
- 4. What such measures reveal about the tensions within neo-liberal modes of governance between the duty and expectation of the state to ensure the greater good and its appeals to individual personal responsibility in the name of morality and economic efficiency.*

With the exception of Peter Stearns’ (1997) comparative study of the social history of dieting in France and the UK, there have been few notable surveys of obesity’s emergence as a problem “here and now” (Guthman and Dupuis, 2006: 428) necessitating dedicated action to prevent further rises in prevalence, healthcare costs and its future burden on the state. Reflecting the broad and interdisciplinary nature of the topic, the

research themes will be explored through several sets of sources from both the UK and the US. A comparative approach has been chosen, in the first instance, to contest the assumption that obesity is a fundamentally American problem. While the US is globally synonymous with obesity, the same cannot be said of the UK, despite the country recently being crowned one of the two fattest in Europe (OECD, 2006). The British acknowledge that theirs is a country of expanding girth, but still suggest this situation has emerged from the globalisation of American lifestyles (Feachem, 2001; Revill, 2003). Yet, conversely, there is virtually no recognition among Americans of high European obesity rates such is the perception that the condition is something both uniquely American and, moreover, unique to certain parts of the US. Moreover, a cross-national study of health, as Vlahov and Galea (2002) contend, is particularly instructive as it can highlight the ways in which differential and key features of urban environments shape health outcomes.

The chosen case study sites of London and Austin present interesting points of comparison. Texas has been primarily chosen as it is among the top five states in the Centers for Disease Control's (CDC) official state rankings of obesity prevalence. The state is also synonymous with excess being, with the exception of Alaska, the biggest in the country, the second richest after California (US Department of Commerce data, 2006), deeply conservative and religious. Yet, within the state, there are great variations in people, lifestyles and the cities they inhabit. While Austin is a far smaller city than London, it is unusual within Texas for being crowned the 'fittest' city in a state composed of some of the nation's 'fattest' (*Men's Fitness*, 2006), an accolade that will be explored in more detail later in this work. London is thus directly comparable as it was at the bottom of a recent national league table of fat cities (BBC, 2006), despite the fact that, like Austin, it has childhood obesity rates far exceeding national averages (London Health Observatory, 2004). Furthermore, two cities have been chosen as the

fundamental unit of analysis to explore the questions of governance set out in the research themes in line with Brenner and Theodore's contention that "cities have become strategic targets for an increasingly broad range of neo-liberal policy experiments, institutional innovations and politico-ideological projects" (2002: 375). There are few qualitative empirical studies within health geography, and certainly none concerning obesity, which hinge on the notion that cities are now "geographical targets" and "institutional laboratories" (*ibid* pp.368). Obesity, furthermore, reveals how London and Austin are now distinct entrepreneurial spaces where efforts to improve health through a variety of creative governmental and non-governmental means are being constantly tested, evaluated and modified.

Moving from the city, the analysis is scaled down to the local in order to reflect and explore the increasing devolution of health promotion and obesity prevention within the broader context of shifting paradigms concerning the most effective scale of governance. In London, recent changes to the National Health Service (NHS) mean that national public health policy must be implemented by local Primary Care Trusts (PCTs), overseen by Strategic Health Authorities (SHAs) making these valuable scales and sites of analysis. Until recently, Camden and Islington composed one PCT under the North Central London SHA. By virtue of the two boroughs' persistent and coexisting deprivation and wealth, they exemplify the health inequalities that underlie virtually all UK public health policies and, furthermore, exacerbate the risk of obesity. Camden and Islington are also in the heart of London's newly-dubbed "Central Activity Zone" and exhibit many of the same characteristics and face the same issues that define the numerous recent spatial strategies to regenerate the city laid out in the *London Plan* (Mayor of London, 2004). Furthermore, both boroughs also exhibit relatively high proportions of non-white residents (28% in Camden and 25% in Islington) (UK Census, 2001), allowing an interesting point of comparison with Austin, where 32% of the city's

residents are Hispanic (US Census Bureau, 2001). Austin is also marked by strong social, economic and spatial divides which have effectively bifurcated the city into a poorer, minority-dominated East Side and its richer, whiter counterpart, Austin. Given that the prevalence of obesity is higher among non-whites and those on lower incomes (see chapter four), the intersections of racial difference and the space of East Austin are inextricable from the practices of obesity prevention and public health itself. This study will therefore supplement the national with the city scale and augment this with insights into local practices relating to health.

In the first instance, this work draws upon the biomedical and epidemiological literature to explore obesity's classification as a biomedical epidemic, characterised by sharply rising prevalence rates in both countries in the past twenty years. In order to justify classifying obesity as a public health 'crisis', the UK and US governments have relied heavily on health statistics showing changing prevalence through time, by locale and demographic characteristics. Fortunately, the volume of quantitative health data keeps growing and now exists at a number of geographic scales (although it must be noted that this is more accessible in the US). This work draws upon health statistics at a variety of scales: nation, state, city and neighbourhood level to describe and explore urban space through the patterning of health status, demographic factors and socioeconomic status in order to provide a context to the qualitative findings. These data sources are outlined in detail in the appendix.

Statistics are presented as evidence of obesity's "epidemic" scale and have necessitated action by public health policy makers spurred on by their ability to shape public opinion (Crettaz Von Rotten, 2006). Therefore, to explore the second research theme, textual analysis of these policy documents is used to trace the development, changing rationale and methods of obesity prevention. Policy responds to and constitutes public opinion through its interaction with and filtration through the media (Osborne and Rose, 1999).

While in some cases of health-related research, the assertion that “geographers have, on the whole, been conspicuous by their absence from substantive policy debates” (Peck, 1999:131) may be true, the current policy focus on the linkage between the built form and physical activity means that geographers are now actively being sought out by policy makers (Jones *et al*, 2007). To reflect the increasing integration of approaches to health, policy document analysis is thus considered alongside the textual analysis of newspaper reports about obesity from 2002-2006 drawn from the archives of the Wellcome Trust library in London. Over one hundred articles were examined for language and content, helping clarifying the feedbacks between policy developments, scientific discovery and news stories, and how such stories later filter into policy, through acknowledging public needs and demands and setting out the methods by which these will be addressed.

In order to explore the third and fourth research themes, this work draws upon semi-structured interviews undertaken in the two cities from January 2005 to December 2006 to deepen an analysis of the obesity prevention efforts being undertaken. Heynen and Robbins usefully define governance as “the institutionalized political compromises through which capitalist societies are negotiated” (2005: 6) and to navigate such contested and thorny terrain, forty interviews were conducted in each city. A detailed account of the stakeholder groups from which interviewees were chosen, sampling methods, the nature of interviews, a full list of interviewees and a critique of the qualitative methodology can be found in the appendix. This qualitative analysis then forms the basis of the discussions of obesity prevention measures in central London and Austin in chapters seven, eight and nine. The use of interview material is denoted by a number in square brackets in the text which corresponds to a list of interviewees in the appendix. The integration of quantitative and qualitative sources, located in two case studies, grounded in the policy discussions at a national, state and local scale and set

within the three theoretical spheres of governmentality, political economy of food and cultural anthropologies of consumption provide the overriding framework for this work.

1.4 Conceptual framework

This thesis aims to contribute both to the corpus of work within health geography as well as a public health policy debate seeking the examples of ‘best practice’ needed to design appropriate ‘evidence based’ interventions. For this reason, the conceptual framework cuts across three theoretical spheres, each corresponding to a different framing or problematisation of obesity within policy and popular discourse. As a public health problem, obesity can be profitably interrogated using a “governmentality” approach (see Rose and Miller, 1992; Rose, 2001; Joyce, 2003; Peterson, 2005). When considered as a political economic question, an appropriate focus of study are the supply networks of food production, marketing and retailing that are often vilified for aggravating the risk of obesity (see for example Lang, 1999; 2003; Nestle, 2002; 2003). Finally, the perspective offered by cultural anthropologies of consumption demonstrates how the obesity ‘epidemic’ represents a manifestation of recurrent cultural anxieties concerning the changing nature of consumer demand in relation to lifestyle shifts (Schlosser, 2002; Critser, 2004; Gard and Wright, 2005). These three theoretical spheres provide a way of systematising and critically analysing the huge volume of obesity-related literature and are then revisited in the light of the empirical findings. This re-exploration of the theoretical in the light of the empirical consequently underpins more detailed discussions of the tensions inherent within neo-liberal governance in the UK and US.

iii.i Governmentality

Michel Foucault’s concept of governmentality is concerned with forms and practices of governmental rationality. This thesis builds on his earlier work on “biopower” or the “diverse techniques for achieving the subjugation of bodies and the control of

population” (Foucault, 1978: 140), which include methods of surveillance to regulate populations and techniques to shape bodies induced to self-regulation. It is this enticement to self-regulation that is at the root of the “art of government” that he explores in his later work on governmentality. His work has been taken up across a number of disciplines and, due to the explicit focus on ideas of regulation, self-conduct and discipline, has more recently become influential in health geography, particularly among those calling for “critical geographies of public health” (Brown and Duncan, 2002). Importantly, Foucault’s concern with the ethics of governance, or how what he termed the “conduct of conduct” should proceed, has particular resonance for current public health concerns, not least as they raise deep questions about the legitimacy of state intervention upon individual lifestyle choices. Furthermore, a governmentality approach also helps shed light on the current tension between governments’ moral appeals to personal responsibility for health (especially in the context of preventing future costs to healthcare systems) and the state duty to fulfil the utilitarian promise of public health to ensure the greater good.

Governing obesity treads the fine line between protecting the social body and liberal democratic promises of individual freedom, a conceptual domain explored by Joyce (2003) in his treatise on the co-evolution of modern cities and governmental techniques. While Joyce does not deal with issues of health *per se*, but rather through the lens of technical advances in sanitation and public works, his treatment of governmentality does provoke a consideration of why the form and significance of this line between freedom and rule is not universal, but rather exhibits distinct traits according to location. For this reason, approaching governmentality geographically helps tease out the differences between how the rationality of government is manifest in different ways in different places in the singular pursuit of, in this instance, obesity prevention. Furthermore, using obesity to explore governmentality helps to avoid the trap of over-valuing the role of the

state (Rose and Miller, 1992) in contemporary public health. Neo-liberal market reforms in the UK and US fundamentally altered the means and ends of public health, favouring a more individualist, localised and personalised approach to health, justified as being needs-based and efficient. However, the marked health inequalities that have since defined many neo-liberal economies have catalysed vehement critiques of this approach among those demanding attention to the role of the environment in health. The resulting ‘New Public Health’ which “aims to redirect the attention of public health theorists and practitioners back towards structural and environmental influences on health and health behaviours” (MacIntyre *et al*, 2002: 128), has particular salience to the study of obesity from a governmentality perspective. This is not least as shifting the focus to a more holistic, environmental understanding of health reveals that governing obesity is now an enterprise that takes place as much from the state, as it does through the manifold and diverse stakeholders that exist outside it.

iii.ii Political economy of food.

Obesity as a governmental concern has interjected upon an already staunchly critical approach to the safety, morality and corporate strategies of the food industry, its products and practices (see Goldberg *et al*, 1990; Lambrecht, 2001; Hart, 2002; Nestle, 2003). Furthermore, obesity has brought food into the policy spotlight, raising questions of how citizens can be induced to eat healthily as a form of risk minimisation without imposing undue market restrictions. Neo-liberal tensions between regulation for the greater good and faith in the market’s ability to optimally allocate surplus production are exemplified particularly clearly through the food industry. Moreover, the political economy of food functions in different ways according to national regulatory systems, agricultural policy, retailing, marketing and advertising. Furthermore, given recent attention to the “toxic food environment” as one of the causal factors for obesity (Brownall and Battel Horgen, 2003: 7), the intersections of the social and physical environment with prevailing food

systems of food production and how these condition risk and vulnerability must also be considered.

A geographical approach to obesity through the lens of the political economy of food foregrounds place through its attention to the locales in which food is bought, sold and consumed and, in these processes, imbued with meaning. The differences between the foregrounding of place in the case study sites reinforces the comparative approach adopted in this work. It also demands that obesity is explored from a social historical standpoint, seeing how changes in food technology, marketing and retailing have fundamentally altered individual predisposition to the risk of obesity. Central to neo-liberal economies and politics is the promise of 'choice' and this term is consequently interrogated through considerations of obesity prevention policies and the healthcare systems alongside and within which they function. 'Informed choice' is the repeated moniker of the British and American governments when it comes to encouraging healthy lifestyles, yet this work will explore the practical possibility of this through examining the issues of food poverty, access and availability in both case study sites. The idea that "food is contested territory" (Lang, 1999: 169) consequently underpins this theoretical approach.

iii.iii Cultural anthropologies of consumption

The two greatest risk factors for obesity, diet and physical activity, have both undergone fundamental shifts in the past two decades. Over the same time period, obesity prevalence has increased markedly at a global scale. The coexistence of these two trends has meant that the body as a site of consumption has become subject to analysis, from both social historical and sociological perspectives. These lifestyle shifts are both cause and consequence of the kind of social anxieties frequently referred to as "moral panics" (McRobbie and Thornton, 1995; Campos *et al*, 2006). In contrast to the political

economy of food that treats obesity as a supply-side problem, cultural anthropologies of consumption approach the question from a demand-side perspective. Obesity thus requires consumption to be treated in its widest sense to include not just food, but the whole range of goods and services composing health, leisure and lifestyle.

Preventing further rises in obesity rests on encouraging the widespread adoption of healthy lifestyles. This, therefore, places the relationship between the market and health at the root of successfully selling such behavioural changes. For this reason, cultural anthropologies of consumption approach the question of obesity at an individual scale, placing particular focus on behaviour change and melding consumption to fit public health goals. The uptake of social theory in health geography has enabled an engagement with ideas such as those expounded in Bourdieu's *Distinction* (1984) concerning consumption as a marker of class and taste and the relationship of these practices to social identities and lifestyles. Crucial to this work, Bourdieu also expresses an interest in food and body size and the manner by which these have come to signify and reflect taste and class norms. Turner's work in medical sociology is also recalled within this theoretical framework, especially for its assertion that the body is the material and metaphorical representation of capitalism, complete with all its tensions (Turner, 1984; 1995; 2004). Obesity renders consumption deeply problematic and it is for this reason that a thorough theoretical exploration of this domain is necessary.

1.5 Structure of the thesis

This work commences with a discussion of the theoretical context of the research, before turning to a detailed exposition and analysis of the empirical research and finally critically reappraising the theoretical framework in the light of these findings. Chapter two charts the paradigmatic shifts within the subdiscipline of medical geography, moving from "Traditional" or positivistic medical geography's strong biomedical and quantitative foundations to the 'cultural turn's' catalysis of health geography. This

approach represents a shift due to its adherence to socio-cultural theoretical perspectives and the use of 'place' as framework for interrogating health outcomes and experiences. Most recently, there have been calls for "critical geographies of public health" (Brown and Duncan, 2002), opening the field to a more expressly political engagement with a new range of health topics.

Chapter three expands upon the changes within medical and health geography charted in chapter two, to argue that the recent uptake of qualitative research methods aiming to uncover the experiential and situated nature of health has helped catalyse calls for attention to the obesity epidemic. Consequently, in order to explore the first research theme, this chapter argues that obesity can be theorised as a biomedical epidemic and an "epidemic of signification" (Treichler, in Crimp, 1988: 31). After setting out how obesity is technically defined and classified, the chapter turns to a detailed discussion of how the meanings and associated discourses surrounding efforts to govern obesity might be instructively explored within the three theoretical and interdisciplinary frameworks set out above: governmentality, the political economy of food and cultural anthropologies of consumption.

While what has been termed the "obesity debate" sits at the nexus of a host of cultural, political, social and economic associations, this "epidemic of signification" cannot be considered apart from the biomedical condition and its adverse health effects. Chapter four thus explores the biomedical epidemic in comparative historical context, before appraising the epidemiological evidence justifying the appellation of the "epidemic" label. At the root of the epidemic is statistical evidence of rising prevalence rates at a number of geographic scales, with aetiological explanations underpinned by an 'energy balance equation'. Widespread adherence to this aetiological explanation coalesces around two main causal schools of thought: gluttony (excess consumption) and sloth (insufficient activity) (after Prentice and Jebb, 2003). The rationale, evidence and

significance of each of these explanations are outlined before examining the three main consequences or costs of obesity - health, economic and psychological – that legitimate public health intervention and thus form a central rhetorical and actuarial component of policy.

Obesity is not a new health risk, but its inclusion within public health policy as an urgent problem that threatens long term improvements in life expectancy and mortality rates is far more recent. Chapters five and six thus set out obesity's emergence as a target of public health policy in its own right from 1979 to the present in three temporal phases that correlate to particular discursive regimes framing obesity as a problem. Chapter five charts obesity prevention policy development in the UK from the *Black Report's* (DH, 1980) exposition of health inequalities, to *Saving Lives: Our Healthier Nation's* call for capacity building, infrastructure investment and a prevention-orientated NHS (DH, 1999). By the time of *Choosing Health: Making Healthy Choices Easier* (DH, 2004), obesity had shifted from implicit risk factor for a number of chronic conditions, to a policy issue in its own right. The chapter closes by devolving the scale of analysis from the UK to London and explores the *London's Health* report (London Health Commission, 2004) and the London Health Observatory's 2005 response to *Choosing Health* to contextualise the discussions of obesity prevention policy in chapter seven.

Chapter six sets out obesity's emergence onto the US policy agenda through an analysis of federal public health policy documents in three temporal phases. From the 1979 *Surgeon General's Report*, the US public health agenda has been reworked towards prevention, a move necessitated by rising healthcare costs and changing burdens of disease. By 1990, the revised *Healthy People 2000* (USDA, 1990) report had set 22 priority areas, of which two were immediately applicable to obesity. These priorities rose further up the government agenda with the publication of the *Surgeon General's Call to Action to Prevent and Decrease Obesity* in 2001. The chapter closes with an outline of

Texas' position in the wider federal public health landscape. From this, the *Strategic Plan for the Prevention of Obesity in Texas* (2003) is discussed to provide a background to the prevention measures in Austin that are discussed in chapter eight.

Chapter seven is the first of two empirical chapters, both of which are structured in the same way for the sake of clarity and to facilitate comparison. Findings from stakeholder interviews in the broad field of obesity prevention in central London are set out with particular reference to the boroughs of Camden and Islington and the call for individuals to exercise 'informed choice' in the pursuit of health. The interview findings are analysed through three broad categories. First, the Mayor's *London Food Strategy* (2006) is discussed in the context of ongoing debates about multiculturalism, food tourism and race as a risk factor for obesity. Second, the role of the 'consciousness industries' such as Think Tanks and marketing in translating obesity from the biomedical to the public domain in the process of designing policy solutions is discussed. Third, measures to encourage active travel (walking and cycling) in Camden and Islington are explored, to expand upon current debates about the relationship between the built environment, behaviour and health.

Chapter eight follows the same structure to examine current obesity prevention measures in Austin. The President's call for personal responsibility is the starting point for an exposition of findings from stakeholder interviews which are set also out in three groups. First, the conceptual idea of the 'Hispanic Paradox' is detailed in order to ground discussions of the way in which race and risk are mutually constitutive discourses in Austin that help justify certain policy interventions. Second, the *Steps to a Healthier Austin* obesity prevention program is examined for its conflation of race and risk to delineate intervention areas and populations. Third, the city's goal to become the nation's fittest by 2010 is examined for the way in which, contrary to prevention efforts

aimed at behaviour, it attempts to meld urban space with civic pride as a resource to foster a culture of sporting participation.

Chapter nine compares and contrasts the research findings in the case study sites as the basis for a critical reworking of the three theoretical frameworks outlined in chapter three. The chapter revisits the Foucauldian notion of governmentality to argue that it is through an engagement with the “messy sites of implementation and non-implementation” (Rose *et al*, 2006: 99) that the serenity of the framework is destabilised. The political economy of food, understood as a contributing to obesity through the supply-side creation of desire in order to act as a fix for surplus production, is re-appraised especially in the light of the role of ‘choice’ as political rhetoric underlining neo-liberal policy and citizenship rights. Third, cultural anthropologies of consumption are revisited to explore how demand-side explanations for obesity play out differently in the UK and US. The chapter then turns to the question of the ultimate plausibility of obesity prevention, especially given that policy demands ‘best practice’ and, as interview findings have demonstrated, this remains elusive.

The thesis concludes by highlighting three main limitations to the research and suggesting three potential avenues of further research. It is argued that the current analysis could be extended to new systems of government, healthcare or different cities, particularly those in developing countries where rapidly rising obesity rates among children are highlighting the intricacies of navigating economic growth in a way that is beneficial to all. The current research on issues of health and race could also, it is argued, be strengthened through more detailed qualitative studies on those groups identified as most ‘at risk’. There might also be fruitful lines of further investigation in the ongoing controversies over public health priority setting and funding allocation. The chapter then turns to some final concluding thoughts, drawing together the many strands of the thesis.

Chapter Two – Paradigmatic shifts in medical geography

2.1 Introduction

Medical geography has been a significant sub-discipline in its own right since the 18th century. Curtis and Tacket (1996) contend that Finke's (1792) work *An attempt at a general-practical geography* exemplified one of the first environmental approaches to disease and health. From the 1830s, geographers were using incidence maps of disease to test hypotheses concerning environmental controls on disease aetiology. This approach would govern the development of a 'medical geography' underpinned by a theory of 'disease ecology' in which disease outcomes were understood with reference to the triadic relations of agent, host and environment (Meade *et al*, 1988). This mode of thinking assumed that there were associative and systematic relationships between the environment and the spatial patterning of disease incidence. While early medical geographers did not attempt to extend the idea of possible associations to definitive causative relations, they nevertheless developed the concept of pathogenic spaces that still remain central to the sub-discipline. Traditional medical geography, as it has come to be known, developed as a response to and reflection of the public health system and the biomedical reasoning that sustained it. As Brown and Duncan (2002) rightly contend, paradigmatic shifts within medical geography have arisen primarily as a response to historical shifts in public health discourses, which in turn result from epistemological shifts within medical research. In addition, medical geography's changing epistemology mirrors developments within the discipline itself. This chapter will thus outline the historical and contemporary ways that geographers have engaged with health and disease, and how these reflect changing ideas within both biomedical and geographical discourses.

Over the past decade, there has been a discernible shift from 'medical' to 'health geography' (Kearns, 1993) and, most recently, calls for the scope of health geography to

be widened to embrace wider 'critical geographies of public health' (Brown and Duncan, 2002). This chapter will examine the paradigms governing medical geography, its methodologies and underlying discursive foundations. I will then trace the development of health geography that emerged in the mid 1980s as a response to the neo-liberal supply-side reconfiguration of public health care services – particularly in the US, UK, Canada, Australia and New Zealand – and a renewed political attention to spatial disparities in health status. Medical geography has witnessed a movement, although far from linear, from positivism, to social interactionism, structuralism, and post-structuralism as its guiding axioms (Gatrell, 2002). In turn, these have reflected the humanist, Marxist and cultural/ social theory turns within the discipline.

Since the deviation from positivism, geographers such as Hester Parr (2003; 2004) have been quick to note medical geography's reinvigoration through its newly detailed attention to place, the semantics of 'health' and greater engagement with the wide range of non-allopathic (alternative medicine) spaces that qualitative methods and post-structuralist approaches have permitted (see for example, Valentine, 2003; Doel and Seagrott, 2004). Further to this, Parr (2004) has called for more critical perspectives, drawing upon holistic definitions of health to place "a new emphasis on individual's complex experiences of health and impairment and the associated politics of identity" (Hall, 2000: 21). Critical geography has been central to the 'cultural turn' in the discipline, but it is notable that its uptake by health geographers has been slower than among sub-disciplines such as economic geography. As this chapter shall argue however, the changing burden of disease from infectious to chronic conditions with their associated elevated health care costs in developed countries is making a critical approach both timely and relevant. Moreover, as the mass media interest in health is now greater than ever before, the public pressure on government to assure good health for all means that disease is undergoing a new round of politicisation. Health has always been a

political enterprise – a fact that historical accounts of public health make clear – but there is mounting recognition that neo-liberal healthcare reforms merit a more expressly critical consideration.

2.2 Traditional or Positivistic Medical Geography

‘Traditional’ medical geography, Curtis and Taket (1996) argue, is closely allied to positivistic paradigms within the discipline. Primarily concerned with the spatial patterning of mortality and morbidity (disease), traditional medical geography sought to identify and map such patterns to discern associative relationships between a range of spatial characteristics and health status (see, for example, Gould’s 1993 account of AIDS). Positivism places great faith in the existence of laws or quantifiable relationships between cause and effect. As such, Rosenberg (1998) notes, research in medical geography proceeded in two directions. First, mapping disease diffusion and spatial patterns over broad geographic areas at various scales (see Cliff and Haggett, 1986; 1988; 1993). Such ‘comparative epidemiology’ (Sobal, 2001; Berkman and Kawachi, 2000) concentrated on mapping mortality and morbidity incidence rates as the starting point for explanatory theory development. Buoyed by the optimism of the ‘quantitative turn’ in the discipline in the 1960s, early medical geographers were able to carve a niche for themselves through multivariate computer modelling and statistical analyses of aetiological variables.

This enabled the second avenue of research: identifying clusters of rare disease incidence. Using these models, statistical correlation strength then became the justificatory basis for policy to address the most influential environmental factors. Disease diffusion models charted changes through time and space and were used on three levels: description of change, prediction of future disease spread and rate of change and a prescription for public health intervention. Gould and Wallace’s (1994) study, for example, mapped New York as the AIDS ‘epicentre’ of the US and argued, somewhat

controversially, using epidemiological modelling, for the “spatially contagious” nature of HIV infection. They further argued that regional diffusion was structured by “the daily bellows of commuter flows” (1994: 113) – an assertion based on quantitative data analysis that could have highly punitive social effects if translated into policy action. In addition to epidemiological modelling, medical geography also borrowed the locational analysis techniques favoured at the time by economic geographers to develop models calculating the optimal sites for health care services. Haggett *et al*’s (1965) work is one of the original treatises on locational analysis in geography, with Walsh *et al* (1997) offering a more recent use of network systems to predict optimal healthcare sites. It must be noted that the positivistic paradigm is strongly allied to a biomedical discourse of health and disease and, since the way disease is understood is at the root of any study within medical geography, it is worth considering the assumptions underpinning this biomedical discourse.

The biomedical discourse is based on four assumptions (Curtis and Taket, 1996) which, taken as a whole, help explain the dominant thinking behind public health policy, how space was conceived in relation to health and discourses surrounding the body understood as an agent that either enables or constrains the pursuit of health. The biomedical discourse argues that first; ‘disease’ is a deviation from ‘normal’ biological functioning or that it is the type of ‘disorder’ envisaged by Mary Douglas (2002). Second, the ‘doctrine of specific aetiology’ or that each disease is caused by specific, identifiable, pathological agents, micro-organisms or disease vectors. Third, it assumes that diseases exhibit some generic distinguishing features and fourth, the implicit insinuation that science is value-neutral and medicine is rational. The teleological notion that diseases are caused by consistent agents, that these can be identified through generic symptoms and that science and medicine act objectively in the interests of disease reduction is reflected in the World Health Organisation’s (WHO’s) 1957 definition of

health as “a degree of conformity to accepted standards of given criteria in terms of basic conditions of age, sex, community and region, within normal limits of variation. It is a relative concept” (WHO, 1957: 14). If health is a ‘relative concept’ then the task of public health must be to identify and act on certain aetiological variables to reduce its likelihood. It must be noted though, that this system of thought developed as a response to the biomedical understanding of infectious disease transmission and pathogenesis. Traditional medical geography therefore developed in tandem with biomedical research into infectious diseases. However, as this chapter shall later discuss, the shifting burden of disease to chronic conditions such as coronary heart disease and cancer means that biomedicine, public health and medical geography have necessarily had to reconsider their theoretical stances.

The mechanistic system of thinking from which positivism derives became a prevalent means by which to order a world that seemed in a constant state of flux at the end of the nineteenth century. The mechanistic metaphor posits that health exists as a system of components, and the malfunctioning of any of these constituent parts will produce the failure of the whole. The molecular emphasis of biomedical science at that time – exemplified well by germ theory - reinforced the idea of health resulting from a well-functioning system. Positivism favours modelling and statistical tests of correlation thus rendering the status and role of space as a variable deeply problematic. Whether space is a passive setting or a causal variable in its own right for human health is a question that the biomedical model did not, at that time, address. Since the biomedical model presumes linear relationships of cause and effect, where the cause can be deduced from known effects (or symptoms), neither space nor the body itself are critically interrogated within this paradigm. As a result, public health became orientated towards the universal provision of curative medicine in the name of disease control among the ‘population’.

Mechanistic thinking, combined with the optimism of a time of great advances in medical research, allowed great faith in the potential for treatment. This ideology governed the 1947 establishment of the UK's National Health Service (NHS) as one of the central pillars of the Welfare State (Szreter, 2002). The 'population' perspective saw that improving health was both a medical and political exigency that should be based on a contractual relationship between the state and citizens. Indeed, the history of public health itself, as Brown and Duncan (2002) rightly suggest, cannot be considered apart from the developments in medical science and political theory that have, to a large degree, dictated its trajectory. Traditional medical geography, with the exception of some of Smallman-Raynor and Cliff's (1998; 2002) meticulous recreations of historical data sources, has often downplayed the influence of the cultural history of medicine and the medical profession. Public healthcare systems, as Ham and Alberti contend in their assessment of the changing relationship between the government, public and medical profession since the inception of the NHS, "reflect the values and societies in which they are embedded" (2002: 841). Yet, in contrast to this, medical geography's frequent oversight of the political or historical in favour of the kind of spatial fetishism and neglect of individual agency displayed by Gould and Wallace (1994), has been the source of some debate. Consequently, and in order to remedy this omission of theoretical considerations of 'the body' from quantitative methodologies and epistemologies, a 'social theory of health' (Dear, 1984) has most recently been taken up. Geography is in constant theoretical flux, and the gradual emergence of health geography demonstrates the necessity of and potential inherent within both social theory and qualitative analyses for theorising the latest developments in biomedical science and public health.

2.3 Contemporary Medical Geography

Since the 1970s, three fundamental changes helped catalyse the emergence of what has been termed a more 'contemporary' medical geography. First, the publication of the

1974 *Lalonde Report* by the Canadian government, setting out a new vision for the means and ends of public health. Second, the WHO's 1948 definition of health as "a state of complete mental, physical and social wellbeing and not merely the absence of disease or infirmity" was amended to be a "fundamental human right" that includes the ability to lead "a socially and economically productive life" in accordance with the Alma Ata Declaration (1978). Third, the neo-liberal reconfiguration of the state in many developed countries during the 1980s, which altered public health systems in tune with supply-side economics and faith in the distributive powers of the free market. Traditional medical geography's strictly biomedical roots have not been completely discarded, but the subdiscipline has undergone a gradual shift to reflect a more holistic view of the meaning of health, the myriad ways in which this may be achieved and maintained, the importance of addressing health inequalities as a matter of human rights and the changing conception of the 'body' within these revised modes of thought.

It is worth noting that the shifts characterising the gradual emergence of health geography alongside its more traditional, quantitative counterpart cannot be considered apart from changes within the rationale of public health policy itself. For example, the 1974 report *A New Perspective on the Health of Canadians* by the Canadian Minister of National Health and Welfare, Marc Lalonde, marked a far-reaching transition in the conceptualisation of health and the ways in which it might be fostered. The report revisited Thomas McKeown's contentious assertions that better nutrition as a result of increased wealth were of equal, if not greater, importance to health improvements than clinical and infrastructural advances (McKeown, 1976; Colgrove, 2002). Despite the fact that McKeown's own thesis has been heavily criticised (see Szreter, 2002), its mention did re-open questions concerning the most cost-effective and equitable means of serving public health ends and the most appropriate role of both the state and medical profession within this. The Lalonde report quickly became famous as the first formal

acknowledgement by a developed country that biomedical interventions and services alone could not be held entirely responsible for individual wellbeing and population-scale improvements in health status, and that individuals should assume greater responsibility for their own health. These ideas not only attracted great attention in policy circles, but also, given the theoretical issues raised by notions of personal responsibility and the limits to governmental capacity to ensure health, demanded the inclusion of social theory within health geography research.

The report outlined explicitly, for the first time, the role of “adverse environmental factors and behavioural risks” (1974: 6) that meant the health care system was acting as a “little more than a catchment net for the victims” (*ibid.* pp. 5). The paper outlined the Canadian government’s commitment to addressing the four broad and interrelated ‘health field’ concerns of human biology, environment, lifestyle and a well-financed health care system in order to “add life to our years” and ensure “economic and social justice” within the dictates of neo-liberal welfare state deregulation. Notably, the paper recognised that “there are national health problems which know no provincial boundaries and which arise from causes embedded in the social fabric of the nation as a whole”. In order to address these problems the government proposed to offer the necessary “protection, information and services” by which Canadians could become, in the now-familiar language of capacity-building, “partners with health professionals in the preservation and enhancement of their vitality” (*ibid.* pp.6). This working paper was viewed by some as seminal in that it reframed the idea of health as a collective outcome of a range of environmental, physiological and psychological factors, rather than just that of an efficient ‘control and command’ health care system (see Pinder and Rootman, 1998). It also proposed that attaining ‘vitality’ was not just a task for health care professionals, but rather should involve multi-agency collaboration, reflecting the complex multi-factoral aetiologies of ‘lifestyle diseases’. The conclusion that “the future

improvements in the level of health of Canadians lie mainly in improving the environment, moderating self-imposed risks and adding to our knowledge of human biology” (Lalonde, 1974: 18) reflects the idea that health is governed by both active choices and factors over which individuals have no control. This, in turn, marks a significant change from an essentially passive biomedical model where the risk of disease was seen as extraneous to the body. Instead, risk could now be equated with certain lifestyle choices, thereby also injecting an element of moral judgment into autonomous decision making. The paper marked a shift not only in the theorisation of health in a more expressly subjective direction, but also in the way that public health structures would need to respond to the changing demands placed on them. The paradigmatic shift to health geography is consequently a logical outcome of this transition.

The second change was the altered definition of health by the WHO. Its original, post-war definition was conceived when health and peace were seen as inseparable and helped inject a sense that being healthy is always subjective, psychological experience rather than objective fact (Saracci, 1997). At the 1978 Alma-Ata Convention in Russia, this definition was further expanded to acknowledge health as a fundamental “human right”. Furthermore, drawing on concern with health inequalities, the definition was again refined to include the ability to lead a “socially and economically productive life” (WHO, 1978: 1). Although this definition has been criticised by epidemiologists for lacking operational value, despite its clear conceptual merits (Saracci, 1997), the holistic notion of health that it presents has been of interest to geographers. The influence of this definitional shift to include issues of equity and access in the sub-discipline has been a push to consider the wider connotations and implications of health and, in particular, its close and recursive links to place and landscape.

Third, such theoretical shifts within the sub-discipline have occurred alongside a period of radical reorganisation of healthcare systems. This has inevitably raised theoretical questions grappling with whether health is best considered a commodity or a public good and the most appropriate means of governing the risk factors for chronic disease. Health system transformations have been especially marked in the UK, where the 1989 paper *Working with Patients* signalled a watershed for an NHS long characterised by its “rational, bureaucratic paternalism” (Day and Klein, 1989). The paper set out a modernisation strategy for the NHS, closely following Margaret Thatcher’s neo-liberal goals of blending the social justice offered by socialised medicine, with the internally competitive markets being developed for public services in the US. While the NHS had already seen a series of changes such as competitive tendering for services since 1982, the 1989 paper was a renewed attempt to “alleviate the tension between budgetary controls and consumer demands” (Day and Klein, 1989: 30) and create a more flexible system capable of responding to a population with changing expectations and needs and addressing the fear that better, and more available services might increase demand beyond the system’s capabilities (Illich, 1974; Edwards, 2003). Over the same period, a realisation that advances in medical diagnosis and treatment of chronic diseases were increasing, rather than decreasing, the cost of healthcare provision to the state underpinned a new doctrine of ‘health promotion’ (see Bunton *et al*, 1995 and Peterson and Bunton, 1997) that sought to shift the emphasis from treatment to prevention, thereby mitigating future cost increases. It is within this context that some medical geographers are now distancing themselves from the biomedical to consider a wider range of social theoretical approaches to questions of health (Parr, 2002a).

These three broad changes to healthcare systems and the concept of health itself, have meant, as Kearns and Moon (2002) document, a distancing of concerns with disease to a wider interest in wellbeing and broader social models of health and health care with

geography. They contend that this 'health geography' is novel for three reasons: the emergence of 'place' as a framework for understanding health; the adoption of self-consciously socio-cultural theoretical positions and a quest to develop 'critical geographies of health'. While these three features may not necessarily be novel individually, their combination does mark out a potentially more innovative and illuminating direction for both the topics of research undertaken and the theoretical frameworks drawn upon in their analysis. Perhaps the most significant (and also most frequently overlooked) element of this epistemological shift towards greater criticality has been the potential to conceptualise health and wellbeing as a commodity with a value that is growing ever more central to consumption trends and lifestyles more broadly. Just as significantly, to view health as a commodity also means acknowledging that some individuals are more able to attain this than others, raising the kind of social justice questions that a 'critical' approach within geography should be prepared to tackle.

It is notable that these theoretical leanings within health geography also reflect the reality of a very different epidemiological situation in many developed countries. For example, in the UK, deaths from infectious diseases fell from 25% of total mortality to 1% from 1900-2000 (DH, 2004: 9). Over the same time period, total deaths fell from 587,830 to 503,026 reflecting the eradication of infectious diseases such as tuberculosis through antibiotic use, infrastructural improvements such as sewerage and vaccination. From 1901 to 2002, life expectancy in the UK rose dramatically from 49 to 81 years for women and from 45 to 76 years for men (ONS, 2004), a situation mirrored in the US. Longer lives have been a feature across the developed world, but so has the increasing prevalence of chronic diseases, the ironic result being more people living longer, but often in poor health.

In 2000, 63% (almost 317,000) of deaths in the UK were caused by circulatory diseases or cancer. These chronic conditions require radically different systems of public health

provision to infectious diseases. While polio, cholera, influenza and tuberculosis necessitated measures to identify outbreaks and minimise disease diffusion at a population scale, the individual nature of the aetiology of chronic diseases such as coronary heart disease and type-II diabetes and the existing limits to treatment means that health services are necessarily being reoriented towards the preventive stance outlined in the *Lalonde Report*. But, biomedical advances in chronic disease treatment are also creating new political complexities that are fertile ground for social science perspectives. Despite the fact that, for example, modern medicine has revolutionised cancer treatment to such a degree that death rates are falling year on year, the cost of treatment regimes are increasing as drugs become more sophisticated and effective. The annual increases in prevalence are also adding to the cost of treatment borne by the state, and recent controversies over the “lottery” of access to high-cost breast cancer drug Herceptin in the UK is a clear example of the emergent politics of rights to equitable treatment on the NHS (Templeton, 2005). Such thorny issues of treatment costs further reinforce this policy turn from cure to prevention. Furthermore, there is now growing concern over the rise of what are termed lifestyle-related risk factors for these chronic diseases. The inexorable rise of the ‘lifestyle disease’ of obesity in developed and developing countries has also had a profound impact on the way ‘health’ is conceptualised by medical geographers, not least for the way it has altered biomedical definitions of risk.

A critique of the mechanistic biomedical model has been inevitable in medical geography, as it failed to deliver the public health promise of universal vitality. The shift from medical geography to health geography, first noted by Kearns (1993) has thus arisen as an ardent criticism of the ability of quantitative analysis to accurately capture the interplay of behaviour and environment that conditions the risk of chronic diseases and the individual experiences of illness that play a large role in the efficacy of

healthcare delivery. Healthcare provision within the welfare state has undergone marked changes under neo-liberal deregulation, and continues to evolve as medical research highlights new public health exigencies and an increasingly educated public demand their 'right' to health as promised by the WHO. The changes within public health policy and challenges to ensuring the public's health outlined in this section have started to be clearly reflected in the research epistemologies of health geography. And, in particular, three 'turns' within geography itself have provided the necessary theoretical and methodological tools to induce the development of a health geography theoretically capable of responding to this new domain of health. These humanist, Marxist and cultural turns will be examined in turn to demonstrate the ways in which they have contributed to current theoretical and empirical movements within health geography and, in so doing, presaged calls for a critical geography of public health.

2.3.1 The humanist turn

The humanist or qualitative turn in medical geography arose as a response to the reductionist tendencies associated with the positivist paradigm. As medical geography has moved to a "social model of health" from a "biomedical model of disease" (Kearns, 1993: 149), it has necessarily sought qualitative accompaniments to epidemiological research to uncover the subjective experience of illness understood as having both social and ecological components (see White, 1981). This 'Social Interactionist' (Gattrell, 2002) approach delves into the multifarious meanings of disease, recognising that illness is far more than the biomedical definitions that often guide treatment. Qualitative research methods such as focus groups and interviews probe the meaning of disease and illness to those affected both directly and indirectly, and through this formulate an understanding of the processes that guide health-related behaviour (Dyck, 1999). Social Interactionism offers a more profound understanding of the spatial patterns of disease exposed through positivist analysis, for it focuses on the motivation behind certain health

behaviours and decision-making. As Dyck (1999: 246) writes, it involves “the grounding of research in everyday locales where health practices and behaviour are played out”. In part, the concern with health-related behaviours has arisen in tandem with the widespread drive to reduce smoking prevalence as an avoidable risk factor for a number of co-morbidities, or associated chronic conditions. Understanding why people smoke and among which groups smoking is most prevalent has been crucial to designing effective smoking prevention policies and raising public awareness of the habit’s health risks. The idea of health behaviours conditioned by the biomedical construction of bodies and illness has also produced important work on the idea of norms in relation to illness and disease. Qualitative analyses seek to uncover the motivations behind actions – central to the smoking cessation movement – and key to this is an appreciation of how discursive tropes have come to condition how diseases are understood (Evans, 2006; Kearns, 1997). In this respect, the work of Susan Sontag (1979) has been deeply influential in broadening the horizons of health geography.

Susan Sontag’s (1979) *Illness as Metaphor/ AIDS as Metaphor* has played a significant role in the emergence of health geography. Medical constructions of the diseased body, as Sontag (1979) has cogently argued, have consistently invoked punitive metaphors to apply some degree of control over individuals or groups classified as existing outside the system of established ‘healthy’ norms. As she argues, “nothing is more punitive than giving a disease a meaning, that meaning invariably being a moralistic one” (Sontag, 1979:59). Despite Sontag’s own undeniably rationalist and modernist leanings and the fact that concern with the metaphorical meaning of disease may be more closely linked to geography’s linguistic turn and its ties to comparative literary theory than medical geography, her work and the research that it inspired is worth discussing in some depth with reference to the humanist turn in the sub-discipline. The qualitative study of disease and risk behaviours associated with health cannot be considered apart from the

discursive and rhetorical structures that condition how health is interpreted and, therefore of central importance to this work, governed. While Sontag's work also falls clearly into the remit of post-structuralism, it will be discussed here and instead the changing role of place in health geography will be considered in the exploration of the 'cultural turn'.

The confluence of medicine and morality are discussed with reference first to cancer, and then in Sontag's later work, to AIDS with great effect. As she argues, "disease imagery is used to express concern for social order" (Sontag, 1979: 73) in that ill-health suggests disequilibrium between the individual body and society. The notion that wider societal fears are often expressed in the language of disease or through castigating those diagnosed with medical conditions is an idea that has found resonance among geographers, medical anthropologists and sociologists alike. Indeed, Craddock's 2000 work on the relationships between disease, social identity and risk with reference to HIV in Malawi is particularly notable in this respect, especially given the applicability of the contentions raised to a host of empirical examples. She contends that "diseases are cultural products" that are "given a specific moral lexicon depending on symptomology and the ideological needs of a society at a given moment in time" (2000: 154). Furthermore, she notes, "biomedical interpretations of discourse do not just elucidate the impact of particular pathogens on the human body, but situate disease and diseased bodies vis-à-vis dominant norms of conduct, morality and social order" (*ibid.*) The moral organising principles of a particular place and time often serve, she argues, to determine the 'facts' of medical research, the knowledge produced and the delineation of risk. In similar work on smallpox in nineteenth century San Francisco, Craddock (1995) argues that metaphorical associations between place and affliction often sustained more suffering among Chinese immigrants than the symptoms of disease itself. The unequivocal assumption of parity between Chinese immigrant neighbourhoods and smallpox pathogenesis invariably meant that discourses of disease acted as a rhetoric of

blame and culpability. This is the “punitive” effect of giving a disease a “meaning” that Sontag so criticises, and a theme that will be addressed in more depth later in this work.

The humanist turn in health geography has been notable for its attempts to counter and critique the seeming objectivity of the biomedical paradigm through the explicit call for the inclusion of subjectivities. The shift in focus to individuals and their subjective experiences of health in the context of place also reflects, as Longhurst (2005) notes, interest with the psychoanalytical in the discipline and the growing number of geographers who are turning their hand to studies of the experiential and situated nature of mental illness and disability (see for example, Wolch and Philo, 2000; Philo *et al*, 2003 for detailed discussions of rural mental health). The role and use of narrative and metaphor in studies of the situated and subjective nature of health has also been discussed at length by Kearns’ (1997) and are already evident in two fields: self-help groups and as a rhetorical tool within geographical writing. Groups such as Alcoholics Anonymous or Overeaters Anonymous have long drawn upon personal narratives to unite individual agency with the determining characteristics of places that may lead to addictive behaviours and, therefore, health outcomes. Second, narrative as a rhetorical tool within geography includes tropes such as critical reflection on personal experiences (Longhurst, 2005), “reclaiming the first person” (Kearns, 1997: 270) and forging links between researchers and the communities that they study through participatory research. This is a form of ethnography made necessary by the delicate ethics that arise in the practice of health geography research noted by feminist geographers (Garvin, 1995; Valentine 2003) and the pursuit of social justice that Kearns (1997) argues must always be prioritised. If, as Kearns suggests, “the use of metaphors is a discursive coping strategy” (1997:271) then it is one that gains currency at times of the kind of socio-political changes outlined above when people are forced to rethink the assumption of a contractual obligation of the state to assure health. Given that some of the greatest

structural changes underpinning the emergence of health geography have been political and economic, Marxist critiques of the structural determinants of health have thus been elemental in the emergence of a 'post-medical' geography.

2.3.2 The Marxist turn

The Marxist turn in geography is closely tied to what Gatrell (2002) defines as a structuralist approach in health geography. This political economic analysis of health concentrates on the structural determinants of disparate health outcomes, or, the ways in which the inequalities created by capitalism and the exercise of power condition risk and vulnerability. Outside the confines of health geography, political ecologists such as Piers Blaikie (1994), Michael Watts (1993; 2000) and Randall Packard (1989) have been central to the creation of systematic analyses of the intersection of contemporary and historical structural factors that condition risk and vulnerability to environmental and health hazards. Ideas of relative versus absolute poverty embedded within structural factors (Wilkinson, 1996), have also been crucial to reinforcing the political interest in reducing health disparities and, at a more theoretical level, justifying research into the interactions and relationships between places. After evidence presented in (what are now known simply as) the *Black* (DH, 1980), *Acheson* (DH, 1996) and *Wanless* (DH, 2002) reports highlighted the continued worsening of health inequalities in the UK, neo-Marxist proponents have argued for greater policy attention to correct these disparities. Furthermore, as Asthana *et al* (2002) note, the Marxist turn in health geography is linked to wider debates concerning globalisation which have undeniably contributed to movements within geography as a whole, and also as a result, within health geography.

Globalisation has been of concern to geographers across a broad spectrum of sub-disciplines, particularly within its cultural, economic and environmental strands. Health geography has not been omitted from this, due in large part to the role of the WHO as a supranational body dedicated to the global surveillance and prevention of disease. Since

debates over globalisation often hinge on an appreciation of critiques of the increasing scope and intensity of interconnected and interdependent processes and events, the WHO's compilation of global comparable health statistics presents unequivocal evidence for this. The global spread of HIV, the recent SARS and Avian flu outbreaks demonstrate how diseases no longer occupy ecological niches and are as fluid as the cultural flows that permeate the global economy. Globalisation arguments also, by association, inculcate the local as they demand attention to the interaction between global and local-scale mediating factors. Derek Yach and Robert Beaglehole (2004) have been particularly influential voices in the argument that the globalisation of health risks (such as smoking, alcohol, sedentary lifestyles and western diets) for the chronic conditions that now constituent the majority of the global burden of disease, demand integrated and consistent global public health policy development. The WHO has recently made inroads into this through its *Global Strategy on Diet, Nutrition and the Prevention of Chronic Diseases* (2003). The corollary of this global top-down focus is the emergence of local political mobilisation for health care rights and access (see Brown, 1998 for a good analysis of this in the context of AIDS).

In the shades that exist between the global and the local, the Marxist or structuralist turn in health geography has created space to examine the interplay of social and political forces affecting policy as well as the economic and organisational structures of the healthcare system. In so doing, it has also raised questions about the role of place within the sub-discipline and in health status. With neo-liberal deregulation, public health was re-orientated along productivist lines favouring an ideology of cost-minimisation. This has been made all the more urgent by the inexorable rise in health care costs associated with increasing prevalence of chronic conditions (House of Commons Health Committee, 2004). In the late 1990s, public and political attention turned to social exclusion and the effect of this on health, among other indicators of wellbeing. Social

exclusion encapsulates the tension between composition and context that haunts any definitive attempt to posit solutions to current health risks. Yet, policy makers are increasingly realising that a nod towards the geographical concept of place is essential to comprehend the complex structural determinants of health. The conceptualisation of place within public health discourses increasingly governs policy development. It is therefore worth at this point, briefly suggesting how health geographers have come to view the nature and role of place.

2.3.3 Health and Place

Place has long been one of the defining theoretical constructs of geographical analysis, and it is becoming clear that the growing body of work within health geography is reframing its role within the discipline. Kearns and Moon (2002) rightly, if hyperbolically, contend that “an awareness of place as a socially constructed and complex phenomenon has been a talismanic point of reference for the new health geography” (2002: 610). Despite their ongoing tendency to over-inflate the ‘newness’ of health geography, it is true to say that conceptualising the relationship between health and place as a facet of the way in which places are socially constructed by institutional discourses (e.g. biomedical, political and class) means that it may be possible to delve into the meanings they acquire above and beyond simple physical attributes. In turn, since such meanings can have marked individual health effects, they can also fundamentally reshape the experience and understanding of places, an idea already familiar to geographers. While these health effects are now the target of considerable government attention, rarely are the recursive relationships between place and meaning actively traced back to institutional discourses. While health geographers have a repeated tendency to turn to the concept of place to mark out their discipline as distinct from competitors within sociology and anthropology, it is fair to concede that the form, attributes, use and understanding of place plays a vital constitutive and causative role in

health outcomes at an individual and a population scale. Furthermore, this assertion has been corroborated by public health since the nineteenth century, but the field has only recently gained a greater appreciation for the role played by “social relationships” and “social spaces” in “health experiences and outcomes” (Gatrell, 1997: 141).

When Kearns noted in 1993 that a “post-medical geography” was limited to concerns over the spatial relationships between individual places and institutions, rather than the health-related characteristics of place themselves, he was making the important point that place always means something. Even as early as the nineteenth century, place was often only considered in terms of the statistical correlation between health indicators and certain characteristics of the built environment (population density, housing quality etc). Instead, Kearns argued, health geography “would consider the dynamic relationship between health and place and the impacts of both health services and the health of population groups on the vitality of places” and “how the experience of health and illness...shape[s] the experience of place” (1993:145). Reversing the direction of the relationship between health and place, so that places not only help to condition health outcomes, means that the experience of such health outcomes also conditions how places are valued and understood. This is an important theoretical and methodological direction for the sub-discipline; especially given the fact that, as this work will later explore, public health agencies is being increasingly devolved to local community settings to help address existing health inequalities that are both social and spatial in extent.

The currently strong link between health geographers’ notion of place as a space of meaning where social relations are played out has found valuable ties to recent engagement with the idea of social capital as a mechanism linking health and social inequality (see Mohan and Mohan, 2002; Leyden, 2003; Lochner *et al*, 2003; Szreter and Woolcock, 2004). Social capital has become an important theoretical and policy construct as neo-liberal public health in countries such as the UK and US has turned to

'capacity-building' as a means of raising individual accountability for health status. The idea that a strengthened civic realm could have a beneficial impact on health - and conversely that better population health can vitalise place - is not new, but may have renewed resonance at a time when some sociologists are bemoaning the loss of 'community' (see Putnam, 2000; Delanty, 2003). The "seductive simplicity" (Mohan and Mohan, 2002:191) of social capital has made it a beguiling concept, but also the subject of widespread interrogation. Social capital suffers from conceptual nebulosity, with authors often using the term loosely without referring to the exact theoretical construct they are using. But, as a politically attractive discourse it has come to proudly take its place in the repertoire of health geography, doubtlessly due to its potential to shed light on health disparities as much as its "tendency to wish fulfilment" (2002:200)

Place has not been a recent discovery to health geographers. Rather, its use as a guiding theoretical construct has changed with a shift from a biomedical model of disease to a more holistic idea of health as wellbeing. As Gesler (1991) contends, health concerns are cultural concerns, and, as a result, the cultural turn in health geography has enabled greater use of post-structuralist methodologies and theories consequently opening the field to a wider appreciation of the meaning of 'health'. In turn, this has permitted greater attention to the idea of healthy or therapeutic 'landscapes', where places are not isolated but rather exist in recursive relationships with the people that inhabit them and the processes that constitute them. Over the past decade health geographers have come to realise that places can enable or constrain the pursuit of health. As such, the cultural turn's interest with social theory and the concepts of structure and agency have been fundamental in the process of bringing this holism back into theory.

2.3.4 The Cultural Turn

In a recent paper, Robyn Longhurst (2005) called for greater geographical attention to the issue of subjectivity in relation to health. More specifically, she argued for a spatial

perspective on the experiential and embodied nature of health, and in particular, the way in which health status can be used as discursive construct to serve dominant hegemonic interests and, therefore, reinforce existing power relations (see also LeBesco and Braziel, 2001). This takes structuralist accounts closer to criticality by acknowledging that the meaning and outcomes of clinical definitions of health can have political weight by identifying risk groups and marking out the differences of their members. Interestingly, this perspective reflects a broad change in the way in which public health is being conceptualised by the state and citizens. The neo-liberal marketisation of healthcare systems in the UK, New Zealand and Canada was accompanied by a citizen-consumer ideology where individuals were expected to assume the main responsibility for their health. A quintessentially 'modern' public health movement, underpinned by a reliance on science and belief in the powers of rationality and organisation to achieve progress against disease is now, by contrast, demand-led, flexible, undertaken by a new host of 'experts' and cross-cutting an increasing number of other governmental domains. As a result, there is mounting feeling that public health, now facing new challenges from chronic disease management as well as emergent infectious diseases such as HIV/AIDS, is both "everywhere and nowhere" (Wylie *et al*, 1999 cited in MacKian *et al*, 2003) - increasingly omnipotent, yet seemingly ever harder to define in role or structure. The post-structuralist turn within geography has therefore offered some valuable armoury with which to decipher the ideas of power, governance and subjectivity encoded within the new public health.

It could be argued that the emergence of HIV/AIDS in the early 1980s brought the cultural turn to health geography. By the late 1980s and early 1990s, geographers, sociologists, social theorists, medical anthropologists and cultural theorists were examining the meaning of the virus as much as epidemiologists and clinicians were trying to uncover its aetiology and develop effective treatments. Mirroring Sontag's

earlier ideas, a body of work emerged, ostensibly within gay literature, which included first or third-person experiences of disease, both fictional and based on real-life accounts. The books of Monette (1988), Guibert (1991; 1993) and White (1988; 1995; 1997) are particularly notable in this respect. These memoirs were often intensely critical of the public health policies of the time, raising public awareness and sparking a wealth of academic critiques (Watney in Oppenheimer and Reckitt, 1997). Accounts of AIDS documented strong emergent identity politics centred on and resisting the idea of 'risk group' definitions that pathologised people and places (Shilts, 1988; Hooper, 1998). The work of medical sociologists who explored the problematic and contested politics behind biomedical definitions of AIDS, the process of research and the politics of funding (Epstein, 1998) was also an important contribution to this critical field. The cultural turn in health geography necessarily arose as public health came to face new challenges from conditions with aetiologies complexly tied to environmental structures, individual lifestyle practices and the far hazier way in which people understand and exercise their own agency. AIDS thus helped open up health geography to an appreciation of the way in which social theory and deconstructive epistemologies could be used to take the subdiscipline further beyond the "shadow of the medical" (Brown and Duncan, 2002).

One of the most important contributions made by social theory has been the bodily focus or 'corporealisation' of health geography. In turn, drawing upon the body as a unit of analysis has permitted some interesting explorations of the contemporary and everyday spaces of healthy lifestyle practices and health consumption (Longhurst, 1997; Valentine, 1999; Simonsen, 2000; Parr, 2002a; 2002b). Within social theory, concern with agency-structure arises from an appreciation of Foucauldian, Lacanian and Deleuzian philosophy and the political project of trying to reformulate the body in non-dualist (e.g. mind/form) terms (Grosz, 1995). There are clear and strong parallels between the turn to social theory and wider (although sparse) feminist critiques within

health geography (see Bordo, 1993; Dyck, 1995; 2003). These feminist accounts call upon the need to interrogate gender in relation to the “very local” experiences of health and healthcare through “story telling, the spaces of everyday life and a theorised body” (Dyck, 2003: 363). Feminist accounts of health have been central to the cultural turn by highlighting the importance of talking *to* people, rather than *about* them and also, in the process, uncovering the meanings attributed specific spaces and the salience of this to lived experience. These ideas mirror the notion that “the problem of the body is not simply an issue in epistemology and phenomenology, but a theoretical location for debates about power, ideology and economics” (Turner, 1984: 59). In the light of this, the influence of Foucauldian theoretical frameworks on governmentality, discipline and subjectivity on health geography seem a logical component of and accompaniment to feminist perspectives (Prince *et al*, 2005).

The uptake of Foucauldian post-structuralism is not limited to health geography, but has also resonated within the wider discipline. Nikolas Rose’s (1992; 2002) work has long been influential in medical sociology and has recently started to interest health geography. His comprehensive analysis of Foucault’s governmentality thesis and his work, with Novas on the creation of “somatic individuals” through discourses of health and illness would seem to be particularly pertinent to the emerging study of the discursive techniques employed by the state in the governance of health and new mode of defining and governing risk (Prince *et al*, 2005). Theorising risk in political or social terms is at the root of many sociological approaches to public health and marks a deviation from medically-defined ideas of risk. This shift came about as a response to the feeling that defining ‘risk groups’ or ‘risk behaviours’ (especially in the context of HIV) could have punitive political consequences and often resulted in ‘victim blaming’ – a concept ably explored by Paul Farmer in his work *AIDS and Accusation* (1993). Structural changes to public health systems have fundamentally altered governance, and,

in the process, the relationship between the state and individuals. With lifestyle choices such as smoking, diets and exercise now semantically transformed into risk factors for a wide range of chronic conditions, the state has been forced to intervene at the level of individual decision making. Preventative policy relies on creating conditions whereby citizens can or will act logically and instrumentally towards certain health goals. This means that governments are now faced with the task of managing behavioural choices at a time when the discourse of democratic government “at a distance” (Rose and Miller, 1992: 173) demands the retreat of the state from individual affairs. .

The discourse of the “new” public health in the UK and US, it has been widely noted, is now centred on capacity building. Health promotion emerged in the late 1980s as a central constituent of North American and Western European health policy. Underpinned by the belief that health could no longer be considered in reductionistic terms as an absence of disease; health promotion defined health as a desired state that should be cultivated and enhanced through policy (MacDonald, 2003). Community participation and empowerment quickly became the bywords of health promotion and the widespread dissemination of information in the public realm rapidly metamorphosed into the consumer culture that Greco has termed “Healthism” (1993: 357). Health promotion is essentially based on the belief that information can facilitate healthy lifestyles by inducing the “reasoned action” that constitutes the logical translation of intention into action (LeBesco, 2004: 31). However, health promotion has not been exempt from the kind of critiques that also befell earlier faith in biomedical models of disease that have been outlined in this chapter (Parish, 1995). Some post-structuralists have critiqued the foundations of health promotion for its unwavering faith in the power of words to overcome structural and material disadvantage that, as Wilkinson (1996) has proved, are strongly correlated to health outcomes. As a result, Parish suggests that greater attention is needed to the political economy that produces ill health in the first place, the power

structures that sustain this economy and the way policy is often used as a tool of surveillance to indirectly regulate populations. Furthermore, as Parr (2004) has noted, health geographers need to be much more attuned to the way in which 'health' as lifestyle, aspiration and right is marketed, sold and consumed and the spaces in which this occurs.

However, despite the inevitable critiques of the theory and policy of health promotion – that will be addressed later in this work – the field has reoriented public health structures firmly around the idea of agency. Public health has moved beyond its founding universalist, top-down approach and instead now reflects the demand-driven ideology that individuals are equal 'partners' in the prevention of illness. This injection of agency into the health policy equation has led health geographers such as Gesler and Kearns (2002) to examine the way that healthcare 'branding' and commodification has reframed the patient as consumer and thus an active component in their own health experiences. The extension of this consumerism is the way it has facilitated a culture of victim-blaming. This has not gone unnoticed by medical sociologists, who suggest that the political economy of health not only creates vulnerability, but also paradoxically markets the solution to this (see for example Moynihan *et al*, 2002). In addition, there is also a growing corpus of work on 'alternative' health care, an outcome of increasingly distrustful and demanding consumers actively seeking out the explanations that they perceive state healthcare cannot or is unwilling to provide (Doel and Seagrott, 2003). Consequently, Parr (2003) suggests that within the wide rubric of 'agency' and a wider focus on non-traditional medical practice, that there should be more attention to care and caring as a means of fostering wellbeing (Andrews, 2002). This is also politically salient as more healthcare services such as those for mental health or disability (in the UK at least) are being devolved to private agencies, charities or the individual, with the caring role now fractured between the state and a host of new actors.

It is clear that the post-structural or cultural turn has been instrumental in linking health geography to the reality of the new public health's discursive and institutional structures. It has also, as shall be later explored, opened the sub-discipline to a 'critical turn' that is more attuned to the linkages between research, theory and politics. The transition from medical geography to health geography appears to have turned another corner, and the latest path is being termed a "critical geography of public health" (Brown and Duncan, 2002: 362). While this seems more of a segue than radical about-turn from medical geography, there are still some notable epistemological differences, despite the fact that in reality it is only a short theoretical step from the work enabled by the cultural turn and post-structuralism to 'critical geography' (Blomley, 2006). However, there is a marked difference in the potential of geographers to contribute to health policy debate if they are engaged with expressly political epistemologies, especially at a time when public health agencies are actively recruiting stakeholders and expert advisors to facilitate their search for evidence-based policy to govern the current epidemics of 'diseases of affluence' and their predicted future effects. Furthermore, interdisciplinarity is increasingly being called for in order to formulate effective, 'joined-up' policy. As such, the critical turn may prove to be one of the most decisive in medical geography's development.

2.3.5 A 'Critical' Geography of Public Health

Brown and Duncan (2002) have been instrumental in transforming the desire for health geography to "move beyond the shadow of medicine" (Gesler and Kearns, 1998:3) into an, albeit partial, reality by concentrating on theory development to help carve a role for geographers in policy making. They concede that health geography already counts a broad range of research areas within its repertoire – disability, HIV and mental health are but a few examples - but should still be mindful of the need to interrogate how certain 'phases' of public health have corresponded to the hegemonic form of medical knowledge prevailing at the time. The progression from the 'Sanitary' (which arose from

miasmatic theory) to the 'Preventative' (germ theory) to the 'Therapeutic' (behavioural psychology and psychoanalytic) phases of public health, has now come to rest with a 'new' public health whose hegemonic roots are more blurred (Goraya and Scrambler, 1998). Since the 1970s, Brown and Duncan note that there have been five main spheres of attention for the 'new' public health: prevention; the production of healthy living and work spaces; the material character of health inequalities, the promotion of community participation and individual empowerment in relation to health. Given the wide range of concerns that fall within the 'new' public health, the authors suggest that a geography of public health (rather than health geography) needs to critically engage with the 'social model of health'. They thus argue the need to inject criticality into studies of the rationale, techniques and tools of public health, so that 'health' itself is no longer taken as read, but understood a construct worthy of deconstruction.

These ideas are not new, but they are newer to health geography. The 'sociology of health promotion' literature, as has already been mentioned, has been swift to draw the link through Foucauldian analysis between the rise of public health consciousness and the deepened penetration of medical authority into society. This medicalisation of the everyday spaces of health has occurred despite considerable efforts on the part of public health to transpose responsibility onto individuals. Furthermore, in the process of this transposition (real and discursive), health has unavoidably become one of the primary motifs by which we organise our lives. Indeed, Brown and Duncan contend that the discursive practices of the new public health represent new forms of governance, regulation and social control, set against the rhetoric of individual empowerment and capacity building, represent the areas most in need of critical reflection by health geographers. Further to their suggestions, it should also be asserted that the sub-discipline needs to rethink its conceptualisations of 'risk', especially in the light of rapid

advances into genetic medicine and its profound impact on a health insurance market that is attaining ever-greater salience (Novas and Rose, 2000).

The enterprise of health insurance is inextricable from the state practice of public health. As a result, how they calculate and attribute risk cannot be far from health geographers' concerns (French, 2000). Indeed, in the case of conditions such as obesity, insurance tables of height and weight were one of the first standardised ways of calculating risk (Oliver, 2006). However, now risk groups can be identified on the basis of predicted rather than observed symptoms. Public health is therefore increasingly charged with the task of identifying and managing populations not with a disease, but with a predisposition to it – a situation with clear corollaries to the stigmatised “worried well” figure expounded within accounts of HIV/AIDS (see Alonzo and Reynolds, 1995). Identifying genetic risk, and moreover delineating certain risky places invariably involves an extension of the medical gaze into social domains usually outside the biomedical remit (Armstrong, 1995). In so doing, this dissolves the healthy/sick binary that has long functioned as one of the most fundamental organising principles of society. In tandem with genetic risk, the ‘new’ public health has also embraced the idea that ‘lifestyles’ themselves are now risk factors (again, an epidemiological viewpoint concretised by HIV/AIDS). The realisation that everyday practices and choices can increase susceptibility to illness not only inspired the current reconfiguration of public health policy, but also demands new, critical theoretical stances by geographers concerned with approaching questions of social justice and fulfilling the promise of delivering emancipatory politics (Unwin, 1992).

When lifestyle becomes a risk factor, subjectivity is unavoidably eroded by preventative public health policy as autonomous choices are curtailed by the governance of risk. This means that if the new public health is to succeed in its task of chronic disease management, then it must nurture a markedly different relationship to individuals than its

more overtly authoritarian predecessor. The doctrine of “healthism” or the permeation of discourses of health into everyday life, has charged individuals with the task of their own self-improvement to reduce the burden on the state. The project of self-improvement is then a marker of lifestyle, taste and class (Bourdieu, 1984; Driscoll, 2003); while poor health suggests that individuals lack the capacity or self-control needed to regulate themselves. A critical geography of public health should consequently “draw upon a Foucauldian perspective to investigate the ways in which health has become a central motif for the organisation of our lives within late modern western society” (Brown and Duncan, 2002: 367) in order to interrogate how and why this movement is occurring and its consequences across a broad range of settings. Health thus possesses metonymical qualities that make it a fruitful lens through which to chart wider contemporary social changes and relations (Parr, 2004). There needs to be a shift from the idea that society and social practices are *a reflection of health* towards a consideration that health as material and discursive construct is indeed *a reflection of current social processes* and tensions, which may themselves exhibit deep complexities at an analytical level.

It is inescapable that many contemporary social tensions (particularly those relating to health) reflect underlying uncertainties concerning the difficulty of controlling the newest challenges to effective government. It should therefore be noted that a critical geography of public health should also take heed from recent concern with the nature of “uncertainty” (Cutchin, 2004). Public health, as has been noted, was founded on a profound faith in science to uncover the specific aetiologies of disease. However, while this was largely possible for infectious diseases, chronic diseases tend not to have definitive causes, but rather a panoply of risk factors that condition vulnerability and susceptibility. Indeed, even in the case of AIDS which is caused by a communicable viral agent; co-existing risk factors that can increase vulnerability (e.g. decreased auto-immunity through malnutrition) mean that biomedical or clinical science has not yet

been able to reach the necessary degree of certainty to fulfil the hope of a cure or vaccination. The same logic holds true of biomedical science's continued failure to efficiently treat or 'cure' obesity, despite assurances that the cause can, essentially, be traced to a relatively simple energy imbalance. However, the social, ecological, political, economic and behavioural influences governing such energy imbalance mean that defining the causal relationships that underpin the search for a cure has been difficult. As Cutchin (2004) contends, uncertainty is an unspoken but central constituent of public health that has a profound impact upon decision-making and policy development, and yet uncertainty (perhaps due to its very nebulousness) is rarely itself theorised in relation to health by geographers. A truly critical geography of public health would therefore need to think through the salience and potential ramifications of the gaps in existing knowledge as much as the clear linkages, if any great emancipatory strides are to be made.

Uncertainty may be, he avers, "ubiquitous", but this does not excuse health geographers from the need to conceptually interrogate the assumed links between biomedical knowledge and health, and their consequences at both the policy and individual levels. Longhurst (2005) points out the importance of such interrogation through the example of the uncertain and politicised relationship between body weight and health, not least as billions are at stake for the diet industry. Furthermore, uncertainty demands criticality for it now plays a significant role in the way public health policy is interpreted by the mass media, and in turn, citizens (Davin, 2003). There can be no escape from the fact that biomedical science is sustained by a perpetual search for certainty. Yet, this does little to reassure citizens raised to believe that medical science can offer unequivocal solutions.

The growing popularity of non-allopathic or alternative therapies is testament to the mounting disillusionment with the medical establishment and the search for more 'natural' alternatives to fit in with the increasingly 'organic' consumption habits of the

wealthy (Guthman, 2003). The media's role in this medical defamation must not be overlooked, but it is also indicative of a vigorous public questioning of the political structures that govern everyday life in general, and health in particular. A 'critical geography of public health' must acknowledge that categories and meanings relating to health are now deeply unstable and contested. As a result health is increasingly a political enterprise, especially with governments fending off accusations of 'nanny statist' policies or those deemed overprotective or presenting undue interference in individual choice. The gradual slide from medical geography towards health geography and a critical geography of public health has not been a paradigmatic upheaval. Rather, it has reflected the changing concerns and interests of geographers, political exigencies and wider societal transformations that have demanded critical reflection, opening up the sub-discipline to a new range of voices, empirical examples and theoretical persuasions.

2.4 Conclusion

The transitions within medical geography that have been documented in this chapter reflect the changing role of 'health' within academic, policy and popular discourse. But it is important to note that this has been far from a clean, linear transition and the three broad approaches exposed here continue to exist side by side, albeit in an often tense relationship compounded by, it must be noted, increasing influence of the field from Geographic Information Systems (GIS). The application of this technology has been instrumental in giving traditional medical geography a more visible and policy-relevant presence, with proponents such as Danny Dorling, for example, drawing upon GIS modelling to argue in the high-profile *British Medical Journal* against the Labour government's continued failure to narrow inequalities (Dorling and Shaw, 2002; Shaw *et al*, 2005) The technology has also been widely adopted by national and supra-national public health bodies to great effect to ascertain spatial distributions of disease and thus develop geographically targeted public health interventions. GIS is also politically

powerful in the context of health for unlike simple statistical correlation calculations, it presents visible proof of aetiological associations through space. The political power has not gone unnoticed, and the potentially punitive effects of mapping pathogenic space have started to be noted by those geographers schooled in the cultural turn (Wright *et al*, 1997). GIS has therefore helped catalyse and reinforce the continued bifurcation of the subdiscipline between those classifying themselves as quantitative medical geographers and those taking up the more qualitative health geography label (Rosenberg, 1998). This thesis thus aims to address this resulting lack of inclusive methodologies and epistemologies. Furthermore, it will adopt the kind of dedicated and overt interdisciplinary approach that is being called for by public health in the field of chronic disease prevention; a method and epistemology that those calling for a move ‘beyond the medical’ may also do well to acknowledge.

Epistemological changes within medical geography have opened up possibilities for engaging with new, emergent health risks. This is also a reflection of the way in which ‘health’ has now come to mean more than just the absence of disease and is now part of wider discourses on human rights, equity and equality. Although this concept is officially encoded in the WHO’s definition, this holistic reframing has come to permeate popular culture and the political economy of, in particular, food marketing and retailing (Lang, 2003). The idea of health as ‘wellbeing’ means that it is no longer simply a medical concern, but now encompasses ideas pertaining to society, the environment, cultural integrity, community, participation, empowerment and social justice. Therefore, public health policy has to act on the whole – a task far more arduous than identifying and intervening in specific disease vectors. More problematically, the fact that wellness is a “state of being”, not merely an absence of disease, implies that it can always be improved upon. As grammatically dubious as it may sound, people can always be ‘more well’ and a vibrant economy is developing around selling the belief that there is no room

for complacency in the task of health optimisation or the phenomenon known as “wellness” in the US. As Burrows *et al* (1995: 55) aptly contend, “the marketing of health... is about the creation of wants, needs and desires”. Consumption, health and self-identity are now so irredeemably entwined that a truly ‘critical geography of public health’ will also have to acknowledge and interrogate the “social economy of wellbeing” (Wilkinson, 1996:109). At a time when we are encouraged to consume health rather than treat disease, geographers are just starting to examine the complex relationships that govern this process and the spaces that these create and re-create.

Health geography is becoming a more diverse field as public and government fears over the nature of contemporary threats to health grow ever greater. Importantly, conditions that once might have been considered too mundane, personal or trivial to warrant the attention of academic research, are now being brought into the disciplinary fold. Complex conditions such as obesity, which have recently garnered unparalleled medical, government and popular attention, are finally being considered worthy of geographical analysis. This shift is inextricable from the broader paradigmatic changes within medical and health geography that this chapter has explored. Clearly, as health has been redefined in more aspirational terms, the methods by which citizens are expected to attain this desired state have also undergone a profound transformation and, consequently, health is now also being used to classify and judge. At a time when race and gender are no longer viewed as acceptable categories for value judgments, health has become a viable alternative. Now that the medical profession is agreed on the fact that diet, exercise, smoking and other lifestyle choices are risk factors for chronic conditions such as Type-II diabetes and hypertension (even though the exact physiological mechanisms linking them are still the subject of much debate) health status is often now viewed as an exterior materialisation of inner character. While this is not a new concept – the twentieth century hygienist movement was based on similar principles - the rapid acceleration in the

amount of health information circulating in the public realm makes its present form a recurrent obstacle to the pursuit of social justice with regards to health.

This analysis of epistemological shifts within medical and health geography suggest the need to look in two directions. First, towards policy through a critical appreciation of the structure, mechanisms and goals of public health. This notion is allied most strongly to the vision of a critical geography of public health set out by Brown and Duncan (2002) and further reinforced by Parr (2004). This is not to suggest that health geographers should only seek instrumentality in their research, but rather remain alert to issues of relevance that will also, coincidentally, help raise the visibility of the discipline as a whole. Second, aided by the theoretical constructs favoured by the cultural turn, towards the multifarious meanings of health and how these both reflect and are a reflection of wider changes in social relations, political economy, and governmentality. This has already been ably approached from a historical perspective (Gruffudd, 2001; Matless, 2001), but contemporary examples need also to be explored. For example, there is a growing body of work within medical sociology and what is best termed 'investigative journalism' exposing the dangers of the explosion of public health awareness or 'healthism' (Greco, 1993:153; Fitzpatrick, 2001), and such current thinking should also hold a place within geography. Critical health geography should therefore address the historical routes through which health has now become one of the central organising principles of contemporary society, and its associated discourses an implicit and explicit means of governance.

If the coexistence of medical, health and critical geographies of public health has legitimised a wider appreciation of the manifold meanings and forms of health, it has also created the necessary theoretical weaponry to help interrogate those issues currently managed under the auspices of public health. In the past decade, obesity has come to the fore of political and public consciousness as a significant threat to individual and

population health. It is fundamentally a clinical condition in which excess body weight acts as a risk factor for a number of co-morbidities. However, it also has definitive social, cultural and economic systems of causation and meaning. The condition has been the subject of vociferous debate in the biomedical and social science literature, not least because, despite years of research, its aetiology still remains uncertain. Thus, obesity is an apt (but as yet under-researched) topic for health geographers that demands further attention. If, as Kearns and Moon (2002) question, “the problem centres on the extent to which health geography is about geographies where health matters or health where geographies matter” (2002: 618) then obesity may be one of the most pertinent and conceptually intricate clinical conditions through which to examine their contention. Indeed, thinking through obesity as a proxy or gauge of the complex challenges currently facing the governance of health will be the primary focus of this work and, it is hoped, will also become a topic worthy of greater geographical analysis.

Chapter Three: Obesity as a geographical research agenda

3.1 Introduction

The coexistence of medical and health geography is not as recent a phenomenon as some have suggested (Parr, 2004). As early as 1984, Michael Dear was calling on medical geographers to adopt a “social theory of health”. A decade later, Robin Kearns suggested that a “post-medical geography” should examine the “dynamic relationship between health and place, and the impacts of health services and the health of populations on the vitality of places” (1993:144) to “firmly locate the field within social geography” (1993:145). While there may still be perceptible methodological and epistemological divides between some medical geographer’s quantitative preferences and health geographers’ social-theoretically informed frameworks of analysis, it is important to note that continued debate over this bifurcation risks losing sight of the unprecedented volume of research across a range of health concerns that these varied methods have enabled (Rosenburg, 1998). Medical and health geographers may appear split methodologically and epistemologically, but ironically the division seems to have catalysed rather than hindered research. This is especially true given the applicability of qualitative methods to interrogating experiences of and risk factors for chronic diseases at an individual scale, which often involve uncovering meanings and contexts that quantitative methodologies frequently fall short in understanding. Furthermore, the social, cultural and more recently, critical turns within health geography have legitimised the inclusion of topics which might previously have been considered outside medical geography’s remit

Over the past fifteen years, the uptake of qualitative research has opened up the field to the study of people, places and conditions previously ignored by medical and health geography (Rosenberg, 1998). For example, Kearns’ (1991) mix of participant observation and informal interviews helped capture a sense of New Zealand’s Hokianga

Special Medical Area's contribution to the 'healthiness' of place. In-depth interviews also allowed Dyck (1995) to capture the "hidden geographies" of women with multiple sclerosis and Doel and Seagrott (2004) offer some thoughts on obsessive compulsive disorder as both a spatial and embodied practice. The clear difference between such research and quantitative analyses of disease diffusion or spatial clustering is its foregrounding of the experiential and situated nature of health. Interestingly, recent research on the way illness and health is understood has emerged from both mounting interest with social theory's treatment of the body and the everyday spaces that act as social backdrops to condition health outcomes (Parr, 2002a). While some medical geographers may mourn the loss of quantitative rigour; the humanist, Marxist, cultural and critical turns discussed in chapter two have become valuable methodological resources to health geographers interested in deepening understandings of what it means to be healthy. This is especially evident in geographers' recent, limited engagements with the multi-faceted nature of chronic, 'lifestyle diseases' like obesity.

Longhurst (2005) notes that obesity or "corpulence" may have once been considered too mundane, subjective, self-imposed or aetiologically self-evident to merit social-theoretical research in addition to the existing body of biomedical literature. However, obesity has sufficiently permeated public and government consciousness that detailed geographical engagement with the topic seems not only timely, but essential to navigate the current stalemate that seems to have beset public health policy development (Nestle and Jacobson, 2000). Indeed, "geographers have the potential to transform other disciplinary agendas by bringing a spatial perspective to bear on the social relations surrounding fatness" (Longhurst, 2005: 248). This suggestion however, must be extended beyond social relations to include the structural processes conditioning the risk of obesity in certain places, the cultural responses to the condition that are currently subject to such intense media interest, the way such discourses are then employed as part

of public health prevention policy rationale and, furthermore, what such policies reveal about the systems of governance from which they emanate (see for example Adam, 2003; Teather, 2005; Woolaston, 2005; Gard and Wright, 2005).

The recent calls for a more critical approach within health geography and, in particular, a critical geography of public health (Brown and Duncan, 2002) demonstrate the potential to conceptually interrogate what mounting rates of obesity signal for the meaning of health within public health. With mounting evidence of spatial disparities in health status, there is a growing need to research how meanings of health are constructed in place, and in turn, how such meanings influence health-related behaviours. Obesity is cast as an “epidemic” in the biomedical sense (see US Surgeon General’s 2001 *Call to Action*) due to its global prevalence and rising rates (WHO, 2003a; 2004). But it may also be helpfully theorised as an “epidemic of signification”, to cite Paula Treichler’s memorable phrase (in Crimp, 1988:31). These potentially illuminating avenues of research fortuitously cross-cut some of the current theoretical positions of interest to geographers across a range of sub-disciplines. Therefore, this chapter will examine how obesity has risen to the status of an “epidemic of signification” through three theoretical frameworks in order to act as a caveat for subsequent explorations of the “biomedical epidemic”.

For the sake of clarity, the three conceptual spheres are outlined in table form below giving their central tenets, how they relate to obesity as a ‘problem’ and their chief proponents (figure 2). As a public health concern, obesity is problematised as an issue of “governmentality” (see Rose and Miller, 1992; Rose, 2001; Joyce, 2003). Framed as an economic question, the focus usually falls on free market networks of food production, marketing, retailing and consumption (see for example Lang, 1999; 2003; Nestle, 2002; 2003). Finally, cultural anthropologies of consumption offer a fruitful lens through which to examine obesity as reflecting recurrent anxieties over cultural change (Critser,

2004; Sclosser, 2002). How obesity has risen simultaneously to the status of biomedical and epidemic of meaning is a question that critical health geography is in a methodologically and epistemologically fortuitous position to address. This chapter will consequently first briefly discuss the definition and classification of obesity with reference to Treichler's concept of an "epidemic of signification" as a starting point for more detailed discussions of the three theoretical lenses which act as the thesis' overriding conceptual framework.

Figure 2 - The three conceptual spheres, their relation to the problematisation of obesity, central tenets and chief proponents.

THEORETICAL THEME	REALM OF PROBLEMATISATION	CENTRAL TENETS	CHIEF PROONENTS
Governmentality	• Public health • Individual behaviour	• Foucauldian concept characterised by the emergence of biopolitics or the emergence of population health and wellbeing as target of political power. • The 'conduct of conduct' or the rationale and tools of governance. • Government no longer just a state enterprise, but undertaken by a growing array of 'experts'. • Personal autonomy and capacity for self-reflection central to exercise of political power. • Model based on 'advanced	• Foucault (1978) • Rose and Miller (1992) • Lupton (1995) • Dean (1999) • Rose (2001) • Lemke (2001; 2002) • Brown and Duncan (2002) • Rose <i>et al.</i> (2006)

		liberal democracies’.	
Political Economy of food	• Economic/ supply • Structural conditions (access and availability)	• Interdisciplinary study of the influence of social and political institutions in the analysis of economic questions. • Shift from concern with guaranteeing supply to changing nature of demand and role of ‘choice’. • Related to questions of food policy. • Study of emergent political economy of healthier foods. • Questions of distribution, access and availability.	• Fine <i>et al.</i> (1995) • Fine (1998) • Dreze <i>et al.</i> (1995) • Lang (2001) • Heasman and Mellentin (2001) • Whelan <i>et al.</i> (2002) • Nestle (2003) • Wrigley <i>et al.</i> (2003) • Lang and Heasman (2004) • Young and Nestle (2004)
Cultural Anthropologies of Consumption	• Anxieties over cultural change • Nature of demand and exercise of choice	• Study of the cultural processes, social relations and places that pattern consumption. • Individual and group scale of analysis. • Social historical and sociological perspectives of consumption	• Millman (1980) • Bourdieu (1984) • Turner (1984; 1995) • Schwartz (1986) • Levenstein (1988; 1993) • Bordo (1993) • Williams (1995) • Fernandez-Armesto (2001) • Fox (2004) • Belasco and Scranton (2002)

		consumption change. • Interest with the body as unit of analysis (often from feminist perspective). • Consumption practices reflecting and reinforcing class identity and power. • Consumption as a matter of stylised 'lifestyle'.	• LeBesco (2004)
--	--	--	--

2.2 Classifying and defining obesity

The World Health Organisation (WHO) defines obesity as “a condition of abnormal or excessive fat accumulation in adipose tissue, to the extent that health may be impaired” (2005:6). This biomedical definition of obesity is based on a simple standardised ratio or anthropometric reference value of weight to height, or more accurately *weight in kg/ (height in m)²* (see figure 3 for the National Institutes of Health BMI table). The table shows the WHO’s (1995) differentiation between underweight (BMI <18.0), normal (18.0-25.0), overweight (25.0-29.9), obese (30.0-39.9) and morbidly obese (over 40.0). This global classification system is underpinned by the assumption of a statistically significant correlation between increased BMI and mortality and morbidity risk from a range of non-communicable (or chronic) diseases (Koczmarski and Flegal, 2000). Weight-responsive co-morbidities include Type-II diabetes, coronary heart disease (CHD), cardiovascular disease (CVD), hypertension, sleep apnea and certain cancers (Allison *et al*, 1999; Surgeon General, 2001). However, using BMI to define obesity is not without its conceptual problems and substantial debate has developed around the applicability of a universal index of weight/health (Hubbard, 2000). As a result, the WHO recently acknowledged that “public health action” cut-off points should be lower among Asian and Pacific populations as such groups have an increased risk of Type-II

diabetes and CVD at lower body weights than Caucasians (Choo, 2002). There has also been substantial debate over whether BMI or waist-hip ratio (central obesity) is a better measure of health risk for non-Caucasians, with central obesity now the favoured measurement for groups including British Asians. Despite its contested hegemony, BMI does still useful function as a tool for international comparison of population risk and has thus permitted a quantitative exposition of the scale of obesity's global spread, catalysing current national and global calls for public health action to halt this "epidemic".

Figure 3—National Institutes of Health BMI table used to calculate obesity (Source: http://www.nhlbi.nih.gov/guidelines/obesity/bmi_tbl.pdf)

Body Mass Index Table																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	Normal										Overweight										Obese										Extreme Obesity																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
BMI	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
Height (inches)	Body Weight (pounds)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
58	91	96	100	105	110	115	119	124	129	134	138	143	148	153	158	162	167	172	177	181	186	191	196	201	205	210	215	220	224	229	234	238	244	248	253	258	263	268	273	278	283	288	293	298	303	308	313	318	323	328	333	338	343	348	353	358	363	368	373	378	383	388	393	398	403	408	413	418	423	428	433	438	443	448	453	458	463	468	473	478	483	488	493	498	503	508	513	518	523	528	533	538	543	548	553	558	563	568	573	578	583	588	593	598	603	608	613	618	623	628	633	638	643	648	653	658	663	668	673	678	683	688	693	698	703	708	713	718	723	728	733	738	743	748	753	758	763	768	773	778	783	788	793	798	803	808	813	818	823	828	833	838	843	848	853	858	863	868	873	878	883	888	893	898	903	908	913	918	923	928	933	938	943	948	953	958	963	968	973	978	983	988	993	998	1003	1008	1013	1018	1023	1028	1033	1038	1043	1048	1053	1058	1063	1068	1073	1078	1083	1088	1093	1098	1103	1108	1113	1118	1123	1128	1133	1138	1143	1148	1153	1158	1163	1168	1173	1178	1183	1188	1193	1198	1203	1208	1213	1218	1223	1228	1233	1238	1243	1248	1253	1258	1263	1268	1273	1278	1283	1288	1293	1298	1303	1308	1313	1318	1323	1328	1333	1338	1343	1348	1353	1358	1363	1368	1373	1378	1383	1388	1393	1398	1403	1408	1413	1418	1423	1428	1433	1438	1443	1448	1453	1458	1463	1468	1473	1478	1483	1488	1493	1498	1503	1508	1513	1518	1523	1528	1533	1538	1543	1548	1553	1558	1563	1568	1573	1578	1583	1588	1593	1598	1603	1608	1613	1618	1623	1628	1633	1638	1643	1648	1653	1658	1663	1668	1673	1678	1683	1688	1693	1698	1703	1708	1713	1718	1723	1728	1733	1738	1743	1748	1753	1758	1763	1768	1773	1778	1783	1788	1793	1798	1803	1808	1813	1818	1823	1828	1833	1838	1843	1848	1853	1858	1863	1868	1873	1878	1883	1888	1893	1898	1903	1908	1913	1918	1923	1928	1933	1938	1943	1948	1953	1958	1963	1968	1973	1978	1983	1988	1993	1998	2003	2008	2013	2018	2023	2028	2033	2038	2043	2048	2053	2058	2063	2068	2073	2078	2083	2088	2093	2098	2103	2108	2113	2118	2123	2128	2133	2138	2143	2148	2153	2158	2163	2168	2173	2178	2183	2188	2193	2198	2203	2208	2213	2218	2223	2228	2233	2238	2243	2248	2253	2258	2263	2268	2273	2278	2283	2288	2293	2298	2303	2308	2313	2318	2323	2328	2333	2338	2343	2348	2353	2358	2363	2368	2373	2378	2383	2388	2393	2398	2403	2408	2413	2418	2423	2428	2433	2438	2443	2448	2453	2458	2463	2468	2473	2478	2483	2488	2493	2498	2503	2508	2513	2518	2523	2528	2533	2538	2543	2548	2553	2558	2563	2568	2573	2578	2583	2588	2593	2598	2603	2608	2613	2618	2623	2628	2633	2638	2643	2648	2653	2658	2663	2668	2673	2678	2683	2688	2693	2698	2703	2708	2713	2718	2723	2728	2733	2738	2743	2748	2753	2758	2763	2768	2773	2778	2783	2788	2793	2798	2803	2808	2813	2818	2823	2828	2833	2838	2843	2848	2853	2858	2863	2868	2873	2878	2883	2888	2893	2898	2903	2908	2913	2918	2923	2928	2933	2938	2943	2948	2953	2958	2963	2968	2973	2978	2983	2988	2993	2998	3003	3008	3013	3018	3023	3028	3033	3038	3043	3048	3053	3058	3063	3068	3073	3078	3083	3088	3093	3098	3103	3108	3113	3118	3123	3128	3133	3138	3143	3148	3153	3158	3163	3168	3173	3178	3183	3188	3193	3198	3203	3208	3213	3218	3223	3228	3233	3238	3243	3248	3253	3258	3263	3268	3273	3278	3283	3288	3293	3298	3303	3308	3313	3318	3323	3328	3333	3338	3343	3348	3353	3358	3363	3368	3373	3378	3383	3388	3393	3398	3403	3408	3413	3418	3423	3428	3433	3438	3443	3448	3453	3458	3463	3468	3473	3478	3483	3488	3493	3498	3503	3508	3513	3518	3523	3528	3533	3538	3543	3548	3553	3558	3563	3568	3573	3578	3583	3588	3593	3598	3603	3608	3613	3618	3623	3628	3633	3638	3643	3648	3653	3658	3663	3668	3673	3678	3683	3688	3693	3698	3703	3708	3713	3718	3723	3728	3733	3738	3743	3748	3753	3758	3763	3768	3773	3778	3783	3788	3793	3798	3803	3808	3813	3818	3823	3828	3833	3838	3843	3848	3853	3858	3863	3868	3873	3878	3883	3888	3893	3898	3903	3908	3913	3918	3923	3928	3933	3938	3943	3948	3953	3958	3963	3968	3973	3978	3983	3988	3993	3998	4003	4008	4013	4018	4023	4028	4033	4038	4043	4048	4053	4058	4063	4068	4073	4078	4083	4088	4093	4098	4103	4108	4113	4118	4123	4128	4133	4138	4143	4148	4153	4158	4163	4168	4173	4178	4183	4188	4193	4198	4203	4208	4213	4218	4223	4228	4233	4238	4243	4248	4253	4258	4263	4268	4273	4278	4283	4288	4293	4298	4303	4308	4313	4318	4323	4328	4333	4338	4343	4348	4353	4358	4363	4368	4373	4378	4383	4388	4393	4398	4403	4408	4413	4418	4423	4428	4433	4438	4443	4448	4453	4458	4463	4468	4473	4478	4483	4488	4493	4498	4503	4508	4513	4518	4523	4528	4533	4538	4543	4548	4553	4558	4563	4568	4573	4578	4583	4588	4593	4598	4603	4608	4613	4618	4623	4628	4633	4638	4643	4648	4653	4658	4663	4668	4673	4678	4683	4688	4693	4698	4703	4708	4713	4718	4723	4728	4733	4738	4743	4748	4753	4758	4763	4768	4773	4778	4783	4788	4793	4798	4803	4808	4813	4818	4823	4828	4833	4838	4843	4848	4853	4858	4863	4868	4873	4878	4883	4888	4893	4898	4903	4908	4913	4918	4923	4928	4933	4938	4943	4948	4953	4958	4963	4968	4973	4978	4983	4988	4993	4998	5003	5008	5013	5018	5023	5028	5033	5038	5043	5048	5053	5058	5063	5068	5073	5078	5083	5088	5093	5098	5103	5108	5113	5118	5123	5128	5133	5138	5143	5148	5153	5158	5163	5168	5173	5178	5183	5188	5193	5198	5203	5208	5213	5218	5223	5228	5233	5238	5243	5248	5253	5258	5263	5268	5273	5278	5283	5288	5293	5298	5303	5308	5313	5318	5323	5328	5333	5338	5343	5348	5353	5358	5363	5368	5373	5378	5383	5388	5393	5398	5403	5408	5413	5418	5423	5428	5433	5438	5443	5448	5453	5458	5463	5468	5473	5478	5483	5488	5493	5498	5503	5508	5513	5518	5523	5528	5533	5538	5543	5548	5553	5558	5563	5568	5573	5578	5583	5588	5593	5598	5603	5608	5613	5618	5623	5628	5633	5638	5643	5648	5653	5658	5663	5668	5673	5678	5683	5688	5693	5698	5703	5708	5713	5718	5723	5728	5733	5738	5743	5748	5753	5758	5763	5768	5773	5778	5783	5788	5793	5798	5803	5808	5813	5818	5823	5828	5833	5838	5843	5848	5853	5858	5863	5868	5873	5878	5883	5888	5893	5898	5903	5908	5913	5918	5923	5928	5933	5938	5943	5948	5953	5958	5963	5968	5973	5978	5983	5988	5993	5998	6003	6008	6013	6018	6023	6028	6033	6038	6043	6048	6053	6058	6063	6068	6073	6078	6083	6088	6093	6098	6103	6108	6113	6118	6123	6128	6133	6138	6143	6148	6153	6158	6163	6168	6173	6178	6183	6188	6193	6198	6203	6208	6213	6218	6223	6228	6233	6238	6243	6248	6253	6258	6263	6268	6273	6278	6283	6288	6293	6298	6303	6308	6313	6318	6323	6328	6333	6338	6343	6348	6353	6358	6363	6368	6373	6378	6383	6388	6393	6398	6403	6408	6413	6418	6423	6428	6433	6438	6443	6448	6453	6458	6463	6468	6473	6478	6483	6488	6493	6498	6503	6508	6513	6518	6523	6528	6533	6538	6543	6548	6553	6558	6563	6568	6573	6578	6583	6588	6593	6598	6603	6608	6613	6618	6623	6628	6633	6638	6643	6648	6653	6658	6663	6668	6673	6678	6683	6688	6693	6698	6703	6708	6713	6718	6723	6728	6733	6738	6743	6748	6753	6758	6763	6768	6773	6778	6783	6788	6793	6798	6803	6808	6813	6818	6823	6828	6833	6838	6843	6848	6853	685

This standardised measure of weight-related health risk underpins the current ubiquity of the “epidemic” label when describing the global and national scale prevalence of obesity and its rapid rate of increase over the past two decades from a biomedical perspective. However, as some cultural analysts of HIV/AIDS have made clear and the first research theme of this thesis explores, biomedical perspectives may provide only a partial account of the stories of disease. Treichler’s argument is particularly compelling in this respect for it suggests that “the very nature of AIDS is constructed through language is particular through the discourses of medicine and science” (1988: 31). Drawing heavily on Latour and Woolgar’s *Laboratory Life* (1985), Treichler contends that while AIDS is a real disease syndrome “damaging and killing human beings” (1988: 32), it is also subject to a “chaotic assemblage of meanings” (*Ibid.*). It is therefore of epidemic scale and significance through “the exponential compounding of meanings” and one of signification as “the facts themselves arise out of the signifying practices of biomedical discourse” (*ibid.*). The outcome of this has been that social interpretations of disease are “based not upon objective, scientifically determined reality, but about what we are told about this reality” (1988: 35). As a result, obesity as a public health crisis encapsulates the entwining of biomedical knowledge and the meanings generated from its associated discursive practices which, together, have marked (and very real) political and practical significance. Some of the manifestations of this significance will be explored through empirical examples later in this thesis.

Treichler’s work may be based on the example of AIDS, but along with Sontag’s contribution to the field of cultural analysis, her theoretical ideas are exceptionally relevant to the study of obesity. In particular her assertion that AIDS “is a deeply problematic signifier” (1988: 70) that reinforces existing social prejudice and preconceptions is one that offers great theoretical weight to an analysis of obesity prevention. Furthermore, if social interpretation is based on “what we are told” about

certain conditions, then it would seem imperative to analyse not only *what* we are told, but *how* and *why*. In so doing, a more political, and thus critical, agenda, engaged with not only the rationale and tools of public health, but also the discursive currency that it both responds to and produces, might start to meet the expectations of a “critical geography of public health” laid down by Brown and Duncan (2002). With these ideas in mind, it is thus necessary to consider where obesity and its multiple cultural, political and economic causative or ‘antagonistic’ structures sit within current geographical research themes before turning to a more detailed exposition of the biomedical nature of the ‘epidemic’ in the next chapter.

3.3. Governmentality

The thesis developed by Michel Foucault in *The History of Sexuality* (1978) has inspired a raft of literature on the body, urban form and society. Foucault’s inquiry into the emergence and mobilisation of discourses of ‘sexuality’ in the nineteenth century was also a study of the functioning and circulation of power through these discourses. Contrary to the views put forward in the “repression hypothesis” - suggesting that Western Christian cultures long repressed sexuality – Foucault argued that the nineteenth century imperative not to speak about sexuality did not produce silence but rather an explosion of discourses aimed, in part, at speaking about this silence. Foucault further argued that such discourses ushered in a new era of “biopower” (Foucault, 1978: 140), a concept that is highly pertinent to questions of obesity and obese bodies and, inextricable from this, the analysis of governmentality or the “conduct of conduct” (Dean 1999: 190) that characterised Foucault’s later work and will be addressed in this section. The use of Foucauldian frameworks has now spilled over into health geography, understandable given the strong resonance of concepts such as power, regulation, discipline and surveillance with the management of current public health challenges.

Biopolitics is marked by “the emergence of the health and physical well being of the population in general as one of the essential objectives of political power” (Foucault, cited in Rabinow, 1984: 277). It is “the endeavour, begun in the eighteenth century, to rationalise problems presented to governmental practice by the phenomena characteristic of a group of living human beings constituted as a population: health, birth rate, longevity, race” (Foucault, 1978: 73). This was characterised by “an explosion of numerous and diverse techniques for achieving the subjugation of bodies and the control of populations” (*ibid*, pp.140). The rise of technological capacities to identify, survey and control a population also created a need for public health policy to correct the deviations from accepted norms noted by such surveillance. While Foucault’s work has been criticised by feminists bemoaning its neglect of the gendered workings of power (see Bristow, 1997 for a good overview); it still has great theoretical and analytical utility to the methods of control and societal implications of public health.

The biopolitics of late modernity, according to Rose (2001) has four tendencies, all of which have applicability to obesity. These are to individualise human worth; essentialise variations in human capacity; reduce social phenomena to the aggregate of each individual’s actions and also to discriminate against, constrain or exclude those existing outside biological norms. Twentieth century neo-hygienist discourses on “population fitness” and the rise of eugenic thinking were both based on a conceptual link between ‘fitness’, public health and political power and, importantly, confidence in the ability to achieve such political goals. However, the model of a central state able to define and enact health policy over its population has been progressively devalued by neo-liberal reforms and especially their appeals to personal responsibility and individual choice (Larner, 2000). As Rose writes, “the contemporary state does not ‘nationalise’ the corporeality of its subjects into a body politic on which it acts *en masse*, in relation to the body politics of other states...in this domain as in so many others, the images now are of

the enabling state, the facilitating state, the state as animator” (2001: 6). With the state assuming the role of ‘enabler’, the onus is thus firmly on the individual to ensure the effective enactment of public health policy. The citizen must consequently become an “active partner” (2001: 7) in a new biopolitical system in which individual biological “vitalism” (2001: 1) is a necessary prerequisite for the collective political health of the nation.

This is a sentiment clearly echoed in the UK Department of Health’s *Choosing Health* White Paper’s aim to support “informed choice” (2004a: 15) by fostering “healthy environments in which healthier choices are easier” (ibid). However, media critiques of this policy have been notable for their suggestion that a deepened state reach into the health of the population is one step closer to “nanny statism” (Revill and Hinsliff, 2004; Reid, 2004). Obesity clearly brings biopolitical tensions to the fore in that prevention policy necessitates reconciling the expectation of individual freedom with the demands for collective wellbeing that public health is expected to deliver. In the case of obesity, where individual freedom may (and inevitably does) produce unhealthy behaviour, the desire for autonomy sits uneasily alongside an expectation that the state has some responsibility and duty towards the wellbeing of its citizens. While this tension is clear, the question still remains of not just how best to reconcile it, but also how to navigate it in the governance of health.

Two of the chief proponents of Foucault’s governmentality thesis, Rose and Miller, offer a useful starting point from which to analyse this process of navigation. Their account argues that the development of governmental technologies is intrinsically linked to knowledge diffusion and the parallel rise of the “expert”, critiquing the assumption implicit in much contemporary political debate that free life can only start beyond the reach of the state (1992: 173). Instead, they suggest, “political power is exercised today through a profusion of shifting alliances between diverse authorities in projects to govern

a multitude of facets of economic activity, social life and individual conduct". Furthermore, "personal autonomy is not the antithesis of political power, but a key term in its exercise" (1992: 174). They suggest that viewing governmentality as a range of techniques employed in order to fulfil the rationale of government may avoid the trap of over-valuing the state and, in the process, reveal the manifold ways in which power is now exercised over individuals and populations. Essentially, they argue, the state cannot be considered apart from how it articulates itself in the activity of government and, it should be added that this articulation is becoming increasingly transparent and accountable in the UK and US, not least in the domain of public health. The "expert" figure and the associated hope that "the problems of regulation can remove themselves from the disputed terrain of politics and relocate onto the tranquil yet seductive territory of truth" (1992: 188) finds particular resonance with obesity where scientific certainty, expert panels, evidence bases and "best practice" remain the foundation of prevention policy.

Government, according to Dean, is the attempt to "control human conduct". Consequently, governmentality is the study of the regulation of the manifold realms which involve the "shaping of rational human behaviour" (1999:11). This "conduct of conduct" with regards to obesity is undertaken in the interlinked realms of ethics committees, researchers, employers, insurers, the pharmaceutical industry and a host of other stakeholders who classify those at risk to legitimate intervention in the name of prevention. This fits well with the idea of shaping rational behaviour which, Dean suggests, involves the "practice in which humans take on their own conduct to be subject to self-regulation" (*ibid*). This moralised practice relates to societal prescriptions of what constitutes "good, virtuous, responsible appropriate conduct" (Dean, 1999: 12). Governmentality thus requires attention not just to the way individuals are directly regulated, but also the manifold ways in which they engage with the project of their own

self-regulation and, crucially, how they are made aware of the need for this engagement. However, as Larner (2000) notes, it is important to place discussions in specific programmes, projects and policies to avoid over-generalisation when discussing broad governmental themes. To this it is important to add that comparing the politics of these projects at a variety of geographic scales will be even more illuminating.

The conduct of conduct relies on surveillance and expert knowledge to calculate risk, as evidenced by the ever-increasing volume and use of health data (for example the National Health and Nutrition Examination Survey, Behavioural Risk Factor Surveillance System and the Health Survey for England). However, “official” state data now competes with multiple sources from outside the state (e.g. market research) which also shape public opinion, influence policy and direct behaviour. The result is a fragmented relationship between individuals and states, problematising Foucault’s original biopolitics thesis which implied a separation between those who calculated and exercised power and those subject to it. Now, the enabling state (in all its forms) demands that its population “encode an optimisation of [their] corporeality to embrace a kind of overall ‘well-being’ – beauty, success, happiness, sexuality and much more” (Rose, 2001: 17), an idea mirroring the WHO’s holistic redefinition of health and providing a space for a range of new tools and techniques of government that this thesis will examine in chapters seven and eight.

As Larner writes, neo-liberal strategies of rule “encourage people to see themselves as individualised and active subjects responsible for enhancing their own wellbeing” (2000:11). Rose, Dean and Larner offer a version of governance in which human agency and autonomy is central to the functioning of the system and this, in turn, acts as a resource for policy. Obesity paradoxically foregrounds the individual as both a passive victim of the “toxic” or “obesogenic” food environment (Hill and Peters, 1998), but also an active agent in the neo-liberal logic of “personal responsibility and self-care” with

respect to health (Lemke, 2001: 203). Since individual capacity for self-care is at the root of agency and consequently a crucial tool of neo-liberal government, it must be factored into public health policy and analysis. The failure of public health policy to address obesity may thus, to some extent, be traced back to the way in which government has traditionally defined the diseased body as a passive object of governance, rather than an autonomous being capable of self-governance (*ibid.*) Consequently, with obesity policy now a government priority in the UK and US, it might be asked what its language and implementation reveal about the changing conceptual fit between the state and citizens and the role of public health within this.

Public health not only identifies and defines disease as a threat to the state (in a number of senses), but must also counteract this threat through techniques of government. Historic accounts of public health (see Caldwell and Santow, 1989; Garrett 2000; Gattrell 2002) have shown how governing populations has invariably been based on a rationale founded on a particular relationship between the body and society. For example, Huff (in Brazier and LeBesco, 2001) examines how late nineteenth century cultures of slimming assumed the body to be (and recreated it as) dynamic, calculable, re-formable and legible. This relied on creating a docile body capable of self-reform, from which corporeal transformation could be calculated and read back as a legitimisation of policy. Foucault's work lends itself to the idea of governmental technologies deployed in the name of public health that create bodies consistently induced to acts of self-improvement. However, Foucault did not consider how public health strategies to tackle (for example) obesity reveal the moral and practical difficulties inherent in creating a society predisposed to health maximising behaviour. The realisation that prevention is not as politically simple or popular as cure in part explains calls among health geographers for attention to critical geographies of public health. Recent policy suggests

that the state still has a legitimate role for proscribing behaviour, but this is becoming increasingly difficult to instigate within current public health paradigms.

National public health strategies to tackle and prevent obesity in the US and UK draw heavily on the belief that individuals should be active partners in state measures to enable health-seeking behaviour through education and support (see High Committee for Public Health, 2000; US Surgeon General, 2001; DH, 2004a). While the biomedical literature has neglected these issues in favour of uncovering the aetiology of obesity; health geographers, by contrast, are raising these issues through governmentality analyses. As Kearns *et al* (2005:2) contend, a governmentality framework “highlights the plural rationales, techniques, mechanisms and re-framings through which health and its subjects become governable, and, of particular salience here, the effects of these processes in restructuring territorial, spatial and space-place-subject relations”. Exploring how individuals have been rendered governable through making them both the cause and solution of a public health problem will therefore be at the root of this study of obesity. Furthermore, it will also consider how policy has come to frame lifestyle proscriptions and the government’s role in “enabling” these.

Neo-liberalism as ideology is based on an “individuating of the social” in which “individuals are compelled to believe that they are in charge of their own destinies and that success or failure are contingent on the wisdom or otherwise of their actions and decisions” (Kearns *et al*, 2005:3). In this way, what Dean (1999) terms “neo-liberal governmentality” is a process where individuals are discursively constituted as a problem by manifold stakeholders, but as consumers can effectively buy themselves out of this categorisation. The idea of consumer agency is also covered extensively in the social capital literature on health (see for example Mohan and Mohan, 2002; Lochner *et al*, 2003; Leyden, 2004; Szreter and Woolcock, 2004).

If governmentality is considered “a patterned way of thinking or style of reasoning that is embodied in the particular institutions, analyses, reflections, procedures, calculations and tactics which aim to know and/or govern the actions and thoughts of the populace” (Kearns *et al*, 2005:3) then it is also a profitable theoretical framework through which to analyse obesity as public health concern in both policy and practice. As a result, it will be taken up in more detail in the discussions of the development of obesity prevention policy in chapters five and six. Obesity as public health construct is a problem of regulation, in that it arises from a purported lack of individual self-regulation. However, regulating obesity also demands attention to systems of supply and demand that destabilise the ability to self-regulate, consequently making it inseparable from both the political economy of food (Lang, 2003) and consumption. Critical health geography must interrogate how a governmentality framework illuminates the links between the multitudinous structures governing the risk of obesity, the idea of citizen-consumers increasingly disciplined to be responsible for their own health and an increasingly fragmented and deregulated public health system. Furthermore, the grounding of abstract governmentality literature in the sites and practices of policy implementation is essential to highlight the linkages creating risk and vulnerability. Obesity focuses attention on individual conduct and the influences upon this. As a central influence upon conduct in the context of health and obesity, the political economy of food offers an important frame of reference to uncover how such risk and vulnerability is patterned in different places and to what effect.

3.4 The political economy of food

In the past decade, the political economy of food production or supply, retailing and consumption has returned to the geographical agenda. At the same time, popular concern and the global media frenzy over agricultural biotechnology and the risks posed by GM crops as well as a series of high profile food scares in the UK and US have focussed

government and public attention (and also intense criticism) on the agro-industrial model of food production and its relationship to prevailing political institutions and modes of governing (see for example Goldberg *et al*, 1990; Charles, 2001; Lambrecht, 2001; Hart, 2002; Nestle, 2003; Vorley, 2003). Furthermore, concern over rising rates of obesity has perpetuated fears over the integrity of the food chain, the quality of supermarket food and, moreover, brought significant inequalities in access to nutritious food to the fore (see Wrigley *et al*, 2003; Cummins and Macintyre, 2002; Smoyer-Tomic *et al*, 2006). Political economy is taken here in its interdisciplinary sense, incorporating the broad influences of political and social institutions into the analysis of essentially economic questions (Drèze *et al*, 1995: 14).

Since economic questions also raise issues of governance and it should thus be noted that there is also a long history with regard to the governance of food and public health, with historical analyses generally based on the problem of ensuring a stable supply of food to combat persistent hunger (Fine, 1998). By contrast, contemporary political economic accounts focus on questions of demand and choice, and the governmental systems of regulation and education that are necessitated in order to ensure population health (*ibid.*). It seems necessary therefore to consider how recent changes in food production, manufacture, retailing and marketing have, through questions of demand and choice, ignited powerful cultural criticisms of the political economy of food in the context of health and, furthermore, how such discourses of demand and choice have themselves become powerful components of obesity prevention policy (Winson, 2004). Interestingly, political economic approaches are now being augmented by incorporating nuanced readings of place in relation to food systems (see Fine *et al*, 1995; Marsden and Harrison, 2000; Bell and Valentine, 2003; Lang and Heasman, 2004), lending further weight to an incorporation of this approach within geography. Within the wide remit of obesity studies and increasingly within policy, the concept of a “toxic food environment”

has sparked interest (Brownall and Battel Horgen, 2003: 7; Oliver, 2006) – a concept moving political economy even closer to sociological and geographical approaches. Consequently, the intersection of the social and physical environment with prevailing economic systems of food production and consumption must be considered to see how these condition the creation and perpetuation of risk and vulnerability that public health policy must act to mitigate.

The political economy of food production and consumption has been at the fore of obesity studies. Since obesity is most popularly explained as being caused by an imbalance of energy consumption and expenditure (see chapter four), the form of this energy intake has been subject to close political and public scrutiny (Gard and Wright, 2005). Indeed, as Fine *et al* (1995) note, there have been five relevant theoretical approaches to the study of food in social science, illustrating the huge potential for political economic approaches taken in their most interdisciplinary sense: the economics of food, nutrition, the geography of food, psychology and social theory. The first, the ‘economics of food’, involves the study of supply and demand, the tendency towards equilibrium and pricing mechanisms as a form of control. Such nomothetic studies are perhaps most interesting to studies of obesity for their faith in a rational consumer able to respond logically to nutritional knowledge. This theoretical standpoint therefore tends to view the correlation between poor diets and low income as a result of imperfect decision making and therefore the fault of individuals rather than society and this argument has been taken up as a Trojan horse by those casting obesity as evidence of individual fallibility. These ideas also link well to the idea that public scepticism with regards to technology (or in this case, food and nutritional science) is the result of ignorance and lack of understanding. The “knowledge deficit model” (Allum and Boy, 2004; Sturgis and Allum, 2004), suggests that without sufficient information, the public is more likely to fall back onto irrational fears about the methods and products of science, therefore

rendering information campaigns essential to garner public support for scientific enterprise and, again, placing blame on the individual. While the assumptions of this model have been heavily criticised, especially for the insinuation that all fears are necessarily ‘irrational’ (Sturgis and Allum, 2004), it remains a concept that illustrates the potential punitive conjectures that purely economic approaches can generate.

The second, “nutritional approaches”, assume that the norm of a balanced diet finds its nemesis in the illogicality of unhealthy diets and place great faith in the sanctity of nutritional science. Yet, as left-wing authors such as Nestle (2002; 2003), Schlosser (2002), Critser (2004) and Oliver (2006) have all suggested, nutrition is still a long way from being an exact science. Rather, the links between diet and health, and just as importantly diet and body weight are still far from definitive, recently spurring a raft of literature claiming the obesity “epidemic” to be a politically-fabricated “myth”, based on selective reading of epidemiological data designed to foster panic and therefore increase weight loss drug manufacturers’ and pharmaceutical treatment sales (Campos, 2004). Such works fall into a literary genre entitled “science for the people” by Gard and Wright (2005) and persuasively meld political critique with an air of scientific rigour. This style is exemplified by works such as Nestle and Dixon’s 2004 *Taking Sides* in which they argue that nutritional science is far from simple, but rather an intensely competitive and lobby group-driven industry largely driven by controversy and uncertainty. Examples of this uncertainty include the questions of whether added sugars are harmful to health, the link between disease risk and foods with high Glycaemic Indices (or those which cause a rapid rise in blood sugar levels) and whether body weight is a reliable measure of health. The latter contestation being, also, one of the central tenets of the critiques of obesity as an “epidemic” put forward by Campos (2004) and Oliver (2006). These ideas reveal the contested theoretical foundations of some of the assumed links between nutrition and health, upon which policy is frequently based.

The remaining three approaches find great resonance with the topic of obesity. The ‘geography of food’, according to Fine *et al* (1996), involves the study of changing patterns of supply and demand through space. The region, nation and locale are considered alongside global circuits of food trade or commodity chains (see for example Leslie and Reimer, 1999). ‘Psychological studies’ argue that food is a social object that has meaning far beyond its nutritional properties, an idea that has strong resonance with feminist perspectives on eating disorders (Orbach, 1978) and issues of consumption that will be taken up further in the next section. The ‘social determinants of food choice’ examine the structures determining dietary habits, upon which the political economy of food must act to ensure consumer demand. Since behaviour is seen as a causal factor for obesity, the ‘psychology of consumption’ has much to offer obesity studies and, since it is the basis for marketing, economic questions concerning the profits of the food industry. Its uptake is also marked in the inordinate quantity of diet literature and self-help guides (see Schwartz, 1986; Smith, 1999) seeking to theorise individual conditions of overweight by recourse to personal relationships with food. However, when considering obesity there is no room for disciplinary segregation. The ‘epidemic’ cuts across all five categories of food studies and demands an interdisciplinary approach linking the individual psychology of food choice to the neo-liberal economic rationale of highly globalised systems of food production and manufacture where retailing is consolidated in the hands of a few multinational companies able to dictate patterns of supply and demand with or without state or consumer approval (Lang and Measden, 2004).

Popular social historical and sociological literature on obesity has focussed heavily on the changing political economy of the “toxic food environment” through exploring advances in food manufacturing that have reduced costs while multiplying calorific content. For example, Schlosser (2002), Critser (2004) and, most recently, Spurlock

(2005a) have documented the link between the disposal of corn surpluses through the manufacture of High Fructose Corn Syrup (HFCS) since the 1960s that enabled the bulk manufacture of a host of processed foods and, consequently, the development of fast food (Roston, 2004). Young and Nestle (2002) then place these technological changes within the context of profit-driven “super-sizing”. Increasing portion sizes, especially in the US, have been a topic of study in and of themselves not least due to their possible causal relationship with obesity. Young and Nestle’s work documents the rise of average portion size in the last two decades through an inventive comparative study of cookery book editions. They found that the same total recipe size was progressively catering for fewer and fewer people, meaning that increasing meal sizes might impede the ability to judge the amount of food needed to achieve satiation. This work has been developed further by Andrew Prentice and Susan Jebb (2003) in their quest to satisfy popular assumptions and prove that fast food is positively correlated to obesity incidence. However, what is often left untouched by the academic literature is the way in which food marketing and advertising (rather than food *per se*) sustains the propensity for weight gain. This is a notable absence, given that in the last two years food advertising, especially to children, has become one of the main targets of public outcry and obesity prevention policy in the US and UK.

Government agencies such the UK Department of Health (DH) and US Department of Agriculture (USDA) are charged with developing dietary guidelines and food labelling policy. Yet, because these are open to intense scrutiny by industry coalitions and consumers themselves, advice and labels can be undermined by confusions over meaning and marketing messages. In the rush to comprehend the system of food provision and the social conditions under which people make dietary decisions, the role of food manufacturers in artificially fostering demand for obesogenic products is often overlooked in food studies. More attention needs to be given to how the system which

provides the choice so coveted in neo-liberal discourse simultaneously creates desire for what are now understood as the “wrong” choices, a notion alluded to by Fine (1998), but ultimately ignored. Furthermore, since marketers are happily aware of the malleability of human consciousness, the inability to choose healthily has paradoxically revealed a glaring gap in the market that has been filled by weight loss, “healthier” and functional products. One interesting political economic perspective in this respect comes from Heasman and Mellentin’s (2001) discussion of the rise of “functional foods” as the latest healthy offerings from the burgeoning food technology industry and this merits brief scrutiny for such products mark a fundamental shift in the health orientation of the political economy of food.

The American Dietetic Association (ADA) defines functional foods as “any modified food or food ingredient that may provide a health benefit beyond the traditional ingredients it contains” (Heasman and Mellentin, 2001:5). Functional foods such as recently launched Kelloggs Optivita™ cereal are sold on the principle that their consumption will have a positive health effect by reducing the risk of certain adverse health conditions. Optivita™ contains high levels of oat bran and is sold on the claim that it can help lower blood cholesterol and thus the risk of heart disease. Functional and fortified products rely on proven causal relationships between ingredients and health outcomes or “biomarkers”. Examples of functional foods with health claims currently approved in the EU and US include calcium-enriched juices (risk of osteoporosis), folic acid-enriched bread (risk of neural tube defects) and reduced sodium products (risk of hypertension).

Functional foods and the rise of ‘healthier’ food categories illustrate the business potential inherent in the informed (or perhaps manipulated) consumer. In the case of Optivita™, its marketing strategy highlights that the decision to eat the cereal constitutes a positive “choice” for your health. The advertising rhetoric acknowledges that there is a confusing surfeit of voices advising people what to eat, but armed with the information

that this product will help lower cholesterol; the individual choice should be an obvious one. The product website also features a forum for making a “pledge for positive change”, a tool of persuasion now being used by many food manufacturers to catalyse sales and link products into the wider realm of ‘lifestyle’. As Lang and Raynor (2003) have instructively noted, the pressing need to develop a coherent food and health policy in the UK, where four major retailers control over 90% of food retailing, means that any study of obesity prevention must draw on political, economic as well as sociological theories governing the interaction of the state, industry and consumers. Yet, there are deep tensions between essentially aspatial modes of political economic thought, and the tendency towards cultural relativism that often defines sociological accounts of consumption. These tensions are especially marked with regards to “choice” as one of the fundamental tenets of the neo-liberal rationale.

Sociological and historical studies of changing social relations since the 1950s have highlighted the paradox of choice (see, for example, Ehrenhalt, 2002) and now chart its recent rise as a rhetorical device legitimising neo-liberal structural reform (Clarke *et al*, 2006; Jordan, 2005). Interestingly, the rise of obesity has coincided with a dramatic reconfiguration of the role of choice in both the political economy of food and political language itself. Lang and Heasman (2004) reveal that the average supermarket may have 25,000 different food products and a further 20,000 will be either launched or fail annually. As such, “choice” assumes a new magnitude. Ehrenhalt (1995) argues convincingly that much of the current feeling of social malaise and loss of interpersonal connections can be traced to living in a society that presents us with not only a huge array of choices to make, but also a seemingly unending amount of information that we must process to optimise decision-making, an idea that perhaps helps explain some critiques of the “knowledge deficit model”. Liberal democracies rely on “informed choice” to legitimise and operationalise its own policies, but explosions of choice render

being informed an increasingly daunting task. In the case of obesity, there is a perverse reverse logic at work as a healthy diet often rests on resisting the temptation of choice upon which the political economy of food is built. The job of food manufacturers is therefore to widen the range of foods within consumer repertoires by creating demand for new products, while the goal of public health is to encourage healthy lifestyles by enabling informed choice so that people demand the “right” foods. Health thus becomes an outcome of the ability to withstand the very pull of media-generated desire, rather than a normative state.

Cultivating the self-control and willpower needed to ensure good health in such “toxic food environments” assumes the ubiquity of choice. Despite widespread discussions of the food industry, there have been relatively few accounts of differential and inequitable patterns of food access. Work on ‘food deserts’ (Whelan *et al*, 2002; Wrigley *et al*, 2003) is thus particularly instructive as it extends medical geography’s focus on health inequalities through examining access to and availability of healthy foods. In brief, Wrigley’s (2003) work examined the impact of a structural response to social exclusion and its dietary effects through the location of a large Tesco superstore in a deprived Leeds neighbourhood. The long-term study investigated the impact of increased choice on local residents’ diets and found that health (using the proxy of fruit and vegetable consumption) showed only slight improvement despite better availability and access to healthy choice and, furthermore, that great variation between social groups remained. The study concluded that area-based policy responses to social exclusion may alter the landscape of consumption, but not the cultural relations to food that ultimately condition behaviour.

Despite this conclusion, since diet can have marked health impacts, the structural determinants of food choice should still remain central to studies of obesity and to those designing evidence-based policy. This fact was noted in Tim Lang’s recent call for a

combined food and health policy (2003) in which he argues that food policy should include a substantial health component to avoid the nutritional perils of “food deserts”. Wrigley’s work, it should also be noted, was heavily influenced by political concern with the effects of social exclusion and the hope that structural interventions (i.e. urban planning) might help alleviate these. Since certain areas are better incorporated within the political economy of food and thus well-served by supermarkets and retailers, there is a clear correlation between income and employment levels and supermarket location, factors that also exacerbate social exclusion and its resultant health impacts. In the UK and US, low incomes, high crime and high unemployment are matched only by a lack of large, reasonably priced grocery outlets (Rodriguez, 1998). With limited retailing choice, prices are forced higher through lack of competition, fresh produce is replaced by cheaper convenience goods and alcohol, resulting in a diminished ability for already disadvantaged groups to make healthy choices, even in the presence of perfect nutritional knowledge. Such ideas clearly render the political central to political economic approaches to obesity.

The level of popular criticism directed at the political economy of food has reached unparalleled levels in the UK and US (Borger, 2005). Not only is the food retail market segmented along class and cost lines – the difference between economy retailer Wal-Mart and upscale organic Whole Foods in the US is clear evidence of the divide – but there is mounting feeling that good food *should* cost more (Blythman, 2004; Lawrence, 2004). This idea taps into the more holistic notion of health, where the integrity of the whole food chain is as important as the quality of the final product. Consequently, activists and academics are questioning the morality of the present political economy of food and asking if there is scope for viable, local alternatives to global systems of trade. The way in which the media have long equated obesity with global fast-food, aided by a string of litigations against the corporate giants (Heller, 2002), has produced a vociferous

counter-movement championing an alternative and intrinsically healthy political economic vision of sustainable food production and retailing. However, the food industry's lobbying power makes developing a health-led food policy a significant risk for governments courting fickle corporate affections (Lang, 1999; 2003; Nestle, 2002). Consequently, since "food systems are the outcome of policy and political choices; food is contested territory" (Lang, 1999: 169). This contestation is apparent at the economic and political scales, but is further complicated by cultural relations to food and the act of consumption itself.

3.5 Cultural anthropologies of consumption

A recent *Social and Cultural Geography* editorial outlined how the "new cultural geographies of food" (Freidberg, 2003) might explore the unrecorded "social lives of food" and the narratives told about them. Freidberg contends that the "reading of a food's story reveals, like any good biography or travelogue, a much bigger story – a cultural geography of particular times and places" (2003: 4). This metonymical understanding of food, referencing the cultural processes and social relations that generate the meanings that inspire consumption, is not a completely new one. The new cultural geographies of food builds from existing work within cultural geography, anthropology and ecology undertaken before the mid 1980s that saw food and food ways as products of particular Sauerian "culture hearths", or places sharing certain cultural traits. It also builds on the turn, within political economy, to analyses of consumption and consumer culture, reflecting the increasing political and economic potency of consumers themselves and the concomitant drive to explore the contexts of consumption practices (Gabriel and Lang, 1995; Bell and Valentine, 1997). Attention has started to focus on the relationship between food consumption and socially constructed notions of and about bodily nature. The inclusion of a social theoretical perspective on the body and the cultural meanings of consumption within geography offer much to studies of obesity,

especially when consumption itself is extended to incorporate broader questions of lifestyle. As Longhurst (1997) avers, there needs to be greater geographical analysis of the body as discursively and socially constructed site of cultural consumption. Moreover, if “food stories have much to contribute to the larger projects of cultural geography” (Friedberg, 2003:6), then obesity as a problem of cultural consumption sits easily within the discipline.

There have been two main theoretical strands within the broad category of cultural anthropologies of consumption: social history and the sociology of consumption. These link consumption habits to social theoretical work on the relationship between the body and society (see Grosz, 1995; Turner, 1984). In addition, they are now included among the primary influences on cultural geography’s engagement with consumption. The social history of eating, for example, is exemplified well by the work of Levenstein (1988; 1993) whose account of the transformation of American diets from the nineteenth century melds explorations of technological development with wider societal changes governing the meaning and role of the body as a site of consumption. His later (1993) work takes up the story from the 1930s and examines the emergence of nutritional science and its impact on food production, dietary preferences and marketing. His work also analyses the connections between technological development in food production, the consolidation of the food chain, the development of a restaurant industry and recurrent food scares. He counterposes this with an account of the modern diet industry’s rise in the 1960s and thus how dieting as a practice reflects prevailing social, political and economic climates. Social historical accounts of consumption in relation to obesity are also taken up by Millman (1980), Schwartz (1986) and Pool (2001).

Levenstein’s focus on the historical development of the restaurant ‘industry’ is not only instructive for the light it sheds on the cultural evolution of food as ‘lifestyle’, but also as it provides the context for the intense criticism that the trade is currently suffering due to

rising obesity rates. Restaurants, and fast food chains in particular, have been in the firing line in the race to place blame for the sudden escalation in obesity prevalence. This race has produced some striking contrasts, not least in the way that McDonalds in the US suffered its first ever losses in 2003, while in France, a new restaurant was opening every six days and consumers were spending over twice the amount of US consumers per visit (Matlock, 2003). Much of this disparity in popularity can be traced to the manner in which the global chain has been forced into cultural sensitivity in designing its restaurant interiors and menus in France after it was rocked by rural protester José Bové's inflationary anti-Americanism. In spite of this, the French acknowledgement that its globally renowned cuisine has not offered sufficient protection from childhood obesity (Basdevant, 2003), means that an anthropological approach to consumption within the framework of health geography is a fruitful lens from which to undertake a comparative study of obesity.

Millman's early work was the first account of obesity written by a sociologist and argued, drawing on ethnographic research, that body weight had symbolic meaning beyond the physiological (1980). Almost three decades later, this idea seems commonsensical, but before the topic was subject to public, media and government scrutiny, the suggestion that obesity and stigma were inextricable lent weight to calls for 'fat advocacy'. Millman contends that obesity offends societal norms and standards, therefore rendering an elevated BMI a signifier of deviant consumption, a lack of control and self-destructive tendencies. The work also raised the crucial question of whether obesity, regarded through the lens of consumption practices, should be considered an individual or societal question. Schwartz's (1986) work extends that of Millman by offering a more nuanced cultural history of dieting and 'fat'. He contends that fatness has risen to the status of cultural anxiety simply because it "is the modern expression of an industrial society confused by its own desires and therefore never satisfied" (1986: 5).

He charts the historical transition through differing bodily ideals (each relating to a particular quest for satisfaction set within public health paradigms of the time) from the Jacksonian “thin body” to the Victorian “buoyant body” to the “regulated body” of the late nineteenth century and the “measured body” of Metropolitan Life Insurance’s “body weight for height” charts in 1959 (see also Oliver, 2006). He suggests that “the diet is the supreme form of the manipulation of desire...it is through the constant frustration of desire that late capitalism can prompt ever higher levels of consumption” (1986: 328). This is an idea ably explored by Guthman and DuPuis (2006) in their discussion of obesity as the inevitable outcome of neo-liberal supply-side economics. Indeed, it is because consumption promises satisfaction, but never delivers, that it is able to attain such significance above and beyond its practice.

Counihan writes that “food marks social difference, boundaries, bonds and contradictions” (1999:1). This statement resonates deeply with the idea that popular and media interest in obesity reflects underlying cultural anxieties. Essentially, obesity rates exhibit sharp socio-economic gradients (Wardle and Griffith, 2001; Wardle and Steptoe, 2003) meaning that prevalence is frequently highest among low income and non-white groups (Blakely *et al*, 2002). Since socio-economic and racial disparities are inscribed in space through residential segregation, obesity is often cast as a physical manifestation of geographical, social and cultural differences which, in turn, relate to questions of class, taste and identity frequently manifested through the consumption of lifestyle. Social theory’s uptake of Bourdieu’s (1984) reworking of the Weberian notion of class in his treatise on *Distinction* resonates deeply with the inclusion of obesity within anthropologies of consumption and sociological interest with ‘lifestyles’ more generally (Williams, 1995). Bourdieu’s argument centres on the notion that lifestyles are both classified and classifying practices invoking questions of taste that, ultimately reflect and reinforce class differences. Indeed, recent research on the link between poverty, food

purchasing and weight-related health (see Wrigley *et al*, 2002; Whelan *et al*, 2002; Pickett *et al*, 2005) may lend weight to the idea that obesity is a physical manifestation of class differences. Such difference, furthermore, justifies the surveillance and intervention explored within governmentality studies. To further complicate matters, subscribers to the new cultural geographies of food would also contend that we are not just *what* we eat, but also *where* we eat (Bell and Valentine, 1997). For obesity, this should be widened to suggest lifestyle choices have resonance not just for the consumption practices that they entail, but also the constitutive role played by locale within these. Consumption is socially and culturally constituted, but also inscribed upon and derives meaning from place. In turn, this means that as Mintz (1985: xxviii) writes, “the social history of the use of foods...can contribute to an anthropology of modern life”, the adjunct being that it can also contribute to an anthropology of modern places.

Drawing on the substantial volume of work relating to gender, the body and obesity; cultural critiques of the medicalisation of corpulence have much to offer health geographers interested in the constitutive nature of consumption practices. While Turner’s (1984) work has been discussed elsewhere, it is worth revisiting for its Bourdieuan leanings and role in re-categorising the “body” within sociology and geography. Turner contends that, during the twentieth century, the body became a principle site sustaining capitalist development. Consumption bifurcates the body between internal psychological control and external self-presentation, rendering space a site of self-performance. Under this system, Turner suggests, rationality and discipline are needed to quell the temptations of capitalist consumption. Consequently, if the body is a material and metaphorical representation of capitalist social relations, then any lapse of rationality and discipline can be read back on the body as a reflection of the tensions besetting the system. Crucially, disease is thus “the most salient metaphor of structural crisis...all disease is disorder” (1984:114). For obesity, which Turner explores in some

depth, order must be reclaimed through dietary management and subscriptions to healthy lifestyles. Consumption has long been a site for the expression of social anxieties over the effects of capitalism, but the way in which these anxieties have been acknowledged and mitigated through policy discourse has changed through time and, as Stearns' (1997) comparative study ably demonstrates, remains contingent on the place of operation.

Obesity has reframed the body within the dictates of health. The turn to social theory to frame discussions of obesity by authors such as Bordo (1993) and LeBesco (2004) has arisen, in part as both a political project critiquing the medicalisation of fat bodies and a wider feminist project critiquing gendered constructions of bodily difference (Orbach, 1978; Wann, 1999). The intersections of the body and society in the pursuit of consumption are also central themes in the huge volume of diet literature, self-help books and narratives of weight loss. Indeed, the belief that “a fat person’s only shot at citizenship comes if he or she gratefully consumes the panoply of diet and fitness products made available by industry and government” (LeBesco, 2004:57) has fed into a burgeoning debate on what are being termed “fat rights”. Richard Klein’s 1996 work *Eat Fat* was one of the first to expressly argue that cultural anxieties surrounding obesity should not be punitively projected onto those classified as obese. His treatise has been followed by work exploring the nature of stigma and bias in relation to body weight (Brownall *et al*, 2005). These works are, interestingly, united by an agreement that rendering obesity problematic serves the dominant interests of the diet and fitness industries by creating demand for their products (see also Campos, 2004). Consumption therefore, in a confusing twist, is both vilified as cause of obesity and touted as the solution to the health perils of excess body weight.

It is notable that obesity has become a “problem” due to evidence of rapidly rising prevalence since the 1980s. This time period coincides with an explosion of consumption practices in developed countries and, increasingly, in developing nations. The

emergence of a “leisure industry” or the intense commercialisation of (to some extent, class-based) lifestyles witnessed through an explosion of restaurants, bars, coffee shops, gyms and fitness centres has fundamentally altered consumption practices. In the UK, planning regulations have facilitated the conversion of banks and post offices into licensed premises to revitalise urban space and create vibrant “night-time economies” (Hobbs *et al*, 2000: 701) based on a “hedonistic dynamic” (*Ibid*, 2000: 704). These centres of leisure consumption represent not just new economies dominated by corporate conglomeration, but also new forms of popular leisure that have proven a source of great anxiety to the UK Government.

In 2005, there were 26,414 restaurants in the UK, serving 734 million meals totalling sales of over £7.6 billion (British Hospitality Association, 2006). When coffee shops and bars are included, total spending rose to £12 billion in 2005. Interestingly, and contrary to popular perceptions of American fast food culture, market research from Datamonitor suggests that the British actually consume more meals per capita out of the home than Americans. In 2005, the average Briton consumed 633 “meals” (including snacks and drinks) out of the home, while Americans ate 614. This habit translates into annual per capita spending of £1,224 in the UK (Datamonitor, 2006). Restaurant expansion in London has now reached unprecedented levels, with 142 outlets opening in 2005 and prices in the over £50 a head bracket rising by 6%, mainly as a result of private equity investment and rising rental prices (British Hospitality Association, 2006). The growth of the leisure industry has meant constant opportunity and temptation to consume and, interestingly for obesity, rising alcohol consumption. The role of alcohol in obesogenesis is very rarely considered, but given that alcohol is highly calorific, freely available and its consumption sanctioned by the leisure industry, its role would seem to be significant. Healthy leisure has consequently emerged as a consumption trend responding to demands to undo the more deleterious effects of the buoyant “night-time economy”, and

this new type will be discussed later in this work. The cultural anthropologies of consumption must thus consider the place-based meanings of consumption as well as the economic and regulatory conditions that frame them.

Obesity prevalence exhibits distinct geographical patterns and therefore there is significant scope for further comparative research on the spatiality and sociality of consumption practices and how the ideologies that historically underline cultural practices are reframed through the medicalisation and moralisation of obesity. Cultural anthropologies of consumption, as has been suggested, are a useful theoretical viewpoint from which to interrogate obesity as a cultural 'problem', rendering certain cultures problematic by virtue of higher than average obesity rates among group members. While the theoretical and epistemological roots of this frame of analysis clearly cross-cut issues raised within the spheres of governmentality and the political economy of food, the recursive relations between consumption and culture merit attention. Moreover, the idea that health can be consumed to prevent further rises in obesity prevalence requires further exploration. When cause and solution are ironically inculcated within the same system, there is a definite need to interrogate the everyday spaces within which they operate, a task that geographers have long embraced and a tradition that this thesis will build upon.

3.6 Conclusion

The ongoing methodological and epistemological debates between medical and health geographers (Rosenberg, 1998), and recent calls for a more critical approach to public health within geography (Brown and Duncan, 2002; Parr, 2004) have coincided with obesity's emergence as a global health concern. In addition, causal explanations for obesity remain the subject of intense debate between those subscribing to biomedical models of disease and those looking to the environmental or structural mechanisms determining health status (Reidpath *et al*, 2002). Furthermore, not only do the theoretical

ideas surrounding governmentality, the political economy of food and cultural anthropologies of consumption help shed light on the complex aetiology of obesity, but they offer great potential for illuminating how ‘health’ has become one of the defining leitmotifs of late modern society and the cultural, and thus geographical, contingency of this. Thinking through obesity metonymically and geographically through the three conceptual lenses therefore starts to respond to Brown and Duncan’s (2002) call for critical approaches to “public health as a socio-cultural practice and a set of contingent knowledges” (Mackian *et al*, 2003). Moreover, as both practice and knowledge, any study of public health’s “contingency” must always be attuned to the ‘political’ to ensure that health geography retains the prominent position both within and outside its parent discipline that it merits (Thrift, 2002).

Social histories of fatness, obesity and dieting (Schwartz, 1986; Stearns, 1997) illustrate that as both medical and cultural construction, the topic is far from being a recent discovery. However, the present scale of interest in obesity is a new phenomenon. The UK’s most recent public health White Paper cited independent research that shows that from 2003 to 2004 the number of national newspaper headlines with ‘obesity’ in the title more than doubled to almost 600. This signals a journalist response to the kind of “epidemic of signification” highlighted by Treichler (1988). The three theoretical frameworks offer different vantage points for the social interpretation of disease, thus operationalising the idea that such interpretations are based not simply on ‘the facts’ or reality, but rather “what we are told” about such reality (Treichler, 1988: 35) and in turn, this is interwoven with the prior social constructions produced by biomedical discourses. Approaching obesity thus means, studying “a nexus where multiple meanings, stories and discourses intersect and overlap, reinforce and subvert one another” (*ibid.* pp.42) The need for three theoretical spheres demonstrate that not only are the causes of obesity complex, but also the spatialised constructions of its meanings and significance. As a

result, obesity holds great expositional potential when considered in a metonymical and comparative sense.

The theoretical perspectives favoured by a critical geography of public health offer great potential to interrogate how the contested aetiology of obesity, and the way in which this then translates into a framing of the condition as an economic, cultural or public health problem, feeds back into prevention policy development. As Cottam writes, “we might have been slow off the mark here, but if our approach remains the same – finding problems in the medically objectified body without considering the confluence of self and society and the internal relations that could facilitate ill-health – we will surely miss other crises in the making. Unless we can identify what the pressure points are in our culture, we will never be able to draft policy that aims at prevention” (2004:1203). Identifying the pressure points that exist at the “confluence of self and society” are clearly fundamental to disentangling the aetiology of obesity, and are also central sites for the genesis of “signification”. However, there are still a negligible number of accounts of obesity seeking casual explanations from the standpoint of the manifold intersections of the self and society within a social-ecological framework in particular places, despite the fact that this is the approach currently favoured by public health policy makers. Furthermore, there are few approaches that stem from an expressly comparative framework that might contrast the historical development and expression of societal pressure points, their problematisation and how these have been addressed at a variety of scales through public health policy. This is a significant omission on behalf of both social and medical science that this work will seek to address.

Just as medical and health geographers often find themselves polarised along quantitative and qualitative boundary lines, aetiological explanations of obesity are often similarly bifurcated. The literature often overlooks the way causal explanations dictate how obesity is framed by government, the media and the wider public. In turn, this framing

then conditions policy development. At the most basic level, prevention presents a solution to a problem, thus the way in which that problem is framed dictates the solution chosen. The fact that obesity is framed in a number of overlapping, but still conceptually discrete ways, means that prevention policy lacks any degree of coordination within an increasingly multi-agency, deregulated and localised system of public health and a co-existing commercial economy of wellbeing. With the WHO calling for a coherent global strategy to prevent further rises in obesity prevalence and its associated co-morbidities, the European Union demanding a coordinated framework on diet and health and individual nations still undecided about how best to address the condition, there is great need for comparative analysis especially given that, “unlike most of public health, there is no ‘best practice’ for obesity control” (Yach, 2004: 289). It is not the contention of this work that geographers have a unique insight into how a ‘best practice’ might proceed, but rather that the interdisciplinary theoretical themes and critical perspective favoured by health geographers will be another tool, among many, to offer new theoretical and empirical points of leverage into what often seems an intractable policy question. Consequently, the next chapter will move from signification to the biomedical epidemic, thereby charting the emergence of a new target of public health policy.

Chapter Four: The multiple epidemics of obesity

4.1 Introduction

In 2003, a review of Ellen Ruppel Shell's book *The Hungry Gene* labelled obesity the "trillion dollar disease" (Meek, 2003). This bold statement reveals the extent to which obesity has meaning above and beyond its biomedical foundations. Not only is it a disease in the medical sense, but it is also the cause and consequence of a number of associated economies centred on the provision of treatment and cure. Rising obesity rates have fuelled a global weight loss industry as well as the advance of bariatric (or weight loss surgery) procedures such as gastric bypasses² or gastric banding³ for adults and, increasingly, children. The Association of Bariatric Surgeons estimate that the number of gastric bypasses performed in 2005 in the US exceeded 140,000 making the field one of the fastest growing in the medical profession. As one Guardian journalist has recently suggested, "obesity is one of those areas where science meets culture full on" (Parry, 2005). Since science and culture exist in a complex and dynamic dialectical relationship (see for example Epstein, 1995; 1998), it is essential that any account of a condition that sits so uneasily at their intersection first explicates exactly how it has come to occupy such a complex and contested position. This chapter will chart obesity's emergence as a clinical condition and global biomedical epidemic starting from a historical perspective and moving into current epidemiological debates in order to demonstrate how science and culture collide.

Since "medical facts have a history and change over time" (Turner, 2004: 40), it should also be noted that obesity is not a recent discovery, but that the current degree of media,

² 'Gastric bypasses' were first developed in the 1960s based on the weight loss observed among patients that had undergone surgery for stomach ulcers. It is still the most common form of weight loss surgery performed in the US and involves connecting a limb of the intestine to a much-reduced pouch of the stomach.

³ 'Gastric banding' entails encircling the stomach with an adjustable band which creates a small gastric pouch and a calibrated opening to the rest of the stomach. This severely restricts the volume of food patients can eat and means weight loss is inevitable. The procedure has been available since the mid 1980s.

political and public fascination is a much more contemporary phenomenon. This chapter will therefore first offer some historical background before examining the nature of the biomedical “obesity epidemic”, which might be considered a main source of the discursively-generated cacophony of meanings bringing about the “epidemic of signification” addressed in chapter three. Statistics from supranational sources such as the World Health Organisation (WHO) and the ‘expert’ organisation, the International Obesity Task Force (IOTF), demonstrate a dramatic rise in obesity prevalence (or the percentage of the population with a body mass index over 30.0) across developed and some developing countries over the past two decades. Both this absolute rise in numbers and the rate of growth itself – with some countries exhibiting exponential curves since the mid-1980s – have led epidemiologists and politicians alike to brand obesity an “epidemic” (US Surgeon General, 2001) as it exhibits many of the same diffusion and distribution traits as infectious diseases. Epidemiologists have set out to uncover its aetiology, the logic being that with causes known, and the relationship between cause and effect understood, efforts can be focussed on developing “evidence based” prevention and treatment. As a UK *House of Commons Health Committee Report* on obesity states, “determining the causes of obesity is central to tackling it” (2003: 3), a style of reasoning that pervades public health research and policy in the UK and US. Consequently, the second section of this chapter will analyse recent trends in aetiological research on obesity.

At the root of many explanations of obesity is the deceptively simple ‘energy balance equation’ that suggests that net weight gain is the product of the difference between energy (measured in either Kilo Calories or Kilo Joules) consumed and those expended (through base metabolic rate and additional physical activity). This equation is one of the most widely accepted basic aetiological explanations for obesity; but there are notable discrepancies between those whose theoretical leanings fall on either side of the energy

equation (Aphramer, 2005). Prentice and Jebb (1995) term these two competing rationales ‘gluttony’ and ‘sloth’ as researchers remain divided as to whether the rapid rise in obesity prevalence amongst almost all socio-economic, national, ethnic and age groups is best attributed to a sudden and generalised rise in calorific intake (gluttony) or an equally sudden energy expenditure decline (sloth). These two main casual schools of thought will be addressed before considering the implications of this explanatory split on how the known consequences of obesity are conceptualised within policy discourses in the two chapters that follow.

In both biomedical and popular discourse, the causes of obesity are most often assigned to either gluttony or sloth, but there is a mounting interest by researchers in public health, planning, social science and urban studies in social ecological models of disease that suggest that environmental causes may be as significant as behavioural factors. Social ecological models derive from ecological psychology and their theories that environments promote or constrain behaviour by facilitating certain actions over others. In this school of thought, places are “behaviour settings” with disparate health outcomes (Pepin *et al*, 2004; Blanchard *et al*, 2005: 721). The third section of this chapter will consequently discuss these “area-level effects” (Reidpath *et al*, 2002) which include such factors as the quality of the built environment, open spaces, relative deprivation, social inequality and the distribution of social capital. This discussion will shift the idea of disease causation beyond unidirectional influences on the body to one of bodies existing in dialectical relations with environmental settings. These ideas now occupy a prominent position in public policy as it has become clear that two decades of public health education have proved powerless in the face of the “runaway weight train” powered by obesogenic forces and places (Egger and Swinburn, 2005: 737). With policy makers seeking new methods of prevention; environmental, political and economic ‘structural’ factors and their interaction with individual genotypic and phenotypic factors seem to

potentially offer more fruitful avenues of research for those seeking a definitive aetiology.

The fourth section of this chapter will follow logically from causal explanations to look at the suggested consequences of obesity at an individual, community, national and global scale. Consequences are often cast in terms of costs to individuals, society or the state through a weakened capacity to achieve public health goals. In addition, there is a growing discourse surrounding the profound psychological costs of the condition that feeds into a wider debate on human rights, discrimination and equality. As previous chapters have discussed, public health is now firmly focussed on prevention rather than cure, not only to relieve the already heavy financial burden on the UK and US healthcare systems, but also to maintain steadily rising improvements in life expectancy. Obesity may hold the potential to undo many of the advances developed countries have made in improving “healthy life expectancies”⁴ (Olshansky *et al*, 2005), a situation that public health agencies are obviously keen to avoid, not least in a political climate where health and social inequalities are more visible and less tolerated.

This message has been particularly powerful in relation to childhood obesity with a clear message that, “unless effective population-level interventions to reduce obesity are developed, the steady rise in life expectancy observed in the modern era may soon come to an end and today’s youth may live less healthy and possibly shorter lives than their parents” (Olshansky *et al*, 2005:1143). Furthermore, Type-II diabetes, previously referred to as “adult onset” is now becoming increasingly common in obese children in developed and developing countries. The first cases of Type-II diabetes among British

⁴ Healthy life expectancy (HLE) is a disability adjusted measure of life expectancy (LE) (WHO, 2000) reflecting the fact that as people live longer and rates of chronic disease increase; they may live longer in poor health. Interestingly, between 1981-2001 in the UK, HLE rose at a far slower rate than LE, meaning people now live more years in poor health. For example, women in 2001 had a LE of 80.4 years, but a HLE of 68.8 and for men, an average of 8.7 years were lived in poor health in 2001 (ONS, 2001). HLE is gaining more political urgency as rising obesity rates threaten to decrease HLE. Furthermore, the WHO’s publication of global HLE league tables show the US to be in 24th place, providing an impetus to improve its standing.

white children were not detected until as recently as 2002 (the disease had previously thought to be limited to Asian and black children, an assumption justified by detailed health statistics). After the cases were reported in the *British Medical Journal* (Dwyer, 2002), following an initial report in the *Archives of Diseases in Childhood* (Drake *et al*, 2002), understandable media interest ensued. The spread of diabetes into the majority white population signalled a major shift in the visibility of childhood obesity in biomedical and popular terms. (Ahuja, 2005; Andalo, 2005) With the long-term adverse effects of Type-II diabetes known, preventing further rises in obesity has risen to the top of government health agendas, with national frameworks for action coexisting with those of the WHO (2003; 2005). The WHO's assertion that deaths from obesity-related diabetes could rise by 25% over the next decade has further reinforced the justification for public health intervention to prevent the future costs associated with this climb. However, as the later chapters in this work suggest, despite the huge body of biomedical research on obesity, public health prevention efforts do not currently seem to match the scale of media interest or pace of casual explanation development. Since the "problem-orientated biomedical research model" (Robinson and Sicard, 2005) demands that prevention can only be developed on the basis of known and verified causal relationships, actual policy development is lagging behind the government rhetoric expounding its necessity. Therefore, before discussing such policies, brief mention must be made of the historical context from which the contested question of causality has surfaced, before turning to the debate over obesity's aetiology.

4.2 Obesity in a comparative historical context

There are several excellent social histories of obesity and fatness, of which Peter Stearns' 1997 comparative study *Fat History* is perhaps the most instructive and illuminating. His account suggests that obesity has been variously venerated and vilified according to the overriding exigencies of society and government, an idea with great resonance given the

current hysteria generated by the topic. His detailed comparative analysis of the social histories of obesity in France and the US reveal the extent to which the seemingly objective measure of individual waistlines is the result of socially and politically-inscribed cultures of consumption, political rationale and the role of the medical profession in popular life. He suggests that, in the US, body weight has always had a moral component that has long helped fuel a diet industry based on the idea of “dramatic redemption” (Stearns, 1997: 106). By contrast, the French did not assign the same moral judgments to body weight, but rather conceptualised it in health terms. For the French in the 1960s, excess adiposity was a medical condition to be treated by disciplined eating and, if necessary, intervention through the reducing creams and weight loss pills popular at that time.

As social historian Hillel Schwartz (1986) contends, there is some degree of ‘cultural fit’ between the shared fictions of the body and the reducing methods of the era. Thus in the US, dieting was cast as a type of “moral athleticism” (Schwartz, 1986: 17) to counter the failure of rational self-control. Immigration, new technology, changing employments, mechanisation, new planning laws and the building of cities and suburbs changed American lifestyles in the late nineteenth and early twentieth centuries; often leaving dominant cultural beliefs out of synch with the new material reality (Kunstler, 1994; 1998). The new abundance though technological and scientific advances bred fears as to the morality of consumption (Levenstein, 1988; 1993). As a result, obesity was seen, Stearns suggests, as an exterior manifestation of the lack of individual willpower to exercise moderation in the face of the temptations posed by Mammon. With the temperance movement already claiming gluttony to be the inevitable outcome of wider social ills confounded by modernity in the mid-nineteenth century, Schwartz contends that it was perhaps unsurprising that this later led to the development and dissemination of domestic tools such as bathroom scales in 1913 to measure and rationalise body

weight. Nutritional science's rise as an academic discipline and the attendant belief that diet was at the root of conditions such as dyspepsia, infantile weakness or nervous disorders, also produced the idea that there could be an 'ideal' weight. From claiming diet to be a cause of ill-health, it was a short step to brand dietary modification the solution and the modern weight loss industry was born.

From the late nineteenth century, domestic social relations changed as women entered the workforce in increasing numbers. At the same time, domestic economy and household science became commonplace in schools on both side of the Atlantic as managing the division of home and work become imperative. Even from the 1830s, the association between obesity and wilful risk-taking through excessive consumption was strong enough for health insurance premiums to be higher for those weighing above the 'ideal'; an idea that became regularised with the development of the modern Metropolitan Life Insurance charts (see Hostman, 2001; Rothstein, 2003; Oliver, 2006). From 1875 to 1925, Schwartz notes that the number of life insurance policies taken out in the US rose from 850,000 to 92 million. The premium receipts for these rose from \$92.5 million to \$2.25 billion as the sector became more competitive and life insurance became the middle class norm. With the appearance of health insurance in the early twentieth century, medical examinations became necessary to accurately judge present and future risk based on current and predicted health status. From 1901-1940, the 'acceptable' weight range within which applicants would avoid paying an excess premium due to their elevated risk narrowed. When Metropolitan Life Insurance developed the first 'ideal weight for height' charts for men and women in 1942, overweight and obesity were simultaneously transformed into 'risks' signalling the possibility of future poor health. The correlation of risk and obesity therefore metamorphosed the condition into a quantifiable national health 'problem' (Schwartz, 1986).

In contrast to the French experience discussed by Stearns, where medical interventions to induce weight loss were favoured early on; the morality of being overweight in the US was frequently linked to psychological weaknesses. From the 1930s, behavioural explanations focussed on the psychology of hunger as the cause of overeating and weight gain and, from the 1940s, amphetamines were regularly being prescribed to decrease appetite and stimulate metabolic rate. As a result, the period 1940-1967 focussed on appetite as divorced from hunger, thereby favouring group therapy through organisations such as Overeaters Anonymous (founded in 1960) to help weight loss. Such approaches to obesity cast it as an individual failing and this rhetorical division between behavioural and structural explanations still pervade research and policy and will be discussed in more depth later in this work.

Stearns (2005) contends that three factors have produced the current manifestation of the obesity epidemic in the US context. First, a productive agricultural sector and powerful food industry that successfully lobbied governments to push its members' interests. Second, a widespread hesitation among Americans to impose body weight standards on other people and, in particular, children for fear of inducing eating disorders or eroding self-esteem. Third, divergent cultural conceptions of beauty and health in relation to body weight across the country. In the US, for example, differing body shape ideals among African Americans and Hispanics in relation to the (often thinner) Anglo 'norm' have often faced an uphill struggle to be recognised in public health (see Oliver, 2006). In the 1980s, this divergence of beliefs assumed a new importance as obese employees found themselves able to sue for discrimination under the 'Americans with Disabilities Act' of 1990 (Theran, 2005: 196). Such legislation has since become a feeding ground for fat advocacy groups, the most vocal of all being the 'Freedom Lobby for the Advantageously Bellied' or FLAB. In 1952 the US National Institutes of Health (NIH) declared obesity to be a primary health problem, and from the 1960s, Robert Pool (2001)

suggests that both the US and UK have seen the gradual medicalisation of overweight through its incorporation into the rationale of public health. In 1986, the NIH declared that obesity posed a “serious health threat” and from this time, not only has prevalence risen inexorably, but also the condition’s inclusion within medical research agendas and public health priorities. The history of obesity does not stop in 1986, rather, that is the point in time at which, statistically and discursively, the current ‘global epidemic’ (WHO, 2003a; 2003b) starts.

4.3 Epidemiology and the emergence of an “obesity ‘epidemic’”.

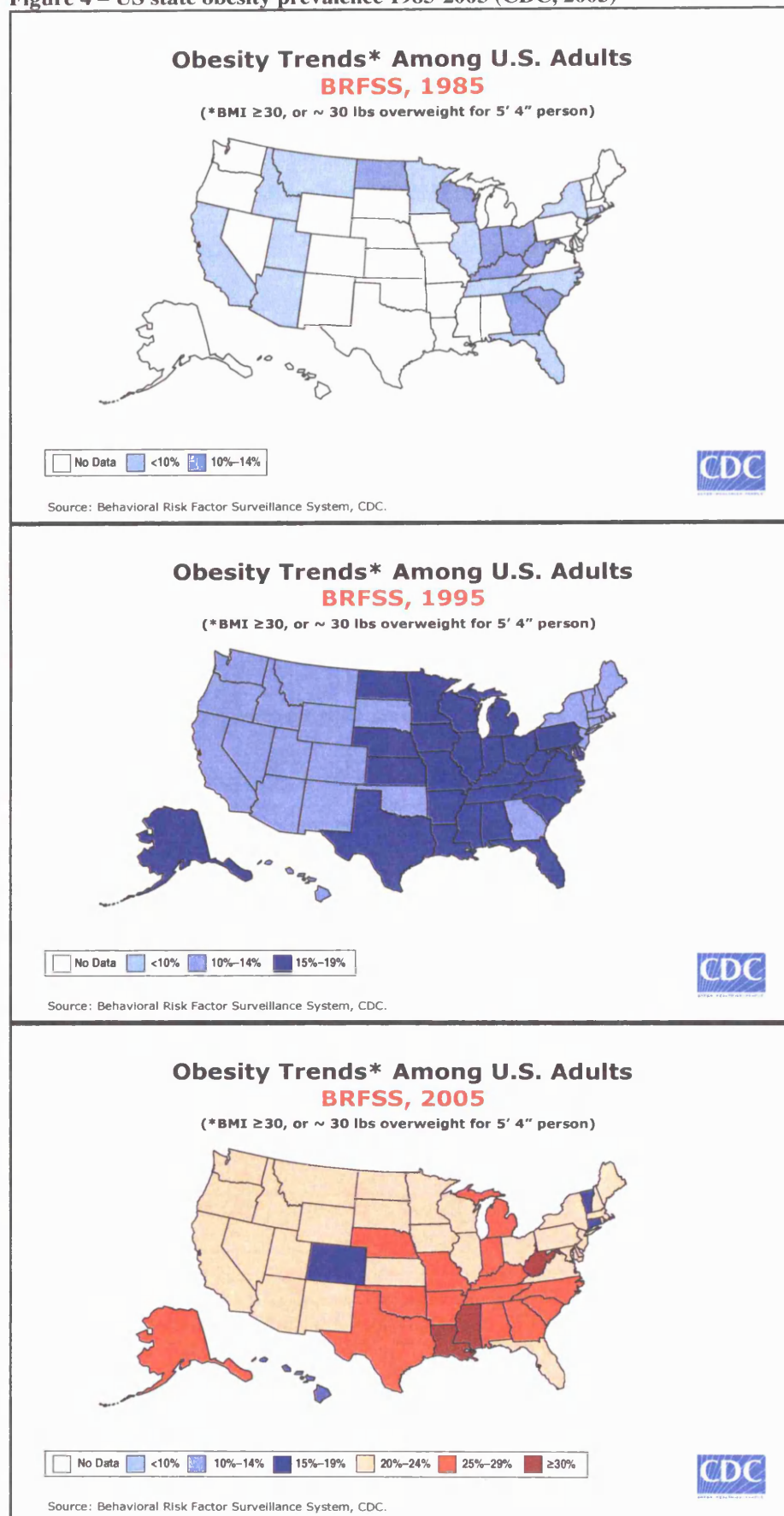
It has become a familiar assertion that the obesity “epidemic” emerged in the developed world only in the past two decades. This does not discount or ignore the long cultural history of corpulence, but rather highlights the unequivocal statistical evidence showing the rapid rise in obesity prevalence since the early 1980s. However, it is also important to keep in mind that high rates of obesity are not just a developed world phenomenon, nor are they particular to the West (see figure 1). Statistical evidence of this epidemic comes from national health survey data sets that only started to measure BMI at a population scale in the 1980s. In the US, the Centers for Disease Control’s Behavioural Risk Factor Surveillance System (BRFSS) is the world’s largest telephone survey and tracks health risks across states and metropolitan areas. The BRFSS was pioneered in the early 1980s when it was recognised that there was insufficient state-level data to direct resources at addressing certain health (or risk) behaviours for chronic diseases. Included within these health behaviours are questions that address physical activity, BMI, weight control and nutrition (fruit and vegetable consumption). The database, like its British counterparts (the Health Survey for England, Scottish Health Survey and the National Diet and Nutrition Survey), offers national, regional and local scale obesity prevalence data that has been used to demonstrate rises in prevalence in both countries. For example, CDC figures show how obesity rates among white American females climbed from 15% in

1980 to 23% in 1990 and to 31% in 2000 (Witt, 2003). The same pattern holds true for white males among whom obesity rates have risen from 12% in 1980 to 28% in 2000 and for African Americans females with prevalence increasing from 31% in 1980 to 51% in 2000. Latinos have not been immune either, with 16% of men obese in 1980 and 29% in 2000. Among Latino women, the rate is even higher, with 40% classified as obese in 2000 (*ibid.*) In 1986 in the United States, 0.005% of people were morbidly obese (BMI>40.0). In 2000, this had risen fourfold to 0.02%.

The same story holds true in the UK, with obesity rates doubling from the early 1980s to the present (CMO, 2003). But, in both the US and UK, it is often the dramatic rise in the number of obese children that is seen as the most striking example of an obesity “epidemic”. For 6-11 year olds in the US, BRFSS data shows that from 1980 to 2000, obesity prevalence among girls rose from 6.4% to 14.5% and from 6.6% to 16.0% for boys. For those aged 12-19, obesity rates climbed from 5% to 15.5% among boys from 1980-2000 and from 5.3% to 15.5% for girls (CDC, 2006a). A recent campaign in the UK by the National Heart Forum to raise nutritional awareness among children claims that by 2020, as many as 25% of under-16s could be obese (NHF, 2006: 11). Reinforcing the expectation of a worsening scenario, the most recent report released by the UK Department of Health (DH) predicts that obesity among girls might climb by 6% to 2010 (Zaninotto *et al*, 2006: 14). Thus, not only is there historical evidence of rising prevalence, but a strong agreement that this shows no sign of abating and that the future impact of present trends continuing will only be dire. The language of emergence underlines the statistics as “obesity is unusual among chronic diseases as it exhibits the speed and dispersion characteristics of a communicable disease epidemic” (Mokdad *et al*, 1999: 1520). The ‘speed’ clearly refers to the short time span over which the distribution curve of average BMIs has shifted further and further to the right, while the dispersion rate suggests that obesity has an impact across geographical scales and

locales. This geographic spread is clearly evidenced in the CDC's own maps from BRFSS data from 1991-2003 that show the highest rates of obesity prevalence spreading dramatically across the country (see figure 4). However, these maps also tell a more detailed epidemiological tale; one whose existence may go a long way to explaining why obesity is proving so difficult to prevent and why it has piqued the imagination of a diverse and numerous group of stakeholders.

Figure 4 – US state obesity prevalence 1985-2005 (CDC, 2005)



Datasets such as the HSE or BRFSS show that, while upwards trends in obesity are clear at a generalised national scale in both the UK and US, there is also a distinct geography to patterns of obesity prevalence, a fact made startlingly clear by the BFRSS maps. In the US, the BRFSS identifies over 30% of the populations of the Southern states of West Virginia, Mississippi, Indiana and Alabama as obese in 2005. States such as Texas and Missouri fall slightly behind this with prevalence rates of 24% (CDC, 2005). The UK also exhibits geographical concentrations of high obesity prevalence with 2001 HSE data showing that 30% of County Durham (North East England) males were obese compared to 14% of men in North East London. Among women the geographical variations are no less marked, with the highest rates in Birmingham at 26% and the lowest in rural Avon and Gloucestershire at 16%. Regional variations in obesity rates are also matched by demographic variations. For example, on average, women in both countries exhibit higher rates of obesity.

Race is also a factor with statistics showing higher rates for both men and women among African Americans/ Black British and Latinos/ British Asian relative to whites living in the same areas (Surgeon General, 2001; London Health Observatory, 2004). The latest 2004 UK HSE data notes marked differences in obesity prevalence by race and socioeconomic status (figures 5 and 6). Black African women have the highest prevalence at 39%, with Black Caribbean following close behind at 32%, far higher than the national average for women of 23%⁵. The elevated risk of co-morbidities and reduced healthy life expectancy associated with obesity places more salience on the correlation between race and obesity. Already minority life expectancies are below their white counterparts (controlling for place of residence). For example the US *National*

⁵ It should be noted that when central obesity is measured using the waist-hip ratio (with a ratio >0.95 for men and >0.85 for women categorised as high risk for co-morbidities), differences by race are far more marked and exhibit a different pattern to that of BMI. For example, HSE 2004 data in figure 7 shows that, on average 30% of women are centrally obese. However, 37% of British Caribbean women fall into this category and 50% of Bangladeshi women (of whom just 17% would be considered obese using BMI). These different ways of measuring risk demonstrate the complexity and ambiguity of defining populations “at risk” and thus justifying interventions.

Vital Statistics Reports show that in 2000, average white life expectancy stood at 77.4, compared to 71.4 for African Americans. The gap between white females at 80.0 years and African American males at 68.2 was even more marked. The same pattern also holds true in the UK, with between 22% and 26% of Bangladeshis and Pakistanis having a long-term limiting illness, compared to 15% of whites (Census, 2001). Higher rates of obesity within minority populations therefore serve to further widen health inequalities; meaning that race has become a central component of public health prevention policies and discourses and will therefore be approached with reference to the two case study sites.

Socioeconomic status is also correlated to obesity prevalence with data from both the UK and US showing that poverty is positively correlated with higher body weights (Wardle and Griffiths, 2001). This socioeconomic gradient concurs well with Wilkinson's thesis that *relative* deprivation, rather than *absolute* deprivation, heightens vulnerability to the risk factors of disease (1996; 2005). Therefore social inequality is not merely a problem in and of itself, but also as a risk factor for health. In the UK, HSE data shows a strong North-South divide between obesity rates and self-reported health, suggesting that the ongoing income gap between the two regions has effects beyond the financial (Meikle, 2005). In the US, BRFSS data shows that southern states such as Alabama and Mississippi have obesity rates higher than those in the North East, mirroring the geographical and socioeconomic divide in the UK. At an individual level, studies using regression analysis have shown the strong relationship between income and obesity rates. In the US for example, women with an income less than 130% of the poverty threshold are 50% more likely to be obese than those with an income greater than 130% (US Surgeon General, 2001). Socioeconomic status and obesity exhibit the strongest relationship among women, presumably due to the gender differences in income and the economic constraints imposed upon many women as household managers (see figure 5).

Figure 5 - % obese by race and gender in England (HSE, 2004)

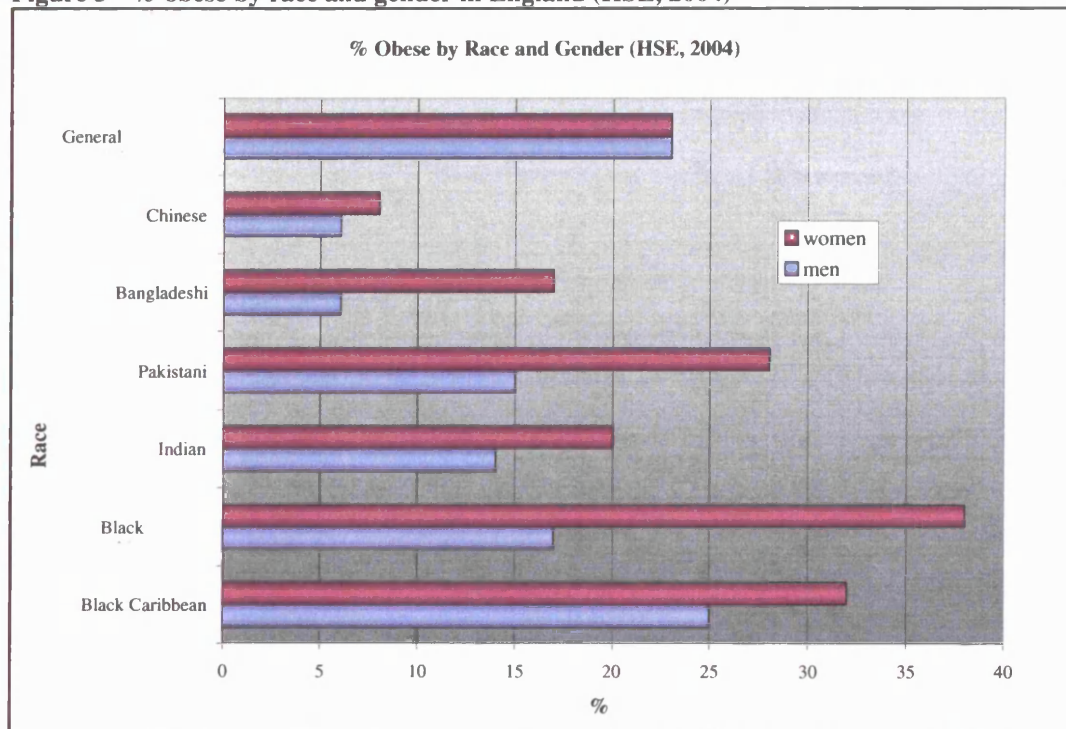


Figure 6 - Socioeconomic status and BMI by gender in England (HSE, 2004)

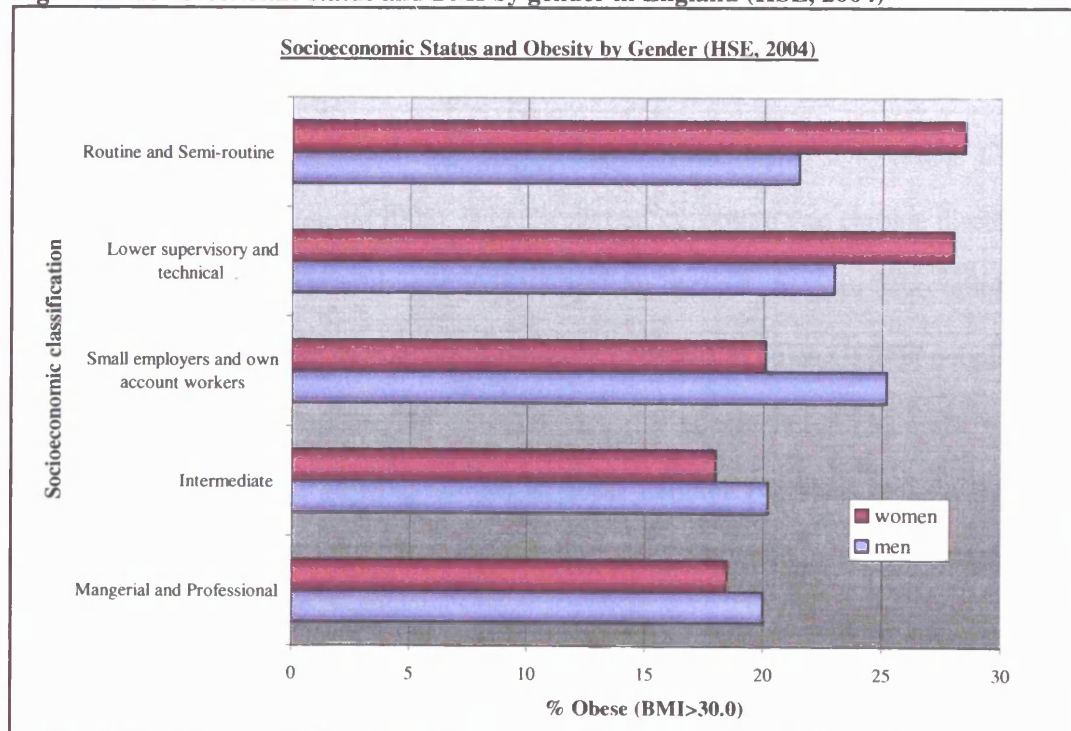
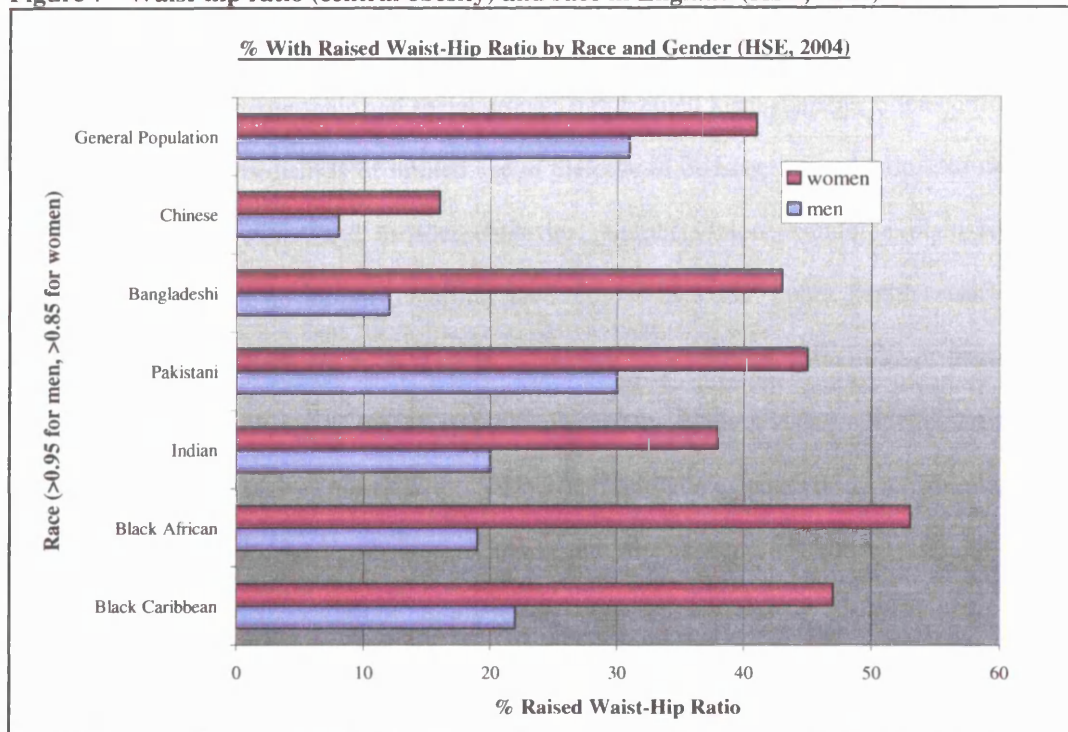


Figure 7 - Waist-hip ratio (central obesity) and race in England (HSE, 2004)



It should also be noted that there is a strong positive correlation between age and obesity across all race and income groups. This is principally due to the fact that as people get older, activity levels fall, energy needs decrease and weight gain is common. This idea of “risk accumulation”, explained well in the latest WHO report *Preventing Chronic Diseases: A Vital Investment* (2005), is predicated on the notion that chronic disease risk factors gradually increase with age, explaining why chronic diseases have, until now, been seen mostly in older people. Since there are expected to be one billion people aged over 70 by 2030, a fourfold gain on 2000, this risk accumulation coalesces with an ageing population and a growing number of obese children (who are statistically more likely to become obese adults than their normal weight contemporaries) justifying the application of the “time bomb” label (see CMO, 2002). The time bomb metaphor has since been frequently used to stereotype obesity as a public health issue. The label has been applied to obesity at a range of scales and is particularly effective in pushing obesity prevention measures further up government agendas on both sides of the Atlantic.

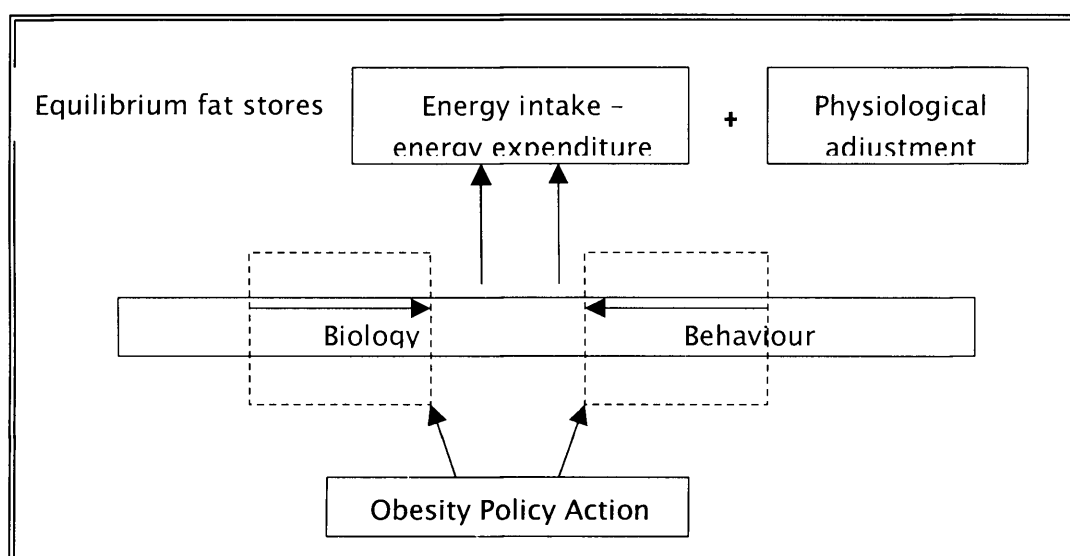
Global statistics may reveal the congruence between national trends in obesity prevalence across geographic and social groups, but detailed local statistics often confuse this picture. Universalism is of limited use in the case of obesity, but reductionism may miss wider connections and broader contexts. Numbers alone cannot explain why developed and some developing countries have come to face this “public health crisis” so quickly, nor why there are such marked social and geographical disparities in obesity prevalence. It is therefore necessary, having briefly explored the epidemiological evidence for the obesity epidemic, to consider current debates concerning its aetiology, or the condition’s causal factors, processes and mechanisms. This is essential to contextualise later discussions of obesity policy.

4.4 Gluttony or sloth?

At the root of virtually all explanations of the sudden and dramatic rise in obesity rates in the US and UK lies the simple energy balance equation, *energy intake – energy expenditure = net weight change*. Yet, as figure 8 shows, this forms only one small component of the complex interrelationships governing equilibrium fat stores (or body weight), despite the attention it commands in policy circles. As Jebb contends (1999:2), “the second law of thermodynamics is one of the few incontrovertible facts in this field. Obesity will only develop if energy intake exceeds energy expenditure over a prolonged period of time, but the mechanisms underpinning increases in energy intake or decreases in energy expenditure remain elusive”. The idea that obesity is rising because we are all eating more of the wrong types of food and exercising less have produced two main schools of thought in the struggle to identify the definitive causes of a condition that not only affects a great number of people, but plays out in individuals in many different ways. In this thesis, these two schools fall into the camps of either “gluttony” or “sloth” (after Prentice and Jebb, 1995). It is notable that subscribers to the two epistemologies

rely equally on three assumptions to guide their research: that increased weight is positively correlated to an increased risk of developing certain chronic conditions; that reducing weight can reduce the risk of these conditions and that weight loss is both possible and attainable (Campos, 2004). However, despite a common logic, these two groups differ in the way in which they trace the aetiology of increased weight. Tracing these differences will be a necessary reference point from which to map out the developmental paths of obesity prevention policy in the UK and US later in this work.

Figure 8 - An 'Ecological' model of obesity (after Eggar and Swinburn, 1997:478)



Obesity was listed as a disease within the International Classification of Diseases after a 1997 WHO consultation (WHO, 1998). Thus, “it is now formally defined as a disease of a classical type, being a physiological debilitation and malfunction, but it is also a lifestyle disorder, the latter having social and psychological connotations” (Lang and Raynor, 2005: 303). Classifying obesity as a disease rests on a number of claims: that obesity has a strong correlation to other diseases, these exhibit consistent patterns of causation, there are specific diseases for which obesity elevates the risk and that this risk increases incrementally with age. Even taking these causative claims as read, the numbers of theories concerning obesity’s specific aetiology and thus its potential

solutions are as numerous as the researchers in the field. In a recent paper for example, the authors identified no less than eight theories for obesity's rise, ranging from genetics to technological changes in agriculture and food manufacturing (Lang and Raynor, 2005). For the sake of clarity, these theories, in addition to two more omitted by Lang and Raynor - health inequalities and 'obesity as myth' - are outlined in figure 9, giving their central tenets, proposed solutions and chief proponents. Yet, despite the broad range of theories, more often than not they still fall back on either the assumption of increasing energy consumption or falling energy expenditure over the past two decades. Consequently, the next section will outline the central arguments supporting each side of the energy balance equation, thereby revealing the deep politicisation of attempts to unravel obesity's aetiology to develop workable and legitimate interventions upon individual lifestyles.

Figure 9 - Aetiological theories of obesity (after Lang and Raynor, 2005)

	SCHOOL OF THOUGHT	KEY PROPONENTS	CENTRAL TENETS	EVIDENCE	PROPOSED SOLUTIONS
1	Genetics	• Geneticists (e.g. George A. Bray) • Ellen Ruppel Shell • Robert Pool	Humans have a biological predisposition to store fat to guard against times of food scarcity. This trait marks out some people as being more pre-disposed to weight gain in any given environment than others. Also referred to as the 'natural variation' argument.	Strong evolutionary evidence, but a paucity of genetic evidence to explain the rapid rate of obesity prevalence change over the past two decades, given that genetic change cannot have occurred to such a degree over such a short time span. Explanation favoured in countries where obesity rates have risen more slowly (e.g.	Genomics, gene mapping, re-thinking obesity as a problem, nutrigenomics, gene therapy, pharmacogenics. Inaction also favoured by genetic explanations as obesity can be explained as a natural occurrence among some people that does not justify intervention.

				Singapore).	
2	Economic transition	• Cara Ebbeling • Marion Nestle • Michael Jacobson • Roland Robertson	Economic development results in a post-industrial 'consumerist' society, a shift from manufacturing to a service economy, more women at work, break-down of the family meal. Obesity as the inevitable outcome of lifestyle changes resulting from rising affluence.	Mixed evidence to support this assertion. The US may be considered the world's most obese and richest nation, but countries such as the UAE and Bahrain have higher rates, as does Greece. However, rising rates in fast-developing nations such as China and India may support this theory.	Several: use this affluence to create a market for commercial weight loss products; rely on the higher levels of education generated by affluence to put targeted health promotion in place; flood the marketplace with information to encourage the creation of an 'informed consumer' (see Duff, 2004)
3	Convergence	• Morgan Spurlock • W. B. Werther • Niall Ferguson	The economic advance of countries will logically follow the same developmental and cultural paths, the result being similar health profiles (including obesity rates). The US is currently viewed as the end-state of this process.	Evidence of the global spread of fast food outlets, 'American' dietary habits and a gradual loss of traditional eating patterns. Increasing uptake of sedentary lifestyles as jobs change. Trend most marked in emerging nations such as China, India and Russia.	A combination of solutions which tend towards the techno-centric. These include bariatric surgery, pharmaceutical intervention, exercise and diet interventions to avoid matching the current situation in the US.
4	Food supply and technological change	• Tim Lang • Michael Heasman • Eric Schlosser • Joanna Blythman • Felicity Lawrence	Obesity as the unforeseen outcome of "Productionist" agricultural policies from the 1950s designed to increase output to address existing	Strong: Common Agricultural Policy in the EU created large surpluses ideally suited for the advances of food processing	Food industry responding to accusations of responsibility for obesity by developing 'healthier' foods, single-serve portions and placing blame on sedentary

			malnutrition in US and Europe.	technology. These have enabled the creation of high fat, value-added, portable snack foods, adding to individual calorific intakes.	lifestyles. Other solutions include nutritional labelling, consumer education, government regulation of the food industry.
5	Cultural transition	• Marion Nestle • Martin Caraher • Greg Critser • Eric Oliver • Hillel Schwartz • UK Department of Health (DH) • US Department of Health and Human Services (DHHS)	Changes in family and household compositions, eating habits and the rise of advertising have all confused traditional mealtimes, the role of food and portion sizes. Such changes have tended to have the most marked effect on children as they are most likely to be swayed by advertising.	Strong: the power of advertising to manipulate food choices (especially of children) is widely and internationally acknowledged and caused the UK government to move to match other countries' stringent regulations. Some food manufacturers such as Kraft have put self-imposed advertising restrictions in place (e.g. products, timing, audience)	Neo-liberal "soft" solutions in UK and US: self-regulation, codes of conduct, Corporate Social Responsibility (CSR) and cultural literacy training. By contrast, many European countries have favoured stringent regulations on advertising, especially to children.
6	Psycho-social	• Deborah Lupton • Susie Orbach • Susan Bordo • Kathleen LeBesco • Fat acceptance activists (e.g. Marion Wann, Richard Klein)	Food choices are personal and go beyond simple satiation into the complex realm of emotional support, stress relief and compensation for feelings of alienation that may accompany modern life. Such meanings are created and sustained by	Mixed: obesity rates have arisen in spite of bodily ideals favouring thinness. The stigma attached to being overweight may, it is argued, fuel eating disorders such as anorexia and bulimia. Lends support	Psycho-social theories criticized for potentially underplaying the need to implement structural and environmental health promotion policies to encourage healthy eating and active lifestyles. Proponents argue that policy should instead be

			marketing and mean that many consumers are not in full control of their eating habits	to fat acceptance movement and arguments to accommodate larger bodies in planes, restaurants etc.	focused on reducing stigma to increase individual self-esteem, help people to cope and reduce vulnerability.
7	Obesogenic environment	• Garry Eggar • Boyd Swinburn • Kelly Brownall • Steven Cummins	Humans have evolved only weak physiological mechanisms to defend against weight loss when food is abundant and temptation intrinsic to modern life. The environment creates vulnerability to obesity through constant triggers to eat more than needed and remain sedentary.	Sociological evidence about changing lifestyles in relation to the nature of the built environment, especially with regards to the built form in the US. Human physiological capacity to store subcutaneous fat and draw upon it in times of scarcity means vulnerable to effects of constant temptation.	Environment must be structured around human, biological needs and the food supply chain must match biological demand. Encourage incremental exercise through everyday, routine activities.
8	Nutrition transition	• Barry Popkin (University of North Carolina) • David Yach • World Health Organisation • Global and national public health bodies	Rising incomes allow people greater access to a wider range of foods (e.g. more meat, fat and simple carbohydrates, fewer vegetables and complex carbohydrates). In turn, people eat more and with greater frequency (e.g. snacking)	The co-existence of obesity and malnutrition in many developing and developed countries demonstrates the dietary and health effects of affluence for the few.	Amelioration and controlling access and availability of certain foods through 'fat taxes' on energy-dense foods or through school vending restrictions.
9	Health Inequalities	• Jane Wardle • Neil Wrigley • DH • DHSS • WHO	Obesity does not result from rising incomes, but rather the effects of relative poverty, the high cost of	Good evidence in developed countries such as US, UK and France demonstrating regional and local patterns	Only complete solution is the eradication of poverty and racial inequality. Incomplete solutions include addressing health

			fresh food, structural constraints imposed by low income areas for exercise and planning decisions locating supermarkets in higher income areas.	of obesity prevalence correlated to low incomes. "Food desserts" work accessing the impact of supermarket location on nutritional health.	inequalities through targeted intervention and health promotion in deprived areas and communities.
10	Obesity as 'myth'	• Paul Campos • Glen Gaesser • Laura Fraser	Sociological viewpoint that 'obesity' is a fabricated epidemic and public health concern. It cannot be genuine because it is based on false assumptions that body weight and health are correlated and that people can lose weight. To therefore claim that obesity is a disease of epidemic proportions requiring immediate action is flawed and based on misleading data and only serves to increase the diet industry's profits.	Some evidence to support this view: a definitive causal relationship between high body weights and health is unclear, but there is a correlation between health indicators and physical activity rates. Good evidence to support contention that weight loss is difficult and sustained efforts are rare.	To no longer highlight obesity as a problem, but rather focus efforts on generating public acceptance that fat and fit are compatible. Attention should be on encouraging more active lifestyles for all.

4.4 i Gluttony

Proponents of the gluttony camp contend that there is statistical evidence suggesting that per capita calorific intake has been rising steadily since the early 1980s. This change has occurred against a backdrop of (assumed) static or declining energy expenditure due to increasingly sedentary lifestyles, increased car usage, the shift from heavy manufacturing to service sector jobs and domestic technological advances that have reduced the need

for manual housework. These lifestyle changes are cast as being an inevitable part of ongoing capitalist development, and the focus of concern is thus on explaining increased consumption through the linkages between the political economy of food and individual behaviour and why, in turn, this has caused such a swift climb in obesity prevalence. The result has been a diverse range of evidence bases from which both the public and policy makers alike have drawn their own conclusions.

The gluttony argument has found a particularly powerful voice among authors of cultural histories of consumption in the US. They argue that obesity has risen against a backdrop of technological changes in agriculture and food production that made disposing of surplus fat and sugar a national imperative (see Schlosser, 2002; Nestle, 2002; Critser, 2004; Spurlock, 2005a) and increasing fast food consumption inevitable. Indeed, Nestle and Young (2002) calculate that from 1978 to 1995, daily calorie intake in the US increased by 200 Kcal per person. This contention comes largely from studies of portion size in 2002, where the authors noted that muffins were on average 300% larger and soda servings 35-100% larger than federal guidelines. Their suggestions link well with assertions that the buoyant political economy of fast food is a central causative factor in the obesity 'epidemic' in both the UK and US. This argument has spurned a vociferous political critique in both countries that has been especially potent in the context of evidence of rising childhood obesity, where questions of health and morality unhappily collide.

Eric Schlosser's best-selling *Fast Food Nation* (2001) was one of the first works to open American eyes to the corporate involvement in school meal provision, with many cash-starved school districts turning to "competitive contracts" with fast food franchises to decrease overheads. Schlosser's powerful exposé revealed not only the proliferation of snack and soda vending in schools, but also the corporate battles between Coca-Cola and Pepsi for control over school districts' vending rights. These popular accounts are

supported by evidence from consumption surveys such as the National Health and Nutrition Examination Survey (NHANES) in the US, showing that from 1977-1995, the proportion of meals eaten outside the home - which tend to be higher in calories, salt and fat - rose from 16% to 29% (Critser, 2004). Other commonly cited evidence supporting the logic of gluttony is food marketing expenditure. McDonalds, for example, spent £41.9 million in the UK in 2003 (AC Nielson data in House of Commons Report, 2003), dwarfing the NHS' £1 million health promotion budget. Market research data reinforces this as also shows that snack sales rose from £173 million in 1993 to £541 million in 1998 (*ibid*). In the US, NHANES data shows that average per capita consumption of sugar has climbed 30% since 1985 to 34 teaspoons a day and soda consumption from 21 to 56 gallons per person per year from 1970-1997 (Ruppell Shell, 2002). However, the proportion of fat in American diets has fallen from 40% to 34% over the same time period (*ibid*) contradicting evidence blaming fat-laden fast food and out-of-home consumption. Such contradictory evidence thus makes the pursuit of 'evidence-based policy' in the UK and US deeply problematic.

One of the main barriers to developing the unequivocal evidence base needed for policy is the fact that NHANES and the UK's National Diet and Nutrition Survey (NDNS) are self-reported. This means that those using the dataset to ascertain temporal changes in calorific intake or composition have to be aware of complex reporting biases. Not only do people tend to under-report what they have eaten, but this underreporting is more marked among those classified as obese, women, low earners, smokers and the perpetual dieters known as "restrained eaters" (Jebb, 1999). Often this gives the paradoxical impression that obese people eat far less than their non-obese counterparts, undermining the 'gluttony' argument. In addition to this, reporting methods, cohort sizes and questions asked have not been consistent since the 1980s, making temporal trends difficult to ascertain due to the incompatibility of datasets. For example, the National

Food Survey in the UK underwent methodological changes when it became the National Diet and Nutrition Survey in 2001. Furthermore, datasets are based on different methodologies in the UK and US and so are not immediately comparable for researchers seeking explanations for the similarities in the rise of obesity in both countries. These problems have led some biomedical researchers to instead contend that the energy density of foods may be one potential explanation (Prentice and Jebb, 2003), and that gluttony *per se* must only be considered a casual factor at individual, behavioural explanatory scales, rather than at a population scale. This idea of individual susceptibility to the modern political economy of food is one that has already been touched on in the previous chapter, but is also resonates with current work on neurological and physiological reactions to high fat diets.

Professor of International Nutrition, Andrew Prentice and nutritional scientist, Susan Jebb, have consistently proved to be some of the loudest voices in the field of obesity studies. Their combined and separate work is worth considering in some depth for both advise the UK government on obesity policy development, and their published findings have found an eager audience amongst the international media. In 1995 Prentice and Jebb grappled with the idea that obesity could be caused by either gluttony or sloth, and reported that, in contrast to Ruppel Shell's figures, the proportion of fat in the diet climbed by 50% from 0.6kJ for each kJ of carbohydrate in 1940, to 0.9kJ by the 1990s. As a result, not only has the fat content of diets in the UK been rising (principally due to a generalised shift from food cooked at home using raw ingredients to processed foods), but high fat diets could themselves undermine the natural hypothalamic regulation of energy balance. The idea that fat could have a neurological effect on appetite, and therefore a physiological effect on body weight had already been the subject of a decade's work led by Jeffrey Freidman at the Rockefeller Institute. Debates over the role of fat are inextricably linked to the scientific race in the 1990s, documented by Pool

(2001), to discover the gene (later termed Leptin) responsible for appetite regulation. Without delving deeply into this rich history of inter-laboratory competition and commercial wrangles for intellectual property rights which mirrors so closely the race to uncover the human immunodeficiency virus (Epstein, 1998), it is important to consider that this research created the possibility that not only could dietary choices have adverse health effects, but that the components of this diet might reinforce this negative effect. High fat diets not only increased calorie intake (fat has more calories per gram than any other type of food) but fat itself could also undermine feelings of satiety leading to what Prentice and Jebb (1995) termed “passive overconsumption” due to “high fat hyperphagia”.

In 2003, Prentice and Jebb struck the heart of the gluttony debate by suggesting that fast food might have a causal role. They suggest, like more politically-orientated commentators, that fast food is often vilified within the ongoing aetiological debate as the explosion of outlets and supersizing has coincided with the timing of rises in prevalence. Blaming fast food also rests easily with anti-globalisation and anti-American sentiment, not least since the majority of retailers are US-owned. However, Prentice and Jebb’s work was the first to expressly provide a mechanistic link between consumption and obesity, suggesting that the ‘energy density’ of foods is the key mediator between food intake and obesity. This “passive over-consumption” is reinforced by the disjuncture between food’s bulk and its energy content (*ibid*). Since people psychologically judge portion sizes based on its absolute bulk, when energy density is raised, over-consumption occurs irrespective of a conscious decision to do so. As an example, Prentice contends that the average energy density of the UK diet is 670 kJ per 100g⁻¹, while in the Gambia it is 450 kJ per 100g⁻¹. Therefore 2000g of food in the Gambia will have the same calorific content as 1300g in the UK. For fast food, with a mean energy density of 1200 kJ per 100g⁻¹, only 700-800g would have to be consumed

for the same number of calories. This means that the calorific footprint of each extra gram of fast food is more marked than for each gram of standard food.

Prentice and Jebb term this process of “passive overconsumption” a “mechanism of dysregulation” (2003: 192) that was an understandably popular assertion with a global media seeking biomedical proof to back up the popular suspicion that obesity should be blamed on multinational food manufacturers and retailers. Their conclusion that “fast food retailers have a global impact and one that targets the most vulnerable members of society in terms of obesity” (2003: 193) was one repeated by the media on either side of the Atlantic. It did however catalyse some food companies to shift from the defensive to an aggressive reinvention of their corporate social responsibility (CSR) strategies, a revision of product lines to reduce their fat, sugar and calorie content and to take up new voluntary codes of conduct for advertising and marketing (Herrick, 2007). These reactions were especially marked with regard to children (Nestlé Annual Report, 2004; Unilever Annual Report, 2004).

In addition to their work on consumption, both Prentice and Jebb, in work conducted together and alone (see Prentice, 2001), acknowledge that while the composition of diets is partly to blame for rising obesity, this would have had a benign population-scale effect if energy expenditure had also risen. At an individual scale, they contend that the factors linking overconsumption (whether chronic or sporadic) and obesity are mediated by individual genetic variations. However, at a population scale, genotypes have not changed to any significant degree in the past two decades. Yet, even without evidence supporting the argument that total calorific intakes have increased, the ability of energy dense foods to undermine physiological and psychological controls on energy intake has coincided with declining energy needs, heightening the risk of obesity.

As Jebb (1999:9) concedes, “the paradox of increasing obesity at a time of decreasing food consumption can be reconciled only by an even sharper decline in energy requirements”. Prentice (2001) reinforces this assertion with the suggestion that reduced calorie expenditure increases an individual’s vulnerability to inappropriate energy intakes. The two authors remain undecided on the relative causal influence of either gluttony or sloth, but their research undeniably lends credence to and adds a further layer of complexity to the gluttony school of thought.

4.4.ii Sloth

The ‘sloth’ school of thought crystallises around the belief that rising obesity is best explained by a population-wide fall in physical activity. The reasons for this assumption are largely the same as those underpinning the argument for increased energy intake, namely that technological innovation has enabled and involuntarily resulted in more sedentary lifestyles, perpetuated by the attractions of TV and videogames. No longer does work require energy expenditure and climbs in car usage means that trips made on foot or by bicycle have fallen at a national scale, despite the paradoxical fact that cycle ownership in the UK actually rose from 14% to 32% from 1975-1996 and in London, cycling is rising at the fastest rate in Europe (Lawlor *et al*, 2003). The assumption of falling activity levels has become common within both the scientific and popular imagination, but proving causal relationships between physical activity and obesity has been a challenging exercise (Fox and Hillsdon, 2007).

In their recent book, Gard and Wright contend that, “what is so striking about the current situation is the extent to which the obesity epidemic, including its central scientific ideas and knowledge claims, has influenced everyday talk” (2005: 16). They contend that causal narratives about obesity are most often viewed through a lens of nostalgia for an Edenic time when food was home-cooked and children could safely exercise in the

streets. This nostalgia has been particularly powerful with regard to the portrayal of childhood obesity and, it is therefore notable that London's 2012 winning Olympic bid is now being used as a vehicle for improving the national status of sport and children's participation to offset rising obesity rates (Cohen, 2005). This nostalgic view may, in reality, actually be a presumptuous supposition given that, as this section will examine, the quantitative evidence supporting falling rates of sporting participation is patchy at best and non-existent at worst. Indeed, "there is a recurring refrain in the overweight and obesity literature in which the relationship between food, physical activity and body weight is described as 'obvious' despite a scarcity of evidence to that effect" (Gard and Wright, 2005: 43). This statement highlights the fraught nature of the relationship between physical activity and body weight, rendered more complicated by the fact that not only is there a link between weight and exercise, but also between exercise and health more generally. Whereas the relationships of diet-body weight and diet-health have, to some extent, been able to discretely co-exist in separate research traditions, the sloth argument has necessarily entailed the entwining of exercise, body weight and health, not least as 'health' has often served as a proxy for weight (and vice versa) where gaps in the data exist.

Measuring temporal changes in population-scale physical activity and then establishing any possible correlation to population BMI has consistently proved an obstacle to determining a definitive aetiology of obesity. Physical activity measures are included within the HSE and the BRFSS and in both cases report the percentage of people claiming to have engaged in no, moderate or intense physical activity in the past week or month. And, among those who have exercised, the duration of time for which it was undertaken. However, as Robinson and Sicard (2005:198) note, "one of the challenges facing obesity research is the difficulty in feasibly, reliably and validly measuring many of the key exposure variables of interest...as a result, many associations identified are

subject to measurement error that, at best, weakens relationships that truly exist or, worse still, introduces bias that leads to spurious conclusions”. Just as energy intakes tend to be underreported by exactly those groups of people who have the highest rates of obesity, energy expenditure is most frequently over-reported by men and those who are overweight (McCormick, 2005). These reporting biases mean that finding statistically significant correlations between physical activity and obesity rates through time has not yet been achieved. Instead, the ‘sloth’ camp tends to rely on more accurate cross-sectional data suggesting that average rates of sedentarism are high, walking trips have declined in both the UK and US and that the time spent on sedentary activities (e.g. TV viewing) has also increased.

For example, a 2005 report from the London Health Observatory claimed that in 2002, 36% of male Londoners and 41% of females in the city were sedentary. In addition, the average distance walked per person fell by 15% from 1984-2000 and among 16-24 year olds, only 51% of men and 27% of women were “sufficiently active”. While evidence suggests that the number of people walking has declined in the past twenty years, this also coincides with a rise in the number of journeys under 4 miles made by car from 4% in 1980 to 25% in 1999 (Lawlor *et al*, 2003). In both the UK and US, there is a lack of evidence suggesting that citizens have become more sedentary as participation rates, although lower than government ministers might desire, have not declined to any notable degree over the past two decades. By contrast, among some demographic groups, participation has actually increased (Sport England, 2006). The emergence of what is less than affectionately known as the “weekend warrior” figure who works during the week to be unleashed onto the extreme sports arena only at weekends is a clear example of a phenomenon most prevalent among white, middle class men in upper income brackets (Lee *et al*, 2004). The gluttony school of thought thus often relies on proxies in the absence of the quantitative evidence of physical activity declines that its thesis

demands, but so far lacks. TV viewing, video game use and car journeys are all used as proxies for sedentarism and assume that they replace physical activity, again an assumption unsubstantiated by the data. The notion that Britons and Americans have become irrecoverably sedentary, slovenly and slothful is one that has been taken up quickly by the media (Gard and Wright, 2005), again searching for understandable explanations for the palpable rise in obesity rates. This was evident in the journalistic disdain for the news that fast food ambassador Ronald McDonald was swapping his clown outfit for a tracksuit in 2005. His sportier image, reports suggested, were merely to detract from the unhealthiness of the chain's food (Teather, 2005).

Cohort studies show that increasing physical activity can cause weight loss, but it is far more problematic to prove that decreasing activity causes weight gain to the point of being classified as obese. In the absence of a clear population-scale correlation between weight and activity rates, research has instead focussed on the link between health and activity rates. There is much clearer evidence from cohort studies suggesting that physical inactivity is correlated with a higher risk of cancer, heart disease, respiratory disease, hypertension (CMO, 2004) and that activity can reduce the symptoms of diabetes (Di Loreto *et al*, 2005) as well as helping ensure mental health and reduce the symptoms of dementia among the elderly (Rovio *et al*, 2005). Since there is stronger evidence for the assertion that the active (across population groups and countries) tend to be healthier; health has been used as a proxy for body weight when arguing for the validity of the sloth argument, despite the fact that the two variables have very different mechanistic relationships with physical activity. Numerous publications have shown that obesity has negative consequences for health status (Mokdad *et al*, 2001; 2004; Flegal *et al*, 2005) and, even though this idea is contested by some (see Campos, 2004), the fact that exercise is correlated to improved health (or a decline in health risks) has pushed physical activity up many government agendas. Both the UK and US

governments have guidelines for recommended physical activity levels, both by duration and intensity⁶ and these show that not only do the UK and US populations currently fall far short of governmental targets, but also that the shifting parameters for being “sufficiently active” mean that even fewer are aware of how physically active they should be.

4.5 Beyond the energy balance equation

As this brief discussion of the two sides of the energy in/ energy out debate demonstrates, attempts to neatly compartmentalise the aetiology of obesity often conclude by acknowledging the limitations of datasets, or the way in which they may contradict assumptions of increased energy intake set against decreased energy expenditure. This has led many researchers to conclude that there must be a wider set of mediating factors that have helped induce the widespread lifestyle shifts needed to produce such a rapid, global rise in obesity prevalence. In their seminal paper, Eggar and Swinburn (1997) suggest that there is little evidence to support the fact that dietary fat intakes have increased to any substantial degree in either the UK or US in the past twenty years, but that energy needs must have declined at an even faster rate, meaning a propensity for weight gain at a population scale. In order to understand the moderating and mediating factors that have created this contemporary public health challenge, the authors rightly propose a paradigm shift away from individual-scale energy balance, to wider interactions between biology, behaviour and the environment, especially in urban contexts. They note that “obesity is a normal response to an abnormal environment, rather than vice versa” (1997: 478). This idea concurs well with the idea that it is not a

⁶ The USDA recommends that “to reduce the risk of chronic disease in adulthood: engage in at least 30 minutes of moderate-intensity physical activity, above usual activity, at work or home on most days of the week”. The UK’s National Institute for Clinical Excellence recommends “30 minutes of moderate activity on 5 days of the week or more” (NICE, 2006).

decline in physical activity *per se* (as the data shows), but rather a fall in the potential for “incidental movement” (*ibid.*) or the exercise incurred through everyday life.

They refine this further with the suggestion that obesity is an unforeseen outcome of “a normal physiology within a pathological environment” (1997:479). As a result, obesity is a public health issue as the behavioural patterns driving the energy balance equation at an individual scale are determined by micro and macro-environmental influences. While micro-environmental factors, (or immediate environs such as workplaces or homes) determine individual vulnerability; macro-environmental factors such as the morphology of neighbourhoods, residential segregation and physical infrastructure may determine obesity prevalence among populations. These contentions are also reinforced by recurrent media discourses characterising certain environments as ‘obesogenic’. As one *Time* journalist writes, “while diet remains an important factor in the obesity epidemic, it’s becoming increasingly clear that Americans are shaped partly by how America is shaped” (Lacayo, 2004). This rhetoric is equally matched in the UK, where British obesity is frequently associated with the seemingly inevitable uptake of American lifestyles and built forms. Yet, despite this awareness there remains a feeling that there is a “major deficiency in research into the obesogenic environment and potential interventions” (Eggar and Swinburn, 1997: 478).

In reality, the past decade has witnessed a marked surge across urban planning, transport studies, epidemiology and public health in research examining the relationship between “objective” and “perceived” measures or attributes of the physical/built environment and either physical activity uptake or dietary choices, and how these may or may not be related to demographic factors (gender, age, ethnicity etc) or socio-economic status (education and income). These studies have been reviewed at length elsewhere (see Jones *et al*, 2007; Papas *et al*, 2007), but it is worth highlighting some of their key findings, the conceptual and methodological issues raised and, moreover, their pertinence

to this research and debates concerning the aetiology of obesity more broadly. It is most important to note that drawing general conclusions concerning the causative role of the built environment on obesity from this body of research is not simple. Most studies that have explicitly considered the role of the environment have tended to be cross-sectional and situated in either Australia (see for example Giles-Corti and Donovan, 2002; 2003, Giles-Corti *et al*, 2005; Ball *et al*, 2007) or the US (Saelens, 2003; Frank *et al*, 2004) or have, instead, set out possible research agendas or conceptual approaches to the topic without referring to geographic context (Bauman *et al*, 2005; Frank *et al*, 2005; Glanz *et al*, 2005). As a result, and as both Jones *et al* (2007) and Papas *et al* (2007) note, these studies cannot be meaningfully generalised across different geographic or social settings as each tend to generate different results. For example, both Frank *et al* (2004) and Rutt and Coleman (2005) set out to measure the correlation between land use mix and BMI, with the former sampling a predominantly white population from Atlanta, Georgia and the latter a mainly Hispanic community in Texas. While the former found mixed land use to be associated with lower rates of obesity, the latter found the opposite to be true, begging the question of whether ‘mixed land use’ takes on varying forms and is negotiated in different ways by inhabitants in each city and, furthermore, how or even if this might translate to a non-US context such as London.

The corpus of work on the built environment and the risk factors for obesity does, however, help to develop a typology of potentially positive and negative environmental features. For example, neighbourhood ‘walkability’ (correlated to physical activity uptake) is predicated on features including conveniently spaced and safe intersections, residential density, quality and aesthetics of route, connectivity or efficiency of route, attractiveness of destination and perceived safety. In addition, use of outdoor space is a result not just of access (proximity) but also its size, quality, features and ‘naturalness’ (Giles-Corti *et al*, 2005). Similarly, uptake of cycling does not just depend on the

existence of cycle paths, but also traffic volume and speed, lighting, barriers between traffic and cyclists and the adequacy of cycle parking facilities. It has also been shown that there are different sets of mediating factors linking the impact of the built environment on physical activity (e.g. brisk walking) for transport (Sallis *et al*, 2004) and for recreation (Pikora *et al*, 2002). However, while crucial to shifting the focus of aetiological speculation away from individuals and onto the environment, this research still has limitations of which three are particularly prescient in the context of designing possible interventions. First, proving that the environment *causes* sedentarism or physical activity uptake is conceptually and methodologically challenging (Jones *et al*, 2007) due to studies' numerous confounding variables. Second, study accuracy is compromised where activity levels are self-reported. Third, self-selection (with the most active people being drawn to the most walkable, liveable high quality neighbourhoods) means that designing effective environmental interventions to increase activity amongst the less motivated must also consider the importance of the environment's "supportiveness" as much as the features of its built form.

However, as Asthana *et al* (2002) contend, the difficulty in planning the environmental interventions that Eggar and Swinburn call for comes when trying to disentangle environmental from individual effects on health discussed earlier in this chapter. The 'context' versus 'composition' argument (Subramanian *et al*, 2003) remains largely unresolved for obesity, where individual lifestyle choices (risk factors) are conditioned by the environment and cultural norms as much as the "supportiveness" fostered by the relationship between the two. In the intervening time since Eggar and Swinburn proposed that obesity research move beyond the strict idea that its aetiology was related to individual behaviour to embrace a more political ecological idea of risk and vulnerability at a variety of scales, it has become clear that not only is obesity more complex than ever previously thought, but that preventing further rises will require inter-

stakeholder collaboration and action at a number of scales. The idea that environments could themselves be risk factors for obesity has extended the field far beyond the biomedical profession. Indeed, the corpus of work on the condition's aetiology (see figure 10 for some examples) now includes analyses of the contributory role of urban sprawl (Frumkin, 2002; Sui, 2003; Frank *et al*, 2004; Vandegrift and Yoked, 2004; Eid *et al*, 2006), income inequality (Pickett *et al*, 2005), the relationship between place of residence and 'health orientation' or general outlook on health (Dutta-Bergman, 2005), the density of fast food outlets and portion size (Hill and Peters, 1998; Reidpath *et al*, 2002), the role of building design on physical activity (Zimring *et al*, 2005), land use mix and activity levels (Powell, 2005) and the relationship between social capital and health (Greiner *et al*, 2004; Leyden, 2003).

Figure 10 - Environmental/ structural causes of obesity, theories and proponents

AREA OF RESEARCH	PROPONENT
Role of urban sprawl	Frank <i>et al</i> , 2004 Vandegrift and Yoked, 2004 Sui, 2003 Frumkin, 2002 Eid <i>et al</i> , 2006
Food access and availability/ food deserts	Cummins and Macintyre, 2002; 2006 Cummins <i>et al</i> , 2005 Whelan <i>et al</i> , 2002 Wrigley <i>et al</i> , 2003
Relationship between place of residence and 'health orientation'	Dutta-Bergman, 2005
Density of fast food outlets	Hill and Peters, 1998 Reidpath <i>et al</i> , 2002 Cummins <i>et al</i> , Marvid and Medd, 2006
Role of building design and urban planning on activity rates	Corburn, 2004 Zimring <i>et al</i> , 2005 Vojnovic <i>et al</i> , 2006 Wakefield, 2004

Role of land use mix on activity rates	Powell, 2005
Relationship between social capital and health	Greiner <i>et al</i> , 2004 Leyden, 2003

While the epistemological underpinnings of this research vary by discipline, it is notable that the inclusion of environmental aetiological factors marks a definitive shift in the conceptualisation of policy solutions and the interdisciplinary collaborations these may necessitate. As the previous chapters note, this is also the outcome of wider changes within public health after the adoption of the health promotion-orientated Ottawa Charter. However, the idea that environmental effects could play as big a role in health status as individual behaviour and physiology means that the geographic must play, and is increasingly playing, a central role in public health. The command and control mechanisms of the ‘old’ public health needed to contain widespread communicable disease outbreaks have gradually been replaced by a more nuanced and devolved version recognising that lifestyle diseases such as obesity necessitate rethought processes of policy development, implementation and evaluation. In both the US and UK, the obesogenic role of environments is now widely accepted (see for example DH, 2004a) but there remains a sharp disjuncture between agreements that immediate action is needed and the continued call for a definitive end unequivocal “evidence base” in advance of such action (Swinburn *et al*, 2005: 23). As this chapter has demonstrated, rising obesity prevalence at global, national, regional and local scales is not in doubt, but the refusal to stray far from the biomedical paradigm’s reliance on ascertaining specific aetiology means that casual factors grounded in locale are rendered problematic by their spatial particularity (and therefore not generalisable for public health policy solution planning) or somehow geographically or socially particular and thus not representative of the obesity epidemic in general terms.

4.6 The consequences of obesity

If the causes of obesity are the subject of ongoing and increasingly vociferous debate, then its consequences are, by contrast, rarely disputed. In the context of obesity, public health policy must act to prevent not only further rises in prevalence, but also its adverse health, economic, political and personal consequences. But, unlike other “chronic non-communicable diseases” (WHO, 2003a); policy must not just reduce prevalence levels, but also the host of associated co-morbidities for which being obese raises the risk. The logic suggests that policy should aim to prevent those of normal weight and overweight from becoming obese and the obese from becoming even heavier (or preferably lose weight), such that, by association, the negative externalities of the condition are reduced (Sturm, 2005). It is clear that since obesity is, by itself a “disease” and a “risk factor” for a range of other chronic conditions, then not only is its conceptualisation different within biomedical research, but also the way in which its consequences have been rhetorically employed by governments and the media alike. Rarely, would the statement ‘cancer costs the NHS billions a year’ be used to justify prevention policy, if only for the moral implications of such a claim. Rather the rationale would be in terms of quality of life improvement, the ‘right’ to good health or access to new drug treatments. Conversely, the consequences of obesity are cast as falling into three broad groups: economic/ fiscal, health and personal/ psychological costs. The way that these are used to legitimate prevention policy will be discussed with reference to the two case studies later in this work, but it will suffice here to briefly describe the nature of each group.

The economic or fiscal costs of obesity have been recently calculated in a large number of developed countries, but the UK and US stand apart for the fact that both have not just estimated annual costs, but also predicted future costs and revised estimates as new calculation methods have arisen. In 2003, the UK’s Health Select Committee suggested that the total direct costs (to the NHS of treating co-morbidities) and indirect costs (lost

productivity due to days off work and the cost to business of health insurance bills) amounted to £6.6-£7.4 billion annually. The Chief Medical Officer's 2003 report puts the annual cost to the state of physical inactivity at £8.2 billion, applying a monetary value even to obesity's risk factors (DH, 2004b). The CDC, using National Health Account data, puts the cost of treating obesity at \$78.4 billion in 2003. In addition to calculations of federal costs, studies also compare the cost of treating the obese and non-obese with the same disease, comparing total medical costs over the average lifetime of the obese/non-obese and the increasing Medicare/Medicaid burden (Daviglius *et al*, 2004), especially given that 50% of obesity-related costs are estimated to be borne by these insurance schemes (Finklestein *et al*, 2003; 2004). The economic cost of obesity is clearly related to its health consequences. The health costs are supported primarily by studies calculating mortality rates due to obesity (Mokdad *et al*, 2004; Flegal *et al*, 2004; 2005). They are also reinforced by calculation of annual years of life lost attributable to obesity (Fontaine *et al*, 2003; Olshansky *et al*, 2005) and calculations of healthy life expectancy reductions due to being overweight or obese (Fontaine *et al*, 2003). These epidemiological studies are further reinforced by cohort analyses calculating the degree to which being obese elevates the risk of developing, for example, type-2 diabetes, hypertension, coronary heart disease or certain cancers. The final broad category of cost is that of the personal and psychological toll that obesity casts (see Brownall *et al*, 2005). Research quantifying this is for obvious reasons, sparse. Anti-discrimination laws in both the UK and US mean that, in theory at least, obesity should not be a barrier to equal opportunity. Yet, as the ever-growing number of web-based support groups demonstrate, theory and practice are still in sufficient opposition for obesity advocacy groups to be an increasingly powerful voice within US lobbying circles.

This overview of the three main groups of costs suggests that obesity is not only inherently complex, but also that its effects are felt far beyond the individual. Ironically,

this makes preventing further rises more pressing, yet since it may involve targeting people and places far removed from the individual causes of obesity more morally tumultuous to justify. This process of using aetiological claims, linking these to the adverse consequences of obesity and then rhetorically employing them within the development and deployment of neo-liberal public health policy will be the focus of the next two chapters. In the context of the neo-liberal governance of health, where responsibility, duty and accountability on behalf of the state and its citizens exists in a contested matrix, obesity prevention faces particular challenges. Added to this, the complicating layer of geographical causality in obesity's aetiology means that there can be little parity in the policy process between countries. It is for this reason that this work will compare the UK and US, for as this chapter has shown, while the consequences of obesity are broadly similar between countries, the causes are so deeply entwined with the interplay between people and places that geographical variation can never be far from the agenda.

4.7 Conclusion

The medical sociologist Bryan Turner writes that “issues about health and illness are moral and political because health is implicitly used to describe normality. The problem is that ‘normality’ is variable, contested and context-dependent” (2004: xxiv). As this analysis of both sides of obesity's aetiological coin shows, the condition not only inverts assumptions about the health effects of ‘normal’ behaviour such as eating and exercising, but also renders these behaviours ‘abnormal’ in those showing the outward physical signs of vulnerability to obesogenic environments. This chapter has explored how both the gluttony and sloth camps struggle to reconcile the assumption that in the past twenty years people have started to eat more and exercise less with the empirical reality of data that is less definitive. Interestingly, this disjuncture is fuelling a body of research under what might be termed “critical obesity studies” (Gard and Wright, 2004;

Monaghan, 2005; Rich and Evans, 2005; Sciolino, 2005) that seems to feed from this uncertainty. The mounting awareness of the aetiological complexity of obesity – an opinion culled largely from epidemiological research - subsumes voices calling for policy action even in the absence of absolute certainty (see Rosamond, 2004). The situation therefore in the US and UK, and to an equal degree in Canada, Australia and New Zealand, is that evidence bases across a broad range of discrete disciplinary sources far exceed the rate of policy development, implementation or evaluation. It is inescapable that both the causes and consequences of obesity suggest a widespread public health concern that governments must acknowledge and address to ensure ongoing long-term population health improvement. That governments have acknowledged obesity is not to be doubted, and the gradual shift in its prioritisation in the UK and US will be outlined in more detail later in the next chapter. However, creating policy to address obesity has proved an entirely different task and one where intention and action, as well as theory and practice seem to be caught in a perpetually-reproducing bifurcation.

As Eggar and Swinburn's (1997) work suggests, the need to understand obesity's aetiology as a social ecological interplay between biology, behaviour and the built environment is an assertion that resonates with geographical research (see also Jackson, 2005). This epistemological shift, if taken up, thus offers great potential to unravel the way in which a wider set of cultural, economic and political societal changes have resulted in an increasingly "pathogenic" environment. Of course, this is not an entirely new public health concept– the sanitary movements of the nineteenth century were based on the recognition of the role of the urban built form in the pathogenesis of infectious diseases – but it does represent new thinking with regards to chronic 'lifestyle' conditions. Just as with the sanitary movement, social ecological models suggest that some places may be intrinsically healthier than others and that the task of public health

should be to re-engineer the built environment so that healthy behaviour becomes an inevitable and incidental act, thus removing any need for (potentially flawed) decision-making processes. As such, policy action must target the relationships between biology and behaviour and environment and behaviour, so that the energy balance equation reverts back to a 'normal' dose-reaction response at a population scale. Policy is needed not just to prevent further rises in obesity, but to recalibrate the delicate relationship between the environment, biology and human behaviour.

The energy balance equation is one that has risen to the status of common sense truth by virtue of the fact that it corroborates inherited wisdom. As both proponents of the gluttony and sloth camps concur, neither side of the equation is discrete. While at an individual level, it is broadly correct to suggest that energy imbalance leads to net weight gain (or loss), the same argument does not hold true at a population scale. Public health, as Lang and Raynor (2005) contend, and governmentality analyses help clarify, rests on institutions, surveillance systems, tools and practices that seek to understand a population as a problem and act – through a variety of means - to ensure their greater good. However, obesity brings into sharp focus the disjuncture between the expected and observed outcomes of human behaviour and the manifold ways in which health is now inextricably tied to issues beyond medical practice. It is consequently the contention of this thesis that rather than reducing the aetiology of obesity to a mechanistic energy balance equation, it is more salient to consider the risk factors for both gluttony and sloth as existing in a dialectical relationship, with the existence of each reinforcing the likelihood of the other. Thus, as this work will explore, expected or 'normal' behaviour and biology clashes with the observed behaviour necessitated by pathological environments in a "punitive synthesis" that, evidence suggests, acts to continually reinforce the mechanisms exacerbating the risk of obesity.

Considered within a social ecological framework, obesity becomes a wider question of how environments shape behaviour. The insinuation is not that people are passive victims of the geographic context in which they live, but that places exhibit traits that can be variously health promoting or constraining. This idea has been potent within the rhetoric of neo-liberal governance where having choice, exercising self-responsibility and capitalising on the duty to maximise individual potential have long been discussed. The admission that the economic and health consequences of obesity might reverse the significant medical progress made by the state is thus an unwelcome critique of the ability of neo-liberal healthcare to deliver its pragmatic promises of the greater good. In a further complicating twist, not only is this reality coming into wider discourse at a national scale, but it is becoming increasingly clear that some places are fuelling the spiral into obesity-induced poor health. Geographers have long been interested in the mutuality of places and people and the recursive relations that continually reinvent them (see for example, Hayes, 1999). But, obesity has politicised this relationship within public health, a situation reinforced still further by efforts in both the UK and US to reduce health and social inequalities (DH, 2003; 2004a).

Returning to the idea of the causes and consequences of obesity set out in this chapter; situating the energy balance equation in the context of place provides the rationale for implementing policy at a local scale. As Flegal *et al* (2002: 1727) note, “the practical health benefits from a reduction in overweight and obesity are a matter of considerable public health importance”. Yet, with places both potentially obesogenic and a possible resource for policy makers; an appreciation of geographical context has widened the field of obesity studies beyond the biomedical and permitted causality to be located with individuals and their environments. As recent reforms have localised the institutions and power of public health in the UK and US (Prince *et al*, 2005), so too have obesity prevention strategies been devolved. Evidence-based policy and the pursuit of “best

practice” have proved difficult aspirations in both countries, where the “practice” itself is still in its infancy. Thus, the next four chapters will explore the way in which evidence and practice have played out in the two case studies of central London and Austin, Texas, located in their wider national policy contexts. Grounding epidemiology in place, this thesis asserts, is essential when aetiology is so inextricable from the spaces where people live, work and play. Understanding how places are invoked in the discourse and practice of preventing further rises in obesity is one of the central goals of this work, crucial to fully exploring the research questions through an analysis of stakeholder interviews. Turner suggests that “we fall ill because we are embodied and vulnerable” (2004: 312). To which the contention that we fall ill because we, willingly or unwillingly, embody the vulnerability created by the places in which we live seems a logical riposte. The set of ideas encapsulated within these statements will be explored through the case study material in the chapters which follow.

Chapter Five: Health inequalities, informed choice and obesity prevention policy in England

5.1 Introduction

The report of the Chief Medical Officer, Sir Liam Donaldson, *On the State of the Public Health* declared that obesity was “a central public concern and it is good that this is so. Such a profile for a public health problem creates the right environment to ensure that the commitment to tackle it is also sustained” (DH, 2003b: 4). This statement was also accompanied by the, now famous, assertion that obesity was a “health time bomb” (2002: 2). The report went on to expand on this idea:

The growth of overweight and obesity in the population...is a major health concern. It is a health time bomb with the potential to explode over the next three decades into thousands of extra cases of heart disease, certain cancers, arthritis, diabetes and many other problems. Unless this time bomb is diffused, the consequences for the population's health, the costs to the NHS and losses to the economy will be disastrous.

(Department of Health, 2002: 2)

The Chief Medical Officer's words mark a pivotal moment in the development of public health obesity policy. Moreover, the use of the “time bomb” metaphor concurs well with a decisive shift in the policy outlook of the British Government, with the rhetoric of urgency and predicted future costs of mounting obesity prevalence being used to justify greater state intervention. This chapter will thus trace the development of public health obesity policy in the UK in two contexts: ongoing structural changes within the NHS and the wider media framing of obesity. Following logically from the conceptual spheres developed in chapter three, this chapter asserts that recent changes in modes of health care delivery, as well as wider strategies and practices of health can be profitably analysed through the framework of governmentality. Moreover, and essential to understanding recent policy shifts under the current Labour government,

“governmentality studies focus attention on the conduct of conduct: how we conduct ourselves, how we attempt to conduct others, and how others attempt to control our conduct” (Peterson, 2003: 188). This framework thus “links the techniques of discipline and control of individual living bodies (biopolitics)... directly to state politics... [It] shifts the focus of interest from the institutions directly towards the *practices* of government. These practices are in turn related to, and are legitimised by, a ‘rationale of government’... Governmental power and government itself are as much a product of a discourse as the individuals that are subjectified by it.” (Joyce, 2001: 595). This chapter asserts that such discourses overwhelmingly concern the rights, duties and responsibilities of individuals and the state in matters of health and moreover that these are inextricable from the relative apportioning of each of these categories in the practices of government outlined in chapter seven.

The governmentality framework suggests that individuals act as agents whose subjectivity is formed through engaging with the powers by which they are governed. In turn, these powers and this process of engagement then form the basis by which they govern themselves (Peterson, 2003). It was Foucault’s view that practices of the self or techniques of self-governance were not invented by subjects but rather “proposed/ suggested/ imposed on them by one’s culture, society and social group” (Foucault, 1991:11). Hence, to understand contemporary obesity prevention measures, it is first necessary to outline the recursive way in which policy both creates and responds to the needs of citizens through the delicate dialectics of power and discourse. Furthermore, it should also be considered how the media acts as one of the chief mediators in this dialectical relationship. To move from the theoretical to the empirical, this chapter will trace public health policy as a particular “strategy of rule” (Peterson, 2003: 198) that not only constructs obesity as a discourse and ‘problem’ to be addressed, but also frames

this in the context of the state's aspirations for economic growth and better health and the role that citizens are expected to play within this.

As suggested in chapter four, obesity has long been a 'problem' at both societal and individual scales, but the current labour government's renewed interest in health inequalities has permitted a re-politicisation of the condition from something people "do" to something they "experience" (Chang and Christakis, 2002:151). Mirroring this assertion, UK public health policy (and the wider discourses surrounding it) demonstrates a palpable shift from obesity understood as self-induced or wilful to an inescapable and inevitable condition brought on by daily life in an obesogenic environment. Furthermore, this shift "effectively highlights a more general epidemiological tension between an individual level of focus on risk behaviours and a population level of focus that contextualises behaviours within a social and material framework" (*Ibid.* 2002: 152). Furthermore, at both scales, "the framing of obesity...does not operate independently of the framings of race, class and gender". To further complicate the development of policy, it should always be borne in mind that "poverty itself is enmeshed within arguments concerning the role of individual responsibility versus victimisation caused by unfavourable social circumstances" (*Ibid.* 2002: 170). The authors' assertions, while notably overlooking the concept of health inequalities *per se*, inadvertently provide a neat segue into the political ideas first formalised in the UK with the release (and subsequent suppression) of the now-famous *Inequalities in Health* Report in 1980 by Sir Douglas Black. The *Black Report* (as it has come to be popularly known) has since been rediscovered, but it was not until the *Acheson Report* was published in 1998 under Tony Blair's 'New' Labour government, that health inequalities really came to be seen as warranting political action.

Since the late 1990s, the Labour government has focussed heavily on the causes and consequences of social exclusion. This has invariably led to wider questioning of the

kinds of inequality so neatly encapsulated by the phrase “unfavourable social circumstances” (*ibid*). Health inequality is a measure of disparities in individual or community health status as well as the differential ability to access adequate care, advice and support. Both are inextricably linked, but are further tied into factors such as socioeconomic status, educational attainment and demographic variables. Since that time, reducing health inequalities at a variety of scales has come to be an overriding aim of Labour’s health policy. Indeed, before any broadly health-related policy can be passed, there must be sufficient evidence that it will not perpetuate existing inequalities. Moreover, obesity and health inequalities go hand in hand in the governmental imaginary. As a result, not only is obesity seen as a mark of a person’s state of health, but vulnerability to obesity is heightened by lack of access to primary healthcare settings where those at risk may be identified.

Drawing on official policy documents and strengthened in places by primary interview material, this chapter traces obesity as a public policy concern in three temporal phases that mark discursive shifts in the “rationale of government” related to the “conduct of conduct”: 1980–2001, 2001–2004 and 2004 to the present. Prior to the 2001 National Audit Office report *Tacking Obesity in England*, obesity was not an explicit health priority, but since that time it has become subject to “government rationale” in its own right, legitimised by constant reiteration of the condition’s causes and consequences presented in chapter four. The health inequalities discourse is still present, but this alone is no longer the chief justification for addressing obesity within public health. Since 2001 and especially after the publication of *Choosing Health* (DH, 2004a), the remit of obesity policy has widened beyond the Department of Health (DH) to encompass the domains served by the Department of the Environment, Farming and Rural Affairs (DEFRA), the Department of Culture, Media and Sport (DCMS), the Department for Education and Skills (DfES), the Department for Transport, Local Government and the

Regions (DTLR), the Department of Trade and Industry (DTI), the Department of Work and Pensions (DWP) and the Food Standards Agency (FSA) as well as a host of non-governmental actors. This chapter will argue that, at the same time as obesity has become firmly entrenched within public health (DH, 2004a), its remit has, ironically, diversified through its appropriation by other sectors. Furthermore, as healthcare has been devolved to Primary Care Trusts (PCTs) who act with a certain degree of autonomy in priority, target and budget setting, obesity has also become an increasingly 'local' problem. National scale policy and targets hold at the local level, but the methods and resources invested in their implementation are also locally determined. As a result, this chapter will finally set out the case study of London, thereby shifting the focus from an analysis of temporal shifts in policy through a governmentality lens, to the actual sites where practices are implemented and discourse plays out.

5.2 Conceptualising health inequalities 1980-2001

The current concern with reducing health inequalities is a legacy of the *Black Report*. First published in 1980 to Margaret Thatcher's less than receptive incoming Conservative government, it set out the case for health inequalities in England and Wales and was the first such express suggestion that socioeconomic inequality could have a causative influence on health outcomes. Its assertion that poverty was the chief cause of poor health and therefore largely out of medical control presented public health with a direct affront to its hegemonic status. The report also argued that not only were there extreme inequalities in health status across England and Wales, but that these were exacerbated by unequal access to health care and resources. Health inequalities were analysed both quantitatively in terms of age, gender, ethnicity, region and class and qualitatively in terms of their ramifications. Perhaps most importantly, it presented a picture of Britain as a progressively more divergent country, where class gradients for virtually all diseases were common, offering, in the process, a stinging critique of

Thatcher's neo-liberal policies. The report also draws heavily on the work of Thomas McKeown, citing his opinion that there should be "a shift in the balance of effort, from laboratory to epidemiology in recognition that improvement in health is likely to come in future, as in the past, from modification to the conditions which led to disease rather than from intervention in the mechanism of disease after it has occurred" (1976: 179). Thus, the report suggested that health should not just be the domain of the DH, but that positive health outcomes could also be induced by, for example, fiscal measures to help alleviate poverty. The report was published, but only on a Bank Holiday, fuelling numerous suggestions that Thatcher tried to bury many of the findings in a bid to legitimise her nascent neo-liberal reforms.

One of the most important legacies of the Black Report with respect to obesity policy was the idea that the government should not just monitor health *per se*, but should instead create a system of monitoring health *in relation to* social and environmental conditions. The author called for further research on the health effects of diet and exercise, acknowledging that both can promote health and that policy should be orientated to prevention rather than cure. Areas and individuals at high risk (e.g. socially deprived) should be targeted by measures that encourage "desirable changes in diet and exercise". There was no mention of what might be "desirable", but the report's idea that health is both a spatial (population) and social (individual) pursuit is an assumption still underlining policy today.

From 1980 to 1998, there was a long hiatus in work on health inequalities as Thatcher focussed instead on NHS reforms and introducing free market economics into the welfare state. However, with Labour's election in 1997, the topic once again became a government priority. The *Acheson Report* (DH, 1998) extended the meticulous quantitative research conducted by its predecessor to suggest four policy areas where health inequalities could be reduced: the benefits system, education, maternal health and

the practices of smoking and drinking. Furthermore, the report asserted that all policies likely to impact on health should also be evaluated for their impact on health inequalities. Poverty is highlighted as constraining the ability to act 'healthily' as not only are the rich less likely to smoke, but they are also more willing and able to give up. Since smoking is one of the most important factors accounting for inter-class differences in death rates, the ability to modify such behaviours is essential for long-term health. To address this, the report called for stricter controls on tobacco sales, advertising and smoking in public places. In addition, it identified schools as a fundamental area for government intervention and health promotion through healthier meals and free fruit distribution.

The report also set the target to reduce inequalities by 10% by 2010. Such target setting is a fundamental characteristic of New Labour's public health policies, accompanied by a devolved responsibility for health to the administrative regions delineated by PCTs. Since health inequality work extends to evidence that there are marked differences between PCTs in terms of mortality and morbidity, 11 Health Action Zones (HAZ) were created in 1998 to receive extra funding to create integrated plans to include the local community in health delivery to prioritise specific needs. The first wave of HAZ included former coal mining areas such as Bradford and the deprived inner city boroughs of Lambeth and Southwark. HAZ provided the structural framework to address health inequalities and also provided a way to divert additional funds to managing high obesity prevalence rates.

In 1999, *Saving Lives: Our Healthier Nation* was published and set out the government's vision of the nation's health to 2010. The document focused on reducing deaths from preventable causes such as cancer, coronary heart disease, accidents and mental illness by improving the health of everyone and the worst off in particular. In setting out this commitment, the report implicitly acknowledged the inequitable social distribution of

risk in relation to health and the causal role of social, economic and environmental factors. The report set out health improvement targets to 2010, aiming to reduce deaths among those aged under-75 from cancer and accidents by 20% respectively and for coronary heart disease by 40% to prevent an estimated 300,000 unnecessary deaths. This quantitative outlook is not new, but is favoured by a Labour government orientated to targets, task force creation and strategic priority setting. Public health has long been a numbers game – the first social surveys of Booth and Rowntree in the nineteenth century are clear examples (see Seale, 2000 for a good discussion of this) – but such comprehensive target setting for health improvements and health-related behaviours is relatively new. To support this, the Labour government has focused - somewhat controversially given the public distaste for its nanny statist leanings - on data collection. As such, *Saving Lives* marked the inauguration of regional Public Health Observatories (PHOs) charged with the same kind of surveillance and monitoring currently performed in the US by the Centers for Disease Control (CDC). It is interesting to note, especially in the context of the “nanny state” debate, that these new institutions may effectively mean that “power and control is [now] territorially inscribed at different spatial levels and on different policy making domains” (Moon and Brown, 2000: 74). Regional PHOs and local Primary Care Trusts (PCTs) may exemplify this intensifying territorial inscription of power and control by delineating risk and drawing upon a range of techniques across governmental and non-governmental domains in order to manage this. Regional PHOs are thus domains of evidence base collation, from which policy decisions based on observations are made and administered over communities delineated as risky.

To achieve these improvements, *Saving Lives* outlines a vision of productive partnerships between people, communities and the government, with the newly-formed Health Development Agency (HDA) seen as its key mediator. While the report focuses

on reducing deaths from preventable causes, there is no explicit mention of obesity as one of these preventable causes. However, it does state that individuals can improve their own health through better diet and physical activity, the two main modifiable risk factors for obesity. Furthermore, it states that individuals and their families should be “better informed” about risks in order to make rational decisions. In addition, the report outlines plans for a “Healthy Citizens” programme involving the newly created NHS Direct, a “Health Skills” programme and an “Expert Patient” programme as part of wider NHS reforms to devolve responsibility to individuals and communities for their state of health. Communities are asked to address the underlining social and economic causes of ill health, such as poverty, poor housing, unemployment, poor education and crime. To support these local level policy imperatives, the report suggests that the government will also address existing transport, tax and welfare policies that may have indirect and direct health impacts. The report’s overriding theme is that health improvement should be the ultimate goal and that the HDA will be charged with raising the quality and standards of public health needed to achieve this.

From 1980 to 2001, public health policy in England set up the conditions for obesity to emerge as a target of government intervention in its own right. These included the ‘rediscovery’ of health inequalities, a shift from treatment to prevention as a primary concern of public health, a focus on diet and exercise as health determinants and the realisation that health is also influenced by factors such as poverty and education. In addition, the creation of new tools of government such as the HDA, HAZs and PHOs improved surveillance to create the evidence bases for future policy. Essentially, such “neo-liberal forms of health governance re-code and re-problematise the function of the health care system predominantly in terms of an economic discourse” (Joyce, 2001: 595). The HDA, HAZ and PHOs are both a cause and consequence of this economic re-framing of health, where individual behaviours such as smoking, sedentarism or poor

diets have calculable economic costs. Public health policy from 2001 clearly exemplifies this discursive turn to the economic and, furthermore, lays bare the associated public awareness and unease over the tension between managing collective and individual risks with regard to health. These ideas will be explored in more detail by tracing the emergence of specific public health policies to address obesity from 2001 onwards.

5.3 Calculating the cost of obesity 2001-2004

The 2001 National Audit Office (NAO) report *Tackling Obesity in England* offered the first economic measure of the direct and indirect costs of obesity to the NHS and the British economy. In so doing it justified intervention by framing obesity as posing ‘excessive’ costs, both to individuals and the state. The report identified that the prevalence of obesity in England almost tripled from 8% to 21% of women and 6% to 17% of men from 1980-1998. Such rising rates have provided a case for intervention due to their human costs in terms of “contributing to the onset of disease and premature mortality” (NAO, 2001: 1), and also the quantifiable direct and indirect financial costs related to this. The report calculated that the direct cost to the NHS for the treatment of obesity and its co-morbidities (GP consultations, hospital visits, prescriptions etc) stood at £500 million in 1998 (the last year for which data was available). A further £2 billion was accrued in indirect costs to the wider economy through the 18 million days of sickness absence, 40,000 lost years of working life and 31,000 deaths annually (NAO, 2001: 20). Together, direct and indirect costs in 1998 represented 0.3% of Gross Domestic Product (GDP).

While in proportional terms, this figure is relatively insignificant, it is rendered more politically salient by virtue of the fact that it is arguably an *avoidable* cost. More concerning is the fact that if present trends continued, 25% of women and 20% of men would be obese by 2010, increasing costs by a further £1 billion. The report also admits that, due to gaps in the available data and the methods used to quantify these costs, it is

likely that the total figure is likely to be far higher in reality. Notably for this comparative work and, as if to reinforce the significance and magnitude of this rise, the report states that these figures will bring the UK in line with US obesity rates (2001: 21). The report was one of the first documents to expressly set out the case for obesity as a significant risk factor for a host of chronic diseases requiring attention in its own right. While the 1992 *Health of the Nation* white paper set out four obesity-related health targets, by *Saving Lives* in 1999, these had been neglected in favour of addressing four chronic disease target areas. This paper brought obesity back into the policy arena and perhaps most importantly aimed to “create a climate in which individuals are aware of the consequences of obesity and can make informed decisions about their lifestyle” (2001: 12). It is perhaps this “climate” of awareness and a raised awareness of questions of responsibility for obesity prevention that are two of the main legacies of this paper.

From a policy standpoint, the report is significant as it highlights the need for a joined-up approach to the governance of obesity. The onus for intervention does not fall merely on the DH, but a host of stakeholders. These include the Department for Education and Skills (DfES), Food Standards Agency (FSA), the Ministry of Agriculture, Fisheries and Food (MAFF) (now the Department for the Environment, Farming and Rural Affairs or DEFRA), the Health Development Agency (HDA), Local Education Authorities (LEAs), Local Authorities (LAs), the NHS, General Practitioners (GPs), the food industry, the Department of Culture, Media and Sport (DCMS), Sport England, media and advertising, the slimming industry and voluntary bodies such as the International Association for the Study of Obesity (IASO). As the report states, “the DH can have little impact in isolation and joined up approaches are required” (NAO, 2001: 31). This highlights a potential framework for delivery and also demonstrates obesity’s complexity in terms of the burden of responsibility and duty of care. It is no longer a question of simply governing individual behaviour, but rather managing the outcomes of

such choices so that the adverse consequences for the economy and NHS are minimised now and in the future. Furthermore, evidence suggests that behaviour, choices and their health outcomes demonstrate significant variations between individuals and groups and that such differences justify calls for targeted intervention upon those classified as ‘high risk’ (NAO, 2001: 12).

The report suggests that the government has a duty to “identify” and “help” those at “high risk” (2001: 2) of obesity and therefore target intervention at certain groups. The delineation of risk groups means that, just as with action to reduce health inequalities, certain people and places become subject to higher levels of surveillance and governance, often through the data collection activities of the regional PHOs. The NAO identifies Black Caribbean and Pakistani women as having the highest propensity for obesity-related co-morbidities and therefore in need of specific interventions. In addition, the poorest people and communities are also seen as at high risk, suggesting that not only can specific demographic groups be conceived as vulnerable, but also certain locales. This idea has long been a constituent of public health more widely, but only in 2001 did obesity policy discourse expressly acknowledge this. Following from this risk identification, the report suggests that approaches must not only integrate governmental departments and their various remits, but also opt for a “whole population” strategy linking measures across a range of sectors (e.g. education, transport etc) into wider attempts to improve diet and activity levels. If the NAO report was the first to quantify the effect of individual body weight on the national economy and health service, then it was also the first to explicitly state that being overweight or obese merited attention in and of itself, not just by virtue of its risk factor status. This concurs with Joyce’s assertion that neo-liberal forms of health governance often “re-problematise the function of health care systems, predominantly in terms of an economic discourse” (2001: 595). Healthcare spending has been a central component of both the Labour

party's manifesto for its election in 1997 and, pertinent to this discussion, its 2002 budget. The Chancellor announced that spending would rise by over £40 billion from 2003 to 2007 and, as a consequence, assigning a monetary value to the effects of lifestyle has added a deeply persuasive political layer to the explicit inclusion of obesity prevention within public health. Moreover, this rhetorical power has been magnified with the inclusion of questions concerning the morality, responsibility and duty for such costs.

The Chief Medical Officer's 2002 *Annual Report* description of obesity as a "public health time bomb" has now gained valuable currency in the global lexicon. The metaphor insinuates that, if left unchecked, the problem will detonate causing unprecedented rises in prevalence and costs of treatment thereby undermining the financial capacity of the state to deliver essential services. The suggested preventative measure is an "evidence-based action plan" that will halt the year on year rises in prevalence with diet as the main target. The resulting *Food and Health Action Plan* (DH, 2003a) primarily drew on the *Strategy for Sustainable Farming and Food: Facing the Future* (MAFF, 2002) which laid out plans to ensure the viability of the food and farming industries in the UK while improving nutrition and public health. Furthermore, it reiterated the role of the local by charging PCTs with ensuring a food dimension in health improvement and community plans. In keeping with Labour's focus on health inequalities, the report declared that "food is a marker of social inclusion, playing a central part in our social interaction" (2003:11). While this sociological dimension to consumption is already an assumption of cultural anthropological, sociological and geographical consumption studies, policy has been slower to follow suit. The report also acknowledges that "government policies on food need to recognise this wide range of influences, and as far as possible make it simple for people to make food choices that support health, and also fit with their way of life" (*ibid.*). Unpacking this statement, it is

clear that food choices are not made in a vacuum, but as already suggested in this work, are at the mercy of a wide range of influential factors. This idea also fits well with the notion of obesity now being something that people “experience” rather than “do” (Chang and Christakis, *op cit.*). Yet, the assertion that dietary change might be best achieved by building a culture which is supportive of healthy diets is never fully elucidated in the report. Such omission of detail has led Lang and Raynor to fairly assert that “there is still no overall coherence and integration in the government’s activity in this field....Labour has been unnecessarily cautious about food and public health” (2003: 74). This criticism of over-cautiousness still stands today and consistently threatens the translation of policy discourse into practice in the UK.

The *Food and Health Action Plan* draws on an economic rationale for action citing the expected rise in prevalence from the NAO paper and the current and anticipated cost of this to the state (DH, 2003b). It suggests that understanding trends in the UK diet is essential to devise strategies to improve dietary health and draws on evidence from the National Diet and Nutrition Survey (NDNS), the Expenditure and Food Survey (EFS), Health Survey for England (HSE) and the Low Income Diet and Nutrition Survey (LIDNS). Moreover, it suggests that dietary differences in the UK are stratified by factors such as age, race, religion and income and, furthermore, influenced by the demand for convenience, value for money and time saving, as well as advertising, transportation issues and retail patterns. By highlighting the influences on eating in general and healthy eating in particular, the report also identifies possible interventions to improve dietary health. Yet, as with any planned public health intervention, the question of ‘evidence’ is never far away. *Food and Health* offers the background to a more detailed exploration of dietary health presented in the House of Commons Health Select Committee’s *Obesity Report* (HSC, 2004) published the following year.

The disciplinary paradigm of public health within the “reformed NHS” (Moon and Brown, 2000) is one in which healthcare provision is highly fragmented, with responsibility attributed to a range of stakeholders whose numbers grow in tandem with the widening social definition of health. Since 2001, UK policy discourse has framed the business case for tackling obesity in clear and urgent economic terms. By quantifying the cost of the condition to the state, individuals and the wider economy, obesity’s characterisation as a problem was also inextricably altered. Assigning a monetary value to body weight rationalised it, but it also instigated new ways of thinking where individual bodies, classified as overweight or obese, had a quantifiable economic effect thereby threatening the state’s ability to ensure the universal social right to health. As a result, it may be contended that as obesity has risen higher up the policy agenda, bodies have been legitimately and punitively classified, blamed and held responsible for the health of the nation. Furthermore, such classification has also reinforced existing differences by marking out high risk individuals, communities, ethnic groups, socioeconomic status and places as legitimate targets for intervention. Such intervention, moreover, now deviates from traditional, population-scale public health models and incorporates the Foucauldian notions of self-governance ably extended by Rose and Novas in their discussion of “biological citizenship” (2005). As a result, biological or health status and questions of citizenship have, since 2004, become bound up within moral projects determined to “shape the reflexive gaze” (2005: 450) that have quickly become integral to UK policy on obesity and manifest in prevention efforts.

5.4 Taking responsibility 2004 – present

The concepts of duty, responsibility and choice so enshrined within neo-liberal government are developed further by the *House of Commons Health Committee Report* (2004). This comprehensive treatise was published after lengthy research and consultation with numerous stakeholders in what, by this time, had become known as the

“obesity debate”. Media and popular fascination with the idea of obesity as a public health challenge requiring collective action to make ‘healthier’ behaviours both normal and inevitable has really only exploded since 2003. To add a further contextual dimension to this discussion on policy shifts, this work will now draw on an analysis of newspaper articles from the UK daily press from 2002-2006. This analysis immediately shows not just how policy is reactive in that it responds to public opinion, but also that it can be thought of as creative in the sense that it may, to a certain degree, catalyse such opinions.

In 2003, the public backlash against the food industry was gaining its present momentum and sophistication and a generalised scepticism and distaste was starting to pervade the UK press. In 2003 Marion Nestle’s *Food Politics* joined an already long list of critiques in the bestseller lists and McDonalds announced their first annual losses in 40 years (Brook, 2005). In this climate of awareness and quasi-hysteria, Professor of Paediatrics at the University of Colorado at Denver, James Hill’s assertion that “if obesity in America is left unchecked, all Americans will be overweight by 2050” became a seminal quotation in the construction of obesity as a public health issue and, coincidentally, the inspiration behind Greg Critser’s social and political history *Fatland*. The book, described in one review as “a combination of polemic and reportage” (Meades, 2003) raised public awareness about the food industry’s casual roles in obesity through its creation and manipulation of consumer desires.

The outcry in the US also served to reinforce existing criticisms of the global food industry in the UK. By highlighting the role of the food industry in creating products that responded to a seemingly insatiable desire for convenience, value and taste, Critser opened the gates to new ideas about the role of the individual in this public health problem. Just as Chang and Christakis suggest, individuals, “initially cast as societal parasites are later transformed into societal victims” (2002: 151) as behaviours are

“contextualised within a social and material framework” (2002: 152). This “framing of accountability” is inextricable from discourses concerning the causes of obesity. Indeed this may be thought of as “a persistent and consistent relationship between etiological configuration and conceptions of social responsibility and culpability” (2002: 154). Discourses linking the wider social, economic, political and technological causes of obesity to notions of responsibility inevitably come up against the tension between individual and population scales of explanation, an idea aptly exemplified by UK policy from 2004 onwards.

The link between preventative public health and aetiological explanations is encapsulated in the phrase “determining the causes of obesity are central to tackling it” (House of Commons Health Committee, 2004: 41). The report sets out evidence for the (by that time) 400% rise in obesity prevalence in the UK since 1980 and the claim that it could cost the state up to £7.4 billion (a significant climb on the NAO’s calculations in 2001). Drawing on Andrew Prentice and Susan Jebb’s work on gluttony and sloth (see chapter four), the report sets out evidence for both. The weight of explanation seems however to fall on the role of the food industry in creating, enabling and sustaining gluttony, an idea reinforced by details of the industry’s 2003 advertising budgets. The paper concludes that “the causes of obesity are diverse, complex and, in the main, underpinned by what are now entrenched societal norms” (2004: 46). The admission that the aetiology of obesity is “complex” brings into question the plausibility of previous calls for “evidence-based” policy and examples of “best practice”. It is interesting that the Wanless Report *Securing Good Health for the Population*, published two years previously, had also called for action even in the absence of a complete evidence base to achieve the revised health improvement targets from the *Acheson Report*. Instead of just aiming to reduce deaths among the general population, the *Wanless Report* called for deaths to be reduced in specific target groups so as to reduce the income gradient for

chronic illness mortality. Building on this idea of relative risk, Wanless also suggested that health promotion campaigns should be designed to target effectively those most vulnerable to the risk factors of chronic disease such as poor diets and sedentarism. From ideas of preventing further rises in obesity prevalence, the *Health Committee Report* extended this to call for promotion of healthy lifestyles through joined up action on the two spheres of diet and nutrition and physical activity.

The Health Committee also pointed out that since the demise of the Health Education Authority (HEA), there was no longer one central agency charged with developing sustained and long term national health promotion campaigns. As such, the authors believe that the lack of any definitive aetiology for obesity means that the government needs to re-centralise this role so that its actions seem “strategic” rather than just “haphazard” (2004: 51). As the report states, “if the government seriously intends to address obesity through health promotion, it must adopt a health education campaign dedicated exclusively to tackling obesity, which should... plainly spell out the health risks associated with being overweight and obese, and also highlight those nutritional and lifestyle patterns which are most conducive to weight gain” (*ibid*). In particular, it suggests that any strategy should highlight the links between weight and “high risk” foods and drinks, alcohol and diabetes/ cancer as a way of raising risk awareness. The focus then shifts to the potential role of the government in controlling the marketing and advertising of ‘unhealthy’ foods. The report calls for adherence to the precautionary approach but questions whether the solution to encouraging better food choices lies with legislation calling for the active marketing of healthy foods, or strict controls over those pushing unhealthy options. The question of the possible legislative control of consumption in a political system where freedom of choice has long been one of the central tenets of food marketing and advertising, now seems a staple in British

newspapers playing with the idea of Blair's "nanny state". However, the Health Committee report was one of the first to raise these questions for obesity prevention.

The report outlined the potential role of the NHS in obesity prevention and suggested that the onus should fall on PCTs as they have the greatest structural capacity to implement effective changes. The conclusion drawn is that government intervention thus far has been limited by disagreement as to whether obesity is a problem of individual behavioural choices (and therefore an individual responsibility) or the responsibility of government. Government fears of being criticised for nanny statism by heavy-handed (and often seemingly unnecessary) intervention in the private domain of lifestyle choices has hindered progress on achieving health improvement targets. However, the fear of accusations of over-zealous government has had a very real legacy in the form of a preference for 'voluntary agreements' over definitive legislation. Ironically, it seems that side-stepping the legislative issues has only been accompanied by a bewildering volume of policy documents on obesity.

The *Wanless Report* not only set new goals to reduce unnecessary deaths, but it was the first to set an explicit target to 'halt the year on year rise in obesity rates among the under 11s by 2010'. Childhood obesity had already been identified by the NAO in 2001 as of particular national concern, both for the rate of prevalence rises and the moral discourses surrounding children's health. In 2003, a study was published stating that obesity could reduce average life expectancy by nine years (Fontaine *et al*, 2003). This led to frenzied newspaper articles screaming that current children would be the "first generation to die before their parents". Headlines such as "fears as obese children face early grave" (Westcott, 2003) and "obesity: the new Black Death" (Fisher, 2004) were extrapolated from the conclusions of the original study to assert that, instead of living shorter lives, children might actually die before their parents.

While completely incorrect, the legacy of this linguistic stumble has been a rhetoric of moral duty to protect children from the risk factors of obesity as a matter of national pride and urgency. This discourse of protecting the health of future generations and avoiding the possible undoing of the historical progress made in public health in the last century has now been normalised in the UK to such an extent that the government duty to protect children from the risks of obesity is now taken for granted (Bates, 2004). This idea was further reinforced by an example used in the Health Committee report of a three year old girl who had “died” from obesity. Once again, newspapers were quick off the mark with the *Sun* arguing that children were now “choking on their own fat” and the *Daily Mail* branding childhood obesity “the forgotten illness” (Bates, 2004). Three months later it was revealed that the girl had not “died” from obesity *per se*, but rather a rare genetic condition of which obesity was one of the side effects. The case highlights, as asserted in chapter three, how factual information about obesity as a medical condition is so tightly entwined with cultural and media fascination that extricating one from the other to avoid misrepresentation is not just difficult, but often undesirable in the name of journalistic impact.

At this time, the New Labour rhetoric of “informed choice” was also entering the mainstream as the FSA debated the utility of nutritional labelling to convey risk in relation to food and the possible ways the government could legitimately regulate food advertising, especially in relation to children. “Choice” is used repeatedly in the media in relation to food and legislation. An article in the *Daily Express* claimed that “if people want to stuff their faces on rubbish and flop in front of the TV for hours on end, then it is their right. Ultimately it does come down to choice. But it would make some difference if that choice was at least informed by the facts” (Kampfner, 2003). Yet, the sheer volume of information circulating in newspapers, magazines, television, radio, websites as well as academic research means that being informed by the “facts” is not simple. The

elision of the words “informed” and “choice” demonstrates the tension between the collective and individuals in the context of health and will be discussed in greater detail in chapter seven. As the last instalment of the Wanless Report states, “the right of individuals to have their own lifestyles must be balanced against the adverse effect that choice has on the rights and behaviour of others” (Wanless, 2004: 149) Informed choice raises questions of individual rights to information, but also the rights of the collective for that information to be acted on correctly so that health is optimised. How to answer these while balancing the needs of the population and the autonomous rights of individuals is one of the greatest challenges that obesity poses to neo-liberal governance.

In early 2004, Tessa Jowell, the Minister for Sport gave an interview with *The Guardian*. In it, she called for people to take “more responsibility” for their own physical activity levels. She went on to state that “we need to create a culture of activity... an active society, but that doesn’t come simply from government proscription... people have to take more responsibility for their own wellbeing”. Jowell then went on to cite evidence from Finland, Canada and New Zealand of successful government interventions to increase activity levels. The idea of best practice existing ‘out there’ and ready to emulate - with Finland being a particularly popular example of success (Vartianen *et al*, 2000; Sample, 2005) - is one that the British government has frequently fallen back on in their quest to reduce obesity levels. Indeed, evidence of best practice is seen as a legitimisation for regulation. As *Telegraph* journalist Amiel (2004) stingingly writes, “obesity is gearing up as the next tobacco. It’s a natural for the regulators of the world. Good habits are directly connected to the fertile area of ‘lifestyle’, which lives near regulatory paradise”. Casting “lifestyle” as a construction through punctuation highlights not merely British scepticism and distaste for government regulation – especially for the largely conservative readers of the *Telegraph* – but also casts doubt on

the very possibility that it is something that can or should be identified, classified and controlled. As noted in the *Financial Times*:

The problem for Downing Street is that it has concluded that changing personal behaviour is much more important to a whole range of domestic policy objectives than used to be the case. However, this has opened it up to the charge that it is either telling people how to run their lives or not assuming its responsibilities. 'You steer a course between nanny statism and government indifference' said one senior government official.

(Hall, 2004)

In an interview with David Frost on *BBC2* in May 2004, Tony Blair said "I am responsible for many things, but I can't make people slimmer. The prime responsibility for people looking after themselves is with the people. What I can do is encourage, for example, sport in schools which we are expanding. We can give information to people; we can try and get the food industry to act responsibly". The fine line that Blair treads between the "proscription" dismissed by Jowell and achieving a culture of individual "responsibility" is exemplified well by the *Choosing Health* white paper released in November 2004 (DH, 2004a).

Choosing Health captured the public imagination in a way that no previous white papers in the preceding decade had managed. The paper highlighted the need for a personalised and individualised approach to health delivery and set out a specific vision of responsibility for health, with the state assuming an 'enabling' role, helping to facilitate individuals' own healthy choices. The report focuses on four behavioural areas relating to health: sexual health, diet, exercise and smoking. The regulation of these behavioural risk factors demands a holistic, capacity-building approach to health and, importantly, one that recognises that many of the health-related choices that people make are taken as consumers. The particular mode of the patient-consumer is inextricable from the broader context of the British healthcare system, meaning that it contrasts well with the US. *Choosing Health* assigns the role of "supporting informed choice" to the government and states that "while people make their own health decisions, they do expect the

government to help by creating the right environment” (DH, 2004a: 15). This “environment” must be understood in the broadest possible sense as both the material and structural conditions that condition decision making. Rather than simply being the built environment and the way in which it may enable or constrain access to safe, open space for recreation or affordable healthy food retailers, the term can also refer to the environment of consumption. Questions of individual and collective responsibility for choices relating to health have come to government and public attention largely as a result of the way in which health itself is now understood. It is not something that arises when disease is avoided, but rather a desirable and tradable commodity with value and prestige.

Choosing Health is based on the same rationale of cost minimisation as its predecessors; however it differs in its updated assertion that obesity prevention can be achieved through encouraging citizen-consumers to be responsible and ‘choose health’ through policies and structural reform that makes these choices easier and more inevitable. This revised role of government rests on building public awareness of the health effects of being obese and then using this cognisance as the basis for behaviour change. *Choosing Health* is also notable for expressly noting the responsibility of the food industry in obesity prevention (rather than just their causal role in obesity). Referencing the increasing importance of Corporate Social Responsibility (CSR) strategies as a means of reassuring consumers that transnational corporations have their best interests at heart, the paper places the onus on the food industry to put health at the centre of their product development, labelling, promotion and pricing and consumer information and advice. Twisting one of the biggest criticisms of the food industry – namely their advertising and marketing of junk food to children – the report suggests that this technique could instead be profitably used to market healthy lifestyles and, moreover, products that might contribute to these.

Choosing Health is something of a watershed for the context and direction of this work as it was the first assertion that using social marketing to promote healthy lifestyles could effectively address obesity as a public health issue (Cassady *et al*, 2002). *Choosing Health* was not only the first suggestion that a new national obesity awareness campaign was necessary, but also that in order to be successful it would need to be approached in a markedly different way to traditional health promotion. Social marketing is defined by the UK's National Social Marketing Centre (NSMC) as "the systematic application of marketing, alongside other concepts and techniques, to achieve specific behavioural goals for a social good" (NSMC, 2007). Since the success of social marketing is measured in sustained behaviour change, the first step to achieving this is through increasing risk awareness through information exchange at a national level and delivering healthy lifestyle advice at a tailored, personalised local level (Maibach, 2002; Elder, 2002). *Choosing Health* points out that many people engage with health issues through the media before seeking GP advice and that this framing of health may have a different ontological basis to that of public health. The policy recognition of the media's role in the public understanding of medicine and health is something new. Indeed, as Davidson *et al* note, "the media are the key way in which policy enters the public domain" (2003: 533). Conversely, it should also be added that media-fuelled health concerns enter the public domain via policy. The key question, interestingly ignored by *Choosing Health*, is thus how this dialectical system of constructionist information exchange can be reoriented to objectively raise risk awareness rather than induce a media-fuelled, social amplification of risk (Northrop, 2005). Media attention to health policy may create a public discourse legitimating the framing of obesity as an "epidemic", but there is hope that marketing healthy lifestyles may generate sufficient consumer awareness to render this, in effect, wholly preventable.

True to form for a government married to task forces, working groups and consultations, *Choosing Health* created eight task groups charged with discovering ways of changing individual and group health related behaviours and a HDA report assessing the best practices that might achieve the document's aims. The HDA report represents a renewed interest in using behaviour change to attain health goals, the rationale being that behavioural-based interventions may be more cost-effective than traditional service delivery. The authors highlight seven potential interventions upon behaviour: increasing the knowledge and awareness of risks; changing attitudes and motivations; beliefs and perceptions; structural factors and the wider determinants of health; social norms; improving interpersonal skills and health service accessibility. From this, they assess the effectiveness of mass media health promotion campaigns and their potential use in obesity prevention drives.

The report states that mass media campaigns "have generally aimed primarily to change knowledge, awareness and attitudes, contributing to the goals of changing behaviour" (HDA, 2004: 2). It is recognised that knowledge acquisition and behaviour change are not always correlated and one cannot predict the other. This is further complicated by obesity's very nature as a public health issue: not only are its risk factors related to autonomous consumption habits, but they are also heavily influenced by the contexts within which these habits are formed, practised and given meaning. The fact that these are both "habits" means that behaviour change can only be a long-term project involving multiple stakeholders. Most importantly, mass media campaigns must also influence social norms making certain behaviours unacceptable and stigmatised. This has worked for both drink driving and, to a certain degree, smoking in the UK. On the other hand, campaigns must also create a supportive environment, where behavioural change is encouraged, understood and facilitated. *Choosing Health* thus set out a comprehensive list of NHS reforms and new expectations of individual responsibility for health. In 2005

these were then concretised into three delivery documents: *Delivering Choosing Health*, *Choosing Physical Activity: A physical Activity Action Plan* and *Choosing a Better Diet* (DH, 2005a; 2005b; 2005c).

Delivering the goals of health inequality reduction, encouraging healthier choices and meeting the Public Service Agreement (PSA) targets set out in *Choosing Health* comes down to a “programme of practical action” at a local level based on three principles: informed choice for all; personalised support to make healthy choices and partnerships to make health “everyone’s business”. This democratisation of (good) health has £1 billion in funds allocated over 3 years via Local Area Agreements⁷ and led by 10 “spearhead” PCTs, including Camden. The targets to reduce health inequalities by 10% by 2010 is also set within the broader aim to reduce obesity rates among the population as a whole as one of the major determinants of ill health. The two exist in tandem as obesity disproportionately affects the poorest groups in the UK. For example, as the paper states, among those in SES I (managerial/ professional), 14% of women are obese, in SES V (semi-skilled), this figure rises to 28%. The paper calls for a strategy that will give the biggest return on any investment and suggests that a national “obesity awareness evidence-based promotional campaign” backed up by local primary care support, changes to food labelling, advertising to children and measures to encourage active lifestyles is the best way to diffuse the “time bomb”. This is envisaged as cross-departmental effort to raise awareness of the steps that people can take through diet and exercise to prevent obesity. As *Choosing Physical Activity* highlights, “the major challenge in any communication strategy will be ensuring that information is tailored to meet the needs of specific groups, address inequalities, which are reflected in [physical activity] participation rates and reach the least active and most at-risk in society”(DH,

⁷ Local Area Agreements operate under the Office of the Deputy Prime Minister (ODPM) and set out a 3 year plan of the priorities for that local area agreed between central government and a coalition of the Local Authority and Local Strategic Partnership and some other key, allowing tailored local solutions for local circumstances. LAAs are structured around four blocks, of which “healthier communities” is the most relevant to obesity.

2005: 9). The same logic applies in improving dietary health where societal health benefits will not be realised if the most vulnerable are not specifically addressed and enabled.

The outcome of *Choosing Health* has been the coordinated development by the DH, National Consumer Council (NCC) and National Social Marketing Centre (NSMC) of a campaign called “small change, big difference”. This will be examined in more detail later in this work. As the paper confidently avers “the national engine for health improvement is to be found in the ambition of people to live healthier lives” (DH, 2005: 34) and this improvement can only be achieved through co-delivery at local, regional and national scales. Local Strategic Partnerships (LSPs)⁸ have to be matched to national priorities but should also identify and act on local needs. In 2006, the DH’s white paper *Our Health, Our Care, Our Say* took this notion of local responsibility for local needs one step further by noting that, “while there has been real progress in the NHS, there is one area where improvement has not been fast enough. It is still the case that where you live has a huge impact on your wellbeing and the care you receive. These health inequalities remain too stark – across social class and income groups, between different parts of the country and within communities” (DH, 2006b: 2). Consequently, “the main responsibility for developing services that improve health and wellbeing lies with local bodies, PCTs and local authorities...good local commissioning will help local people to stay well and independent and tackle health inequalities (2006: 44). Consequently, changes in health priorities should now be driven by local communities and not central

⁸ Local Strategic Partnerships are non-statutory, multi-agency bodies whose boundaries match those of the LA and aim to integrate the public, private, community and voluntary sectors at a local scale. LSPs were created from the *Local Government Act* (2000) and as a way of delivering the plans laid down in the *Neighbourhood Renewal: National Strategy Action Plan* (ODPM, 2004). The central aim is to deliver joined up, sustainable local community regeneration. LSPs have been established across England and Wales, but in the 88 most deprived boroughs, they receive extra funding and support from the Neighbourhood Renewal Fund. LSPs help deliver LAAs.

government. This seems, however, somewhat paradoxical, especially given the current commitment to developing a national obesity education campaign.

As this discussion of post-2004 UK health policy in relation to obesity has shown, responsibility, duty and choice are the major themes conditioning how government aims are operationalised in both the theory and practice of obesity policy. The 2006 white paper draws on evidence of the predicted growth in obesity-related disease by 2030 to argue for immediate action to reduce the burden of future poor health to the NHS and wider community, the insinuation being that it is ultimately the role of individuals to make behavioural changes in line with government health goals (DH, 2006c). All the policy documents discussed have drawn on some degree of quantification in their discussions of obesity as a justification for the gradual assimilation of the condition into the rubric of public health. The discussion has, however, moved from an exposition of rises in obesity prevalence over the past three decades to a prediction of future levels should trends remain unchecked. Therefore the discourse of responsibility has shifted profoundly from laying blame for past trends, to predicting accountability for future changes in risk. Geographically, responsibility for the “conduct of conduct” has thus become the twin burden of central government and an increasingly localised NHS. National health improvement targets are laid down in *Choosing Health*, but it is the task of PCTs to design and implement the appropriate tools to achieve these and, furthermore, to provide performance indicators to ensure continued funding. This practice inevitably raises further questions about the idea of consuming health and the tensions inherent within a market dedicated to selling wellbeing to individuals, rather than the general public. These are tensions that can be best illustrated through the chosen case study site of London, where the processes and sites of policy development and implementation lend credence to the wider theoretical ideas of governmentality, political economy and consumption.

5.5 Moving from policy to practice in place

Refining the geographic scale from the national to the city, London emerges as a distinctive space to examine the fourth research theme, the tensions within neoliberal governance in the enterprise of health. In 2000, the London Health Commission (LHC) was established as the culmination of the London *Health Strategy* (1999) that aimed to address the inequalities throughout the capital. In 2004, the Commission published its *London's Health* report outlining the specific challenges faced in securing the health of Londoners. In particular, population growth, poverty and unemployment were highlighted as the main problems. It called for more detailed community 'health profiling' as a basis for action, recognising the transitory and temporary nature of many population groups in the city. In particular, it stated that "better links need to be established between qualitative and statistical information at a London-wide and local level" (LHC, 2004: 27) especially in the case of ethnic differences in health access and outcomes. With 30% of adults Londoners non-white, there is a need to understand how different demographic groups experience health. The report also states that "the pattern of health differentials across different ethnic groups cannot be described or explained adequately by reference solely to the 'medical model' of health" (2004: 33). The social model of health favoured by the WHO and DH means that health can be conceived as being conditioned by realms outside the biomedical. In addition, with medicine itself a culturally-conditioned paradigm, understandings of disease can vary markedly across groups. Just as diseases are re-conceptualised through time within biomedicine, so too are they understood in diverse ways by different ethnic groups. This clash of beliefs is concretised in urban space and must be acknowledged and understood if prevention policies are to be effective.

It essential to note that cultural constructions of health and illness intersect with significant borough level differences in deprivation, life expectancy, mortality and

morbidity rates. For example, men in Richmond can expect to live to 77.8 years, while in Tower Hamlets, this falls to 72.7 years (ONS, 2001). While ethnic differences in life expectancy cannot be accurately calculated as race is not recorded on death certificates, assumptions can be made based on the demographic profile of different boroughs from census data. This shows that strong correlations exist between deprivation, black and minority ethnic (BME) concentration and life expectancy. Relationships also exist between deprivation, ethnicity and self-reported health (from the HSE) where the highest incidence of self-reported poor health is found amongst London's Bangladeshi population. Coincidentally, in 2001, Bangladeshi households had the lowest annual and hourly incomes in both the UK and London. This ethnic group is also geographically concentrated in particular boroughs such as Tower Hamlets, South Camden and Stratford. The report demonstrates that there are "layers of influence" governing health in a city as demographically complex as London. Therefore, the problematisation of obesity within public health, the framing of its aetiology and how preventative measures are developed will, to some degree, be specific to London. Furthermore, since the responsibility for addressing obesity falls both on the government and PCTs, there is great merit in grounding a study of prevention efforts at a PCT level and for this reason this work will focus on Camden and Islington to contextualise the national policies already outlined in this chapter.

In 2005, the London Health Observatory (LHO) estimated that there were 4,000 obesity-related deaths in London, making up 7% of total deaths in the capital that year. As a result, it called for a "Pan-London strategy" in addition to "culturally-sensitive local strategies". Despite the number of deaths, adult obesity rates remain below the UK average at 20.5% for all boroughs. Particular concern was, however, raised as obesity rates amongst London's children are higher than any other region of the UK. Yet, the low average for adults masks discrepancies between areas of the city such as North

Central London (18.4%) and the South West (over 24%) (HSE, 2004). As the London Health Committee report acknowledged, both qualitative and statistical information are essential to developing effective local public health policies and thus identifying need. In 1999, Camden and Islington commissioned one of the only geographic data boosts to the Health Survey for England as a response to rising rates of heart disease in the boroughs. As a report noted, “without good information we cannot shape local action and services to best meet the goal of reducing heart disease overall ...the key lies in supporting people to choose to live a healthy life in a society, culture and physical environment that fosters and encourages exercise and a healthy diet” (Camden and Islington NHS, 2000: 5).

The boroughs were among the first to be designated HAZs in 1999 due to their high levels of deprivation and health inequalities. As a result of the data boost, the boroughs instigated concerted action to reduce deaths from heart disease and, as one of the major risk factors for the condition, obesity was also implicated within this. In 2003, both boroughs commissioned detailed annual health reports drawing on this HSE data to assess the progress made towards the reduction of health inequalities and obesity was prioritised in both. In addition, in 2003, the *Eating for Health* and *Physical Activity Action Plans* were launched to run until the completion of a dedicated obesity strategy in 2006 (Camden PCT, 2002; 2003a). The two boroughs thus offer a fruitful case study for exploring local examples of obesity prevention measures and rationales, set within the wider context of the politics of health in London. They will thus form the geographical core of the qualitative and quantitative empirical work discussed in chapter seven.

5.6 Conclusion

It would not be correct to assert that obesity has only become a public health policy issue in the UK since 1980. Rather, it should instead be contended that in that time, obesity has been transformed from an implicit policy target (as a consequence of its status as a

risk factor for certain chronic diseases) to a target in its own right. The discourse justifying intervention has shifted from one outlining the necessity to take measures to prevent obesity in order to prevent heart disease, diabetes and cancer to one calling for the same prevention of obesity as a “disease” in its own right. As a result, the three stages of policy development outlined in this chapter mark a progression towards full inclusion of obesity within public health policy. Furthermore, this inclusion has occurred alongside, as a reaction to and reflection of an escalation in media interest in the topic. The *Choosing Health* report (DH, 2004a) notes that the number of newspaper headlines with ‘obesity’ in the title almost doubled from 2003 to 2004, and 2005 was no exception to this startling growth. The relationships between the media and health have been ably explored by a number of medical sociologists (see Davidson *et al*, 2003 and Kroll-Smith, 2003) but very few geographers (see Parr, 2004). Moreover, none have explicitly traced the interplay of obesity policy development and the related media ‘climate’ – especially with regards to ‘nanny statism’ - and the dialectical, self-serving relationship between the two.

This analysis shows that ‘health’ is frequently used as an effective proxy by which to critique the government, motivate public sentiment and thus reinforce calls for policy change. For example, examining the human toll of Creutzfeldt-Jakob Disease (CJD) became an effective medium through which to criticise UK agricultural policy at the height of the ‘BSE crisis’ (Brookes, 1999). The same is true of obesity, with rising rates often cited as evidence of governmental failure to ensure the adequate wellbeing of its citizens, invest in the NHS and build healthy environments. Moreover, international comparisons of obesity prevalence show that rates in the UK are approaching those of the US. Such an allegation is also used as a form of government critique, the clear insinuation being that the US represents the epitome of convenience-driven, sedentary lifestyles and the path of temptation from which the UK should desist. Such cross-

cultural assertions will be explored in more detail in chapter nine, further demonstrating the idea that policy is both reactive and creative in the context of media representations of public opinion.

Since 2004, the policy discourse of obesity has also come to encapsulate some of the wider tensions manifest in neo-liberal or Nikolas Rose's "advanced liberal democratic" societies (Rose in Berry *et al*, 1996b: 37). In the UK, this has been particularly evident in debates over the relative causal role of individual behaviour versus the broader environment in obesogenesis, and thus arguments concerning the best target of government intervention. The UK government is calling for 'evidence of best practice' in measures to sustain long-term changes in dietary and physical activity habits so that these can be emulated. Yet, what constitutes best practice in one location does not necessarily match that in another. The aetiology of obesity is geographically specific and this also means that prevention measures addressing these causal relationships may not be universally applicable. Simply, what works in one place may not effectively translate to another, especially given that state apparatuses and practices are often highly localised. The importance of the geographical contingency of "best practice" and local-scale variations in state governmental practices means that comparative studies are notable by their absence. The first step to comparing obesity prevention paradigms is therefore to contextualise these by first tracing the development of national public health policy, as has been done in this chapter.

The UK offers a particular reading of obesity as a public health problem, largely as a result of the structural resources available to address it. The neo-liberal reform of the NHS also entailed the devolution of responsibility and power from central government to PCTs and local authorities. As a result, this represents a specific model of government within which obesity as a "lifestyle" disease is problematised. Governmentality is a way of examining the linkage between biopolitics and the art of government. The focus of

analysis is thus the actual practice of government and how this is legitimised by recourse to the overriding political aims of the state (or the “rationale of government”). Central to this is the tension between the neo-liberal promise of minimal state intervention in individual matters and the will and means to know about the population to ensure the effective delivery of these promises. Joyce (2001) extends this argument further by asserting that neo-liberalism, especially in the context of health, relies on respecting a public/private boundary when it comes to appropriate targets of intervention and assigning blame or responsibility. But, crucially, this boundary is becoming ever more permeable. Indeed, the public/ private divide can legitimately be crossed by a growing number of “experts” representing state interests in the private realm. In the case of obesity, successive public health policy developments have not only altered the permeability of the public/private divide, but also created a huge number of stakeholders vying for some input into the lucrative realm of obesity prevention. Thus, even as obesity has become a ‘public health’ problem, it has also become an issue for which many more groups are proffering potential solutions.

The announcement of a national strategy for obesity prevention in the UK has provided a forum for biomedicine, public health, commercial marketing and environmental understandings of health to coalesce. Since 2004, the government has acknowledged the high economic and health costs of obesity, but has devolved responsibility for creating the tools to mitigate these to PCTs, meaning little continuity between places. As this chapter has explored, the principle way in which obesity has come to be discursively framed within national policy documents since 2004 is around questions of duty and responsibility. *Choosing Health* encapsulates these ideas through its assertion that policy must take advantage of “people’s awareness of health issues and their motivation to change” (DH, 2004a: 11) to “create a demand for health” (*Ibid*, pp. 12). The report goes on to state that “if people want better health, we need to make it easier for them to do

something about it” (*ibid*). Here the responsibility and duty to act to improve health is shared by both individuals and the state, with the national strategy envisaged as a tool to foster demand for health by raising awareness and creating informed consumers. Labour’s goal is to make “healthy choices easier” that can be “sustained in the long term” (*Ibid*, pp.13), assuming that choices are made in a consumer society where health has a value and is inextricably tied to the market. The extension of this logic being that people can always be “more well”. Health now assumes great currency as a tool of government regulation and a concept now commodified into an infinite array of products and services marketed through their positive effect on wellbeing. Consequently, unpacking the theory and practice of preventing obesity in the contrasting context of the places where policies are created and health consumed offers much to theoretical debates and the pursuit of effective policy solutions.

Chapter Six: Priority area, personal responsibility and the development of US obesity prevention policy

6.1 Introduction

There is a certain degree of assumed synonymy between the United States and obesity. Such associations have been driven by factors already discussed in chapter three such as a cultural history of consumption allowing the US to lead the world in convenience-driven, automobile-accessible low cost food (see Levenstein 1993; Schlosser, 2002; Critser, 2004). The fact that the majority of global food manufacturers and retailers are US-based has also reinforced the perceived congruence between quintessentially American fast food diets and the highest levels of obesity prevalence in the developed world. Furthermore, the morphology of American cities, many seeing their greatest expansion in the years following the mass availability of the car, is such that walking is frequently rendered physically impossible and socially undesirable (see Duany *et al*, 2001; Frumkin, 2002; Vandegrift and Yoked, 2004). Consequently, as suggested in chapter three, not only does the United States seem an iconic and perspicuous site for examining obesity, but it also presents a useful counterpoint to the UK in terms of the unique way that the interactions of biology, behaviour and the environment have been inscribed within federal public health policy.

This chapter traces obesity's inclusion within public health policy in the US at first a federal level and then a state level. The exploration of developments in British public health policy since 1980 has shown the extent to which obesity has shifted from an implicit target of policy to address chronic conditions such as coronary heart disease, to an explicit target in its own right. In the process, obesity has become both a political and medical concern, with attention specifically focussed on the disproportionate role of and burden upon "hard to reach groups" such as those on low incomes and ethnic minorities. The main catalyst for shifts in the discursive framing of obesity within policy can be traced to the Surgeon General's 2001 *Call to Action to Prevent and Reduce Obesity*. Just

as the UK's *Report of the Chief Medical Officer* (2002) introduced the "time bomb" metaphor into the British – and global – lexicon, so the Surgeon General injected a sense of urgency and drama to an "epidemic" that had long been considered outside the remit of direct government intervention. Drawing from the Behavioural Risk Factor Surveillance System (BRFSS) data, the *Call to Action* stated that the number of overweight and obese adults had tripled since 1980 and doubled for children. The report went on to suggest that these rates might undermine the gains made in the nation's health for heart disease, cancer and diabetes. Obesity was thus transformed from a government problem to a "community responsibility" (Surgeon General, 2001: xiii) as without efforts to reverse current trends, the present and future health of the nation would be affected. While this is not a discourse particular to the US, as the previous chapter demonstrated, the report's further suggestion that obesity needed to be addressed in the context of attempts to reduce ongoing health disparities⁹ is one that is inextricable from broader questions relating to federal health policy and present debates over the US "healthcare crisis" (Daviglius *et al*, 2004; Krugman and Wells, 2006). As such, the development of public health obesity prevention policy in the US has followed a culturally and politically distinct path that must first be examined at a federal level before refining the geographic scale to explore how policies are translated to the state level.

This chapter will explore obesity in the context of public health through three distinct periods: 1979-2000, 2000-2004 and 2005-present to allow broad comparison with the earlier analysis of UK obesity policy. Just as in the UK, the three phases correlate broadly to changes in the discursive framing of obesity within policy, or the particular "rationale of government" within which the condition is presented as a 'problem'. From 1979 to 2000, the first Surgeon General's *Healthy People* report led to a revised public health agenda based on prevention rather than treatment, fuelled by new medical

⁹ It should be noted that UK policy refers to differences in health status among and between people and places as 'health inequalities'. In the US, the same phenomenon is known as 'health disparities'.

research detailing the long term health risks of smoking. This led to the release of *Promoting Health/ Preventing Disease: Objectives for the Nation* in 1980 by the US Public Health Service (USPHS). This was the first of a series of decadal reviews of the state of the public's health and set out targets and objectives to be achieved before the next report, the main focus being to reduce health disparities and increase healthy life expectancy. By 2000, and the release of *Healthy People 2010*, obesity and overweight were figuring explicitly within these objectives and targets. Moreover, linked into the health disparity debate, the report recognised that the risk of obesity was not universal and that certain demographic groups carried a disproportionate burden of vulnerability to excess body weight. By 2000, obesity was being cast as a serious threat to the progress made within public health, but it was not until the Surgeon General's dedicated report on the topic that a sense of urgency really arose among government and the public alike.

Between 2001 and 2004, policy and structural capacity building to address obesity worked hand in hand. At this time, media interest and public pressure to address the socio-ecological conditions magnifying the risk of obesity catalysed public policy. In 2003, the National Institutes of Health (NIH) set up the Obesity Research Task Force charged with assessing the state of knowledge and gathering evidence of best practice in obesity prevention. This period of consultation culminated with the *NIH Research Strategy to Fight Obesity* in 2004. Over the same time frame the newly established President's Council on Physical Fitness, the *Steps to a Healthier US* initiative and the National Governor's Association (NGA) report *The Obesity Epidemic: How States Can Trim the Fat* (2003) brought obesity firmly onto the political agenda. At the same time, obesity has become a fiscally imperative question through the ongoing debate over the nation's continued ability to meet the growing demand for the federally-funded and state administered health insurance schemes Medicare and Medicaid¹⁰, rising healthcare costs

¹⁰ Medicare is a federally funded health insurance contribution for the elderly and disabled, covering 41 million Americans in 2003. Numbers enrolled are expected to climb further as the

and the effect of ‘direct-to-consumer’ (DTC) advertising of prescription drugs on insurance co-payments (Hoffman and Wilkes, 1999; Berndt, 2005). These questions have been more broadly referred to as the ‘healthcare crisis’.

Healthcare in the US is as much a state as a federal imperative. As of 2005, 28 states held CDC-funding to develop their own strategic plans to address obesity. Of these, Texas has received the highest levels of support and currently has one of the most comprehensive strategic plans to address obesity. Therefore, after an initial exploration of the national policy context, this chapter will consider Texas, its demography and particular nature and risk profile for obesity. This last section will discuss how obesity has come to be a strategic funding priority for the Texas Department of Health (TDH) as the state’s cities have acquired a public profile debased by their continued presence at the top of the *Men’s Fitness* “Fat Cities” league since its inception in 2000. The one exception to this has consistently been the capital, Austin, where, according to Lou Earle, the editor of Austin Fit magazine, the pursuit of the “Fittest City” crown has become one of Mayor Will Wynn’s top priorities [79]. The example of Texas will transpose the theory and framework offered by federal policy into the reality of competition for funding, developing culturally sensitive interventions and the practice of implementation across heterogeneous space.

6.2 Legitimising prevention 1979–2000

The first Surgeon General’s Report was published in 1964, but it was not until the 1979 *Healthy People* report that the case for preventative public health was fully developed. The 1979 report concentrated on smoking which was, at that time, presented as “a health hazard of sufficient importance to warrant remedial action” (DHHS, 1979: 3). The report

baby boomer generation retires. Medicaid is managed by individual states and funded by both the federal government and the states to provide health insurance for the 43 million enrolled low income families and individuals in 2004. Numbers again are expected to grow, fuelled largely by immigration.

dramatically stated that “there can be no doubt that smoking is truly slow motion suicide” (1979: 4), both for individuals and public health. As familiar from the economic discourses in the UK discussed in chapter five, the report highlighted the cost of smoking to the state. In 1979, the Surgeon General’s report estimated this to compose between \$5 and \$8 billion of the \$205 billion a year then spent by the federal government on healthcare. These losses were further exacerbated, the report added, by days lost through ill health and absenteeism from work. It concluded that “smoking is public health enemy number one in America” (1979: 2). The report provides an interesting and informative starting point for tracing the inclusion of obesity within public health for two reasons. First, it initiated a public health discourse in which prevention and health promotion were seen as going hand in hand. Second, it recognised that certain health behaviours, while an autonomous right, could have public ramifications.

The private-public tension between the right to smoke and the multifarious health and economic costs of this to the state, the report contended, could be relieved through the provision of appropriate evidence-based health information to the public and, where necessary interventions to modify people’s behaviour. In 1962, the Department of Health and Human Services (DHHS) commissioned an expert committee to review the evidence of the casual relations between smoking and poor health. As a result of their findings, the report suggested that smoking would be best tackled not by regulation, but by research and education. More precisely, these should be “efforts grounded in information, not coercion” (DHHS, 1979: 5). As the report states, “the decision to smoke is a personal one, but once this is said, it remains the responsibility of health officials to ensure that smokers and potential smokers are adequately informed of the hazards...the consideration of what is meant by ‘adequately informed’ is a scientific and public health policy problem” (DHHS, 1979: xiv). The act of adequately informing the

public of the health risks associated with certain behaviours is, as the previous chapter showed, a central aspect of the governance of health. It is thus a governmentality that varies between places as conceptions of ‘adequacy’ or ‘information’ are open to political interpretation. As a private and, most importantly, modifiable behavioural choice, smoking has long provided the testing ground for health promotion as a core practice of government. However, it was the possibility that the estimated costs of smoking could rise further that justified calls for decisive action to develop evidence-based, scientific education campaigns. Indeed, the *Healthy People* report led to the release of *Promoting Health/ Preventing Disease: Objectives for the Nation* commissioned by the US Public Health Service (USPHS) in 1980. If the Surgeon General set the stage for preventive healthcare, unequivocally prioritising smoking as the leading cause of preventable death in the US, then the USPHS paper put these ideas into the policy practices constitutive of governmentality.

Promoting Health/ Preventing Disease: Objectives for the Nation set out 226 measurable objectives in 15 health priority areas to be achieved at a federal and state level by 1990. Among the important needs identified by health officials were: information exchange among federal, state and community agencies; improved state surveillance systems and data analysis to track progress towards the “Objectives”; scientific expertise and technical consultation, multi-city intervention trials; research on cost-effective prevention measures; professional training; stronger links between Medicaid and state public health programs and support for extending health promotion programs to vulnerable populations in both urban and rural areas. Above all, the report underlined the importance of developing surveillance methods and data collection and building coalitions at state and local level to help identify “high risk” target populations. Yet, the report made no express mention of the need to address obesity in and of itself.

Although targeting obesity *per se* is not mentioned, the report does concede that

“excessive or inappropriate consumption of some nutrients may contribute to adverse conditions, such as obesity, or may increase the risk for certain diseases (e.g. heart disease, adult-onset diabetes, high blood pressure, dental caries and possibly some types of cancer)”. Furthermore, it states that “such chronic diseases are clearly of complex aetiology, with substantial variation in individual susceptibility to the factors involved. While the role of nutrients in these diseases is not definitively established, epidemiologic and laboratory studies offer important insights which may help people in making food choices so as to enhance their prospects of maintaining health” (USPHS, 1980: 143). While the focus is on epidemiological evidence, the suggestion of variations in individual susceptibility to these chronic conditions is also a clear admission that addressing dietary health may be a socially complicated matter. It suggests that physical activity “may be a valuable tool in therapeutic regimens for control and amelioration of obesity, coronary heart disease, hypertension, diabetes, musculoskeletal problems, respiratory diseases, stress and depression/anxiety. Such physical activity, however, is still not routinely prescribed for the treatment of these conditions” (USPHS, 1980: 155). In order to address this policy omission, it suggests that:

Programs which are most likely to be successful in recruiting new participants to appropriate physical activity include those which offer services and facilities to individuals, and economic incentives to groups and individuals. On the other hand, programs which can more easily be implemented include those related to the provision of public information and education and improving the linkages with other health promotion efforts. The effectiveness of all measures is handicapped by the limitation in knowledge with respect to the relation between exercise and physical and emotional health; the optimum types of exercises for various groups of people with special needs; the appropriate way to measure levels of physical fitness for various age groups.

(USPHS, 1980: 158).

What should be noted is that individuals and groups are conceptualised as being responsive to incentives when the facilities are put in place to make such change possible, an idea that remains still. In addition, providing information and education and linking these to other areas of health promotion are viewed as crucial to the success of

any programme. Furthermore, the effectiveness of such programmes is also undermined by the limited state of knowledge on the relationship between exercise and health, among both the lay public and experts. *Promoting Health/ Preventing Disease* (USPHS, 1980) not only highlighted the need for health promotion and education to encourage healthier behaviour, but it also set this within the context of structural changes that could facilitate behaviour change. Such structural changes could include (but should not be limited to) regulatory and legislative measures that might not expressly coerce, but could allow for informed choice. By *Healthy People 2000* (DHHS, 1990), the idea of public health policy as a behavioural management tool rather than prescriptive legislation, had become even more developed.

Healthy People 2000 (DHHS, 1990) was the second decadal review of the state of the public health and the improvements that would be needed by 2000. The report outlined 319 separate targets in 22 health priority areas. Again, while obesity was not mentioned as one of those areas, physical activity and nutrition occupied the first and second spots respectively. The overriding goals of the document were to increase healthy life expectancy, reduce health disparities and ensure access to preventative services for all Americans. *Healthy People 2000*, was conceived, above all, as a “strategic management tool” and, after its release, 47 states had created their own modified versions of the plan. For each of the priority areas, a lead agency was appointed with the President’s Council on Physical Fitness and Sports leading the activity area and the Federal Drug Administration (FDA) charged with nutrition. There were 13 objectives for physical activity set for 2000, including reducing overweight prevalence, sedentary lifestyles and improving fitness counselling by primary care providers. The FDA’s 27 targets for nutrition include reducing coronary heart disease (also in the physical activity targets), overweight prevalence, dietary fat intakes, increasing nutrition education in schools and worksites and increasing sound weight loss practices. Targets were set in both general

and specific terms and success measured by declines in risk factors (such as overweight or sedentarism) and reductions in health disparities. Measuring success falls back on the considerable and centralised data held by the CDC of which the BRFSS and NHANES are the most comprehensive.

By the time of the third, and most recent, *Healthy People 2010: The Cornerstone for Prevention* (DHHS, 2000), the number of priority areas had grown to 28, again with their own targets. As with *Healthy People 2000*, this document placed physical activity as its number one “leading health indicator”, identifying six high-risk population groups at whom prevention measures should be targeted. Those designated at “high risk” of physical inactivity include women, African Americans, those on low incomes with low levels of educational attainment, those in the North Eastern and Southern states, people with disabilities and those aged over 75. Not only is it recognised that certain population groups are more vulnerable than others, but also that these groups are more susceptible to the barriers preventing physical activity. The report identifies these as lack of time, lack of access to convenient facilities and a lack of safe environments in which to be active. The notion that healthy behaviour is as much a response to built and natural surroundings as to socio-economic factors is further expanded upon with the inclusion of obesity and overweight as a ‘Leading Health Indicator’ (LHI). While earlier *Healthy People* reports had mentioned body weight as a risk factor for chronic conditions such as heart disease and diabetes, and as an outcome of sedentary lifestyles, it was not until the 2000 report that overweight and obesity became leading health indicators in their own right.

As the report states, “overweight and obesity are major contributors to many preventable causes of death. On average, higher body weights are associated with higher death rates. The number of overweight children, adolescents, and adults has risen over the past four decades. Total costs (medical cost and lost productivity) attributable to obesity alone amounted to an estimated \$99 billion in 1995” (CDC, 2000: 55). If this was the rationale

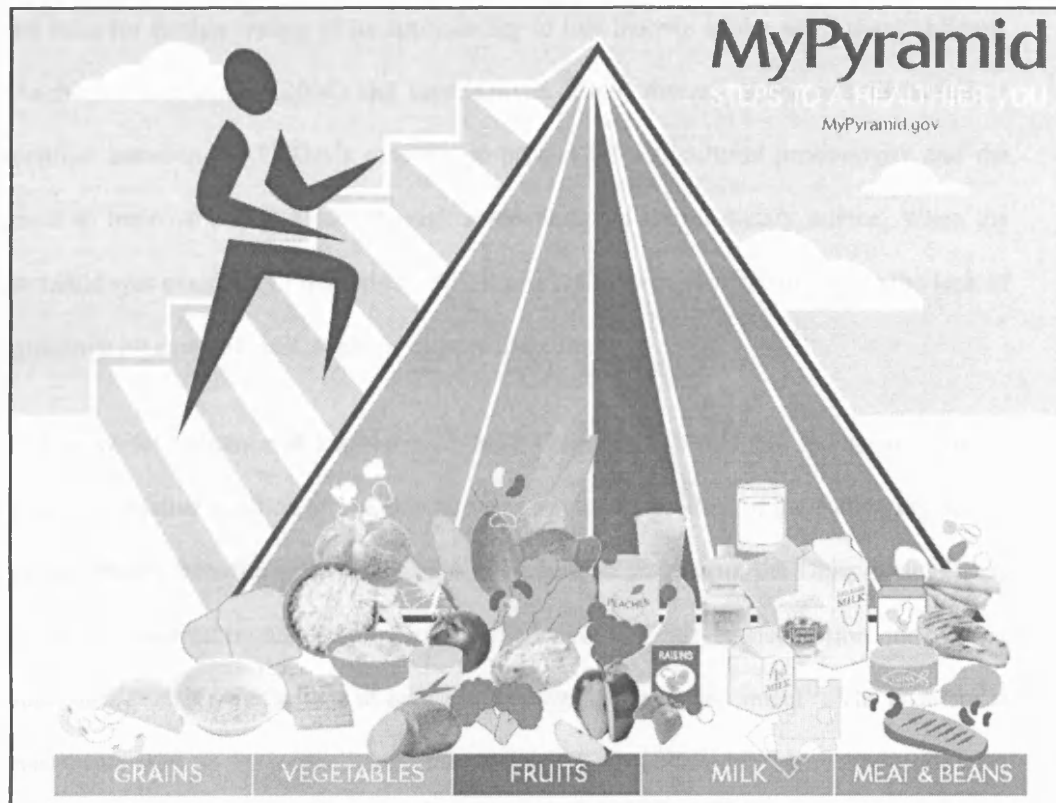
behind including overweight and obesity as a LHI, then this justified the target of “reducing the proportion” of adults, children and adolescents falling into the category. Prevention is highlighted as being preferable to treatment as “obesity is a result of a complex variety of social, behavioral, cultural, environmental, physiological, and genetic factors. Efforts to maintain a healthy weight should start early in childhood and continue throughout adulthood, as this is likely to be more successful than efforts to lose substantial amounts of weight and maintain weight loss once obesity is established” (*Ibid*, pp.58). It is easier to prevent obesity than it is to reverse it, but the report also highlights that the risk of obesity is not evenly distributed across the population. Furthermore, as in the UK, tackling existing health disparities are seen as being inextricable from efforts to address the risk factors for and that derive from being overweight or obese.

The report states that the proportion of adolescents from poor households who are overweight or obese is twice that of adolescents from middle and high-income households. In addition, obesity is especially prevalent among those on lower incomes and African American and Mexican American women compared to white women. Furthermore, the proportion of African American women who are obese is 80% higher than the proportion of men. This gender difference also exists among Mexican American women and men, but among non-Hispanic whites, both men and women have the same prevalence rates (CDC, 2000: 57). Since the vulnerability to obesity is not evenly distributed by race, income and gender, this also reinforces the health disparities that *Healthy People* aims, above all, to mitigate. As a consequence, this gradual development of the idea that obesity is a condition disproportionately experienced by the same groups already carrying the burden of health disparities cuts into wider moral discourses of social equality, access to healthcare and quality of life. The statistical link between obesity, race, gender and income means that in some respects there is an excuse for the

condition of being, for example, poor, black or a woman to also be associated in the popular imagination with being obese. This has a two-sided effect: first, there is considerable momentum behind calls to tackle this inequality and second, these groups often get demonised as disproportionately burdening the already stretched healthcare system. These ideas will be further developed in chapters seven and eight.

While physical activity remains a distinct LHI, obesity and nutrition are intertwined within the 27 specific nutrition objectives laid down in the paper. A goal is set for 60% of adults to be at a 'healthy weight' by 2010 and to reduce the proportion of those classified as obese to 15%. Furthermore, a target is set to reduce the proportion of children who are overweight and obese from 11% (1994) to 5% by 2010. Federal targets also include increasing those eating five servings of fruit and vegetables a day, consumption levels of wholegrains and lower fat and salt intake. These are underscored by the *Dietary Guidelines for Americans* issued by the USDA, DHHS and the Center for Nutrition Policy and Promotion every five years since 1980. This document is the definitive statement on the current state of knowledge pertaining to dietary advice and is thus used to underpin the messages and logic of health promotion. At the centre of the dietary guidelines toolkit is the "food pyramid" which is a pictorial representation of the proportion of each type of food that should make up a healthy diet (figure 11). It should be noted that in 2000, this pyramid was not without its sceptics, with nutritionists such as Marion Nestle (2000) highlighting the contentious links between the interests of the food industry and these science-based guidelines. In the context of dietary advice however, the pyramid is most often used as a planning tool by health promotion experts and is not widely used or known by the public.

Figure 11 - 2005 USDA food pyramid graphic now accompanied by more detailed dietary advice, tailored pyramids to different ethnic diets and proscriptions for activity (USDA, 2005)



Nestle and Dixon (2004) offer an interesting history of the food pyramid, that reveals as much about nutritional science as it does the prevailing political economy of food manufacture, retail and trade. Indeed, such issues are inextricable from discussions on the development of US obesity policy as successive administrations have found themselves bending to the voter power of the agricultural sector. This, it must be noted, is in stark contrast to the UK, where as Tim Lang (2003) has noted, farmers' agendas have been set by political exigencies and not vice versa. From early advice in 1958 aiming to help reduce the effects of post-war nutritional deficiencies, the first *Dietary Guidelines* in 1980 added emphasis on the consumption of fruit, vegetables and grains. The first pictorial representation of this advice came with the USDA "Food Wheel" in

1984 and the development of “recommended daily allowances” (RDA) for each food group. The pyramid was developed between 1988 and 1990, but its launch was delayed by calls for further testing of its applicability to low income adults and school children. As Nestle and Dixon (2004) and later, Oliver (2006) discuss, there was essentially a conflict between the USDA’s mandate to protect US agricultural productivity and the need to improve public health through achievable and sound dietary advice. When the pyramid was eventually released in 1992, it was the subject of criticism due to the lack of guidance on exercise, salt, sugar or fat consumption.

The powerful influence of The National Dairy Council and The Sugar Association means that their relative position on the pyramid was as much a product of their lobbying power as the dietary benefits of their products. It should be noted that the Dairy Council has spent a considerable sum researching the link between dairy consumption and weight loss, thus assuring that advice to eat three servings a day remain intact¹¹. The problem is neatly summed up by journalists Kantrowitz and Kalb (2006: 46) when they write “the biggest challenge in dietary research is that no-one eats just one thing”. The authors further suggest that “everyday the ‘truth’ about diet seems ever more elusive even while scientists insist the picture is becoming clearer” (*ibid*). The dietary guidelines are a scientific rendition of “truth” and condition the communication of health to the public. Since being healthy is distilled to the main lifestyle choices of diet and exercise, how these are presented and communicated has the ability to define what is healthy and what is not. Furthermore, since the ability to live healthy lifestyles is largely conditioned by factors that are often outside autonomous decision-making processes such as income, race, neighbourhood safety and food retailing, there is good reason for viewing public health attempts to address obesity as linked into wider questions of social reform and

¹¹ The research link between the Dairy Council and Kraft Inc led, in 2005, to the branding of a “3-a-day” dairy logo mirroring the NIH-sponsored “5-a-day” fruit and vegetable messages. By 2006, the “3-a-day” message had spread to national TV advertisements highlighting the importance of dairy consumption to aid in weight loss and a website (www.3aday.com) providing quick links to Kraft’s dairy products.

justice, which are also neatly bound into questions of health disparity elimination.

This idea of public health as social reform is demonstrated not only by dietary advice, but also by plans to increase activity levels among the whole population. In 2000, exercise guidelines were based on the Surgeon General's *Report on Physical Activity in Health* which identified the benefits of incremental exercise, rather than merely vigorous activity. *Healthy People* assigns a public health role to reducing the barriers to physical activity for all population groups and states that health promotion should expressly identify and mitigate the negative externalities of such barriers. In 2000, 40% of US adults were sedentary and a target was set to reduce this figure to 20% by 2010. In addition, a more specific goal was set to increase the proportion of people exercising "vigorously" for at least 30 minutes 3 times a week to improve their cardio-respiratory fitness. There were also targets set for children, but since only a minority of states have mandatory PE in schools, the onus to deliver this target falls to parents and health officials. The inclusion of obesity within public health policy has not only widened the scope of activity and nutrition advice, but also raised important questions of why certain people are more active than others. With obesity conceptualised as an explicit target of health promotion activity in its own right, questions of how to promote healthy lifestyles and to whom were starting to be raised. Yet, in 2000, the sense of urgency surrounding obesity was not yet fully developed. There was a definite sense of 'need' to slow rising prevalence rates, but by 2001, media escalation had removed the debate from the domain of personal lifestyle choice and into the wider discursive domains of government duty and responsibility to protect its citizens from the health impacts of "messages that may encourage excess consumption of calories and inactivity" and "industries that promote sedentary behaviours" (Surgeon General, 2001: 26).

6.3 Structural capacity building 2001-2004

Just as the release of the *Report of the Chief Medical Officer* (2002) was, as the previous chapter discussed, a pivotal moment for the prioritisation of obesity within public health, so the Surgeon General's *Call to Action* in 2001 put obesity squarely on the US public health agenda. The Surgeon General heads the US Department of Health and Human Services (DHHS) effectively making him the nation's loudest voice in public health. In 1996, the Surgeon General's report *Physical Activity and Health* had set out the state of knowledge with respect to the link between exercise and health and recommendations to achieve "30 minutes of moderate exercise on most days of the week". The report concluded that "the effort to understand how to promote more active lifestyles is of great importance to the health of the nation" (Surgeon General, 1996: 2). By 2001, when overweight and obesity officially became LHIs in *Healthy People 2010*, the Surgeon General commissioned a consultation on the issue. Latest Centers for Disease Control (CDC) figures estimated that overweight and obesity were causing 300,000 avoidable deaths a year in the US (Surgeon General, 2001: i) and that the problem had reached "epidemic proportions" (*ibid*).

In order to demonstrate the spatial extent of this epidemic, the report drew on choropleth maps of obesity prevalence by state for 1991 and 2000 drawn from BRFSS data shown in chapter three (figure 4). The visible march of high prevalence from coast to coast and belts of higher prevalence in the mid west and southern states also justified this *Call to Action*. The report aimed to "promote the recognition of overweight and obesity as major public health problems" and to "identify effective and culturally appropriate interventions to prevent and treat" the condition (2001: ii). It is worth highlighting that 'cultural appropriateness' or health promotion practices that resonate with the varying cultural norms of different ethnic groups has become a defining feature of US public health policy and will thus be explored in more detail in chapter eight. In addition, the

report called for “environmental changes that would help prevent overweight and obesity” and the development of “public-private partnerships to help implement this vision” (*ibid*). Public-private partnerships (PPP) are now a feature of public health strategies at global and national levels. PPPs emerged, principally “with the purpose of overcoming market and public failures” (Buse and Walt, 2000: 459) to thus augment financially limited public sector provision with extra private or commercial resources. However, this shift in governance also rests on the “recognition that the determinants of good health are very broad and the health agenda is so large that no single agency or sector can tackle it alone” (*Ibid* pp.552). This is certainly true of obesity prevention which is becoming increasingly and necessarily fragmented in both the US and UK, with many private sector agencies (e.g. charities, patient support groups, online information sources, food companies, pharmaceutical corporations) now providing services that were previously the sole domain of government.

The way in which public health itself has been reworked to manage shifting challenges and priorities is explicated well in the report. It states that, “as the threats to America’s health have shifted, so too have public health efforts” (Surgeon General, 2001: 3). Shifting the means of public health has necessitated three things: investment in scientific research, policy development and community mobilisation. Clearly, all three are potent in the context of obesity and provide the framework around which public health efforts are mobilised and translated into action. The *Call to Action* acknowledges that obesity is not a universal affliction and, details how disparities in prevalence exist between racial groups and between men and women within those groups. These disparities add another layer of complexity to the issue of prevention and underscore the salience of questions concerning the efficacy of strategies. The report points out that while obesity has known undesirable health and economic impacts (and that prevention is the best way of mitigating these), the exact means by which to achieve this is still not known. For this

reason, it sets out a framework in four fields: communication; action; research and evaluation. These are then to be undertaken in five settings: families and communities, schools, healthcare, media and communication and worksites. Most pertinent to this work, and the settings most frequently drawn upon by interviewees, are families and communities and the media and communication, both of which consequently merit further attention.

The report lays out a clear vision of the role of scale in prevention. Action must come from the integrated approaches of individuals, organisations, industry, communities, government (local and state) and at a national (federal) level. At root, families and communities are “the foundation of the solution” (Surgeon General, 2001: 10) and the central medium by which to “raise consumer awareness” of the risks of obesity. In particular, the family and communities are the locus where it may be possible to “assess the factors contributing to the disproportionate burden of overweight and obesity in low income and minority racial and ethnic populations” (*Ibid.* pp. 18) and to “motivate” action to reduce this burden. When it comes to individual involvement in this public health issue, it is expected that people engage in a “frank dialogue regarding the methods, challenges and benefits of adopting a healthy lifestyle” and that this should “make the effort to combat the obesity epidemic both *personal* and *relevant*” (*Ibid.* pp. 27, my emphasis). The fact that efforts should be made personal and relevant marks one of the chief contrasts between US and UK obesity policy. While discourses surrounding the ‘personalisation of health’ have become common in the UK since *Choosing Health* in 2004, these have mainly referred to structural reform of the National Health Service (NHS). The personalisation of health thus refers more to the tailoring of primary healthcare to individual needs and Primary Care Trust (PCT) priorities to reduce the risk factors for chronic diseases in the long term. In the US, making efforts to prevent obesity “personal” and “relevant” means that health promotion must be communicated in a

manner that is intelligible and able to be operationalised by the individual. In the terminology so often used among US public health officials interviewed in this research, messages must encourage “ownership” of the issue [49, 54]. Taking “ownership” implies that individuals, families and communities must assume some responsibility for their own healthy lifestyles away from the direct influence of government. Central to claiming “ownership” is changing the discursive framework within which obesity is problematised. And, central to this is acknowledging the role and influence of the media on public perceptions and the cultural landscape of consumption.

The media is viewed in the Surgeon General’s report as an advocacy tool to promote the profound lifestyle shifts needed to prevent further rises in obesity. It suggests that messages should focus on health and not appearance and must “foster public awareness of the health benefits of regular physical activity, healthful dietary choices and maintaining a healthy weight” (Surgeon General, 2001: 25). The call for a national media-driven obesity prevention campaign also reflects the rising media interest not just in obesity, but in topics relating to health and science more generally from around this time. Krantowitz and Kalb (2006: 46) in their excellent journalistic exposé of the baffling and contradictory history of dietary advice also discuss how front page news stories about science in the US have increased from 1% to 3% since 1980 and that news pages devoted to health rose fourfold over the same period. As in the UK, the rising media interest in health and its inherently politicised nature as well as increasing health awareness have all legitimised and catalysed calls for government intervention.

Political scientists Rogan Kersh and Jo Morone contend that there are seven steps that precede government intervention in the private realm. They suggest, in contrast to the perception of a strong US culture of individualism, that there have actually been numerous occasions where the state has seen fit to intervene and regulate private behaviour. Five of the criteria they contend are needed for action – social disapproval, a

justificatory medical science filtered through the media, a culture of self-help, the demonisation of certain groups and an industry that supports their unwelcome behaviours – were already in place for obesity by 2002 (Kersh and Morone, 2002b). While theirs is not a discussion explicitly set out within Foucault's governmentality framework, it nevertheless fits well with analyses of the self-conduct, conduct of others and measures to influence the practice of self-conduct that Peterson (2003:188) explores. It is worth noting that a number of events in 2002 and 2003 helped place obesity on the legislative agenda and satisfy the majority of preconditions needed to catalyse this intervention upon and regulation of the private realm of "lifestyle".

First among these was President Bush's executive order to get government agencies to reconsider their policies on physical activity and nutrition (The Whitehouse, 2002). This was followed in late 2002 by the "Whitehouse Fitness Expo" and the DHHS report *Physical Activity is Fundamental to Preventing Disease*. This culminated in the July 2003 launch of the President's *Healthier US* Strategy led by the rekindled President's Council on Fitness and Sports. At his speech at the Lakewood YMCA in Dallas, Texas, President Bush stated that he "liked to exercise" and that he "wanted people to see their President exercising" (The Whitehouse, 2003). His desire to lead by example in his challenge to get 20 million more Americans active for 150 minutes a week was made clear in his belief that "America will be better off when Americans accept the challenge" (*Ibid*). Lifestyle policies and imperatives to preserve the sanctity of the nation are entwined in Bush's speech and the juxtaposition of the two sets out a particularly moral governmental rationale. He announced that \$125 million would be made available to communities to "raise awareness" of the importance of exercise. Perhaps most interestingly, the President also set out his vision of a "culture of personal responsibility" based on the belief that people should be responsible for personal lifestyle choices and their future impact (The Whitehouse, 2003).

Reinforcing President Bush's words in Dallas, Surgeon General Richard Carmona gave a speech at the American Enterprise Institute Obesity Conference in which he stated that "prevention is still a radical concept to most Americans, we are a treatment-oriented society". In a rhetorical flourish, he asked the attendees if they were "going to sentence [themselves] to being a society defined by obesity and disease?" or if they were going to "choose to be a nation of health and vitality"? (Carmona, 2003b). Both Bush and Carmona have made obesity an explicit priority since 2003 in a bid to reduce present and future healthcare costs and inspire a healthy, vigorous America to see in the next decades. However, policy does not work in a vacuum and government action in 2003 was doubtlessly propelled forward by a court case that, while ultimately unsuccessful, did initiate a series of reforms in the food industry and raise public awareness of its inner workings. In order to understand the cultural and legal context of subsequent public health policy and the salience of the personal responsibility discourse in the US that will be expanded upon in chapter seven, it is worth examining these events in some detail.

The *Pelman v. McDonalds* case rose to notoriety when 14 year old New Yorker Ashley Pelman filed a class action lawsuit against the chain seeking compensation for obesity-related health problems (Mello *et al*, 2003; Falit, 2003). The case was ultimately thrown out, but the reasons for this demonstrate why developing policy to prevent obesity is such an incremental and testy process. The plaintiffs alleged that McDonalds was guilty of deceptive acts of omission by not informing consumers of the health risks of their foods. Yet this charge relies on the degree to which the average consumer can reasonably be expected to know the risks of their foods and, furthermore, can prove that eating McDonalds' food was the sole cause of obesity. These questions come back to Bush's idea of personal responsibility and the existence of free choice. Moreover, determining the limits to personal responsibility is the point of law underlining this case. Ultimately, the judge asked, "where should the line be drawn between an individual's own

responsibility to take care of herself and society's responsibility to ensure that others shield her?" (cited in Falit, 2003). As McDonalds' defence attorney concluded, "these are issues of personal responsibility, not corporate liability" given that individuals possess the ability to choose what they eat and are reasonably informed of the risks these choices might present. The Pelman case has brought the potential enormity of future litigation to food manufacturers' attention, leading financial analysts J.P. Morgan to brand obesity a financial "long term risk" (2006). This potential risk and the public awareness generated by the lawsuits has, interestingly, now led to significant risk minimisation strategies by the food industry, including voluntary codes of conduct for advertising, new labelling, Corporate Social Responsibility investment and sports sponsorship (Herrick, forthcoming).

The period 2001-2004 was formative for framing obesity as a public health priority. Not only did the Surgeon General's *Call to Action* cast the magnitude of the public health crisis as one of "epidemic" proportions, but the President's own appeals have also reinforced the perception of urgency. While federal policy set out guidelines for dietary intake and physical activity levels to address obesity, US presidential discourse has been heavily criticised for pushing physical activity instead of limiting the autonomy of food manufacturers. Indeed, President Bush has been judged for bending to the lobbying power of the food industry – an accusation well supported by the US' long veto of the WHO's *Global Strategy on Diet, Physical Activity and Health* for its potential effect on sugar exports (Brownall and Nestle, 2004; Vastag, 2004). However, the continued failure of the "Personal Autonomy in Food Consumption Act" (or "Cheeseburger Bill") to achieve a Senate vote is clear evidence of a more general unwillingness to place all blame for personal choices upon consumers. The governmental rationale of "personal responsibility" has still had the effect of moralising individual behaviour by highlighting individual duty to oneself, family, the community and the future viability of the

healthcare system. Furthermore, since 2004 this rationale has been gradually concretised from abstract appeal to a state-level policy reality. Conditioning the government response to obesity and justifying calls for personal responsibility is the ongoing debate over mounting healthcare costs and the ability of the administration to cope with predicted increases in the number of people dependent on Medicare and Medicaid. Given that obesity is expected to be one of the greatest components of state health contribution costs (Daviglius *et al*, 2004), it seems inevitable that calls to reduce prevalence at this geographical scale have drawn on wider arguments relating to health insurance, social inequality and the federal budget.

6.4 Putting the federal into state practice: 2004 – present

In 2004, the National Institutes of Health (NIH) Obesity Research Task Force launched its *Research Strategy to Fight Obesity* as a guide for coordinating multi-agency obesity research. The report sets out four specific research agendas: lifestyle modification and identifying modifiable environmental and behavioural factors; the relationship between the physical environment and activity; medical interventions to prevent and treat obesity through further research on the molecular and genetic pathways that regulate energy balance and the link between obesity and its co-morbidities. As the report states, “given the complexity and multiplicity of the forces driving the obesity epidemic, the NIH recognises that it cannot, by itself, solve this major health problem. However, the NIH can and must be a key contributor to solving the obesity problem through scientific research” (2004: 1). In addition to research, the NIH is responsible for communicating its findings to healthcare providers, departments within the DHHS and the public (2004: 6). Furthermore, such findings are not to be limited to the purely physiological, but include wider environmental causes of obesity such as access to healthy, low cost food, neighbourhood safety, urban sprawl and commuting times (2004: 12). The report also admits that these factors disproportionately constrain health in areas with high

concentrations of BME populations or those on low incomes, thereby prioritising the need to address health disparities. The NIH report is significant as it sets the standard criteria for “scientific” and “evidence-based” research and interventions that must, as this work will discuss, be met to secure CDC and NIH funding. In addition, the ongoing drive to address health disparities mean that interventions targeting those at highest risk of obesity (i.e. low income and ethnic minority neighbourhoods) are also looked upon more favourably by funding committees.

One of the NIH’s specific targets is to invest in “translational research” or the process of bringing “bench to bedside” (NIH, 2004: 50) through the conversion of experimental laboratory knowledge into improvements in service delivery or the public health arena. These “bi-directional knowledge transfers” (*ibid.*) bridge the gap between experimental research and the real-world settings where intervention occurs. Two of the short term goals for this agenda are to “support efficacy and effectiveness research to define the role of social marketing and communication in efforts to control obesity at the individual and population level” and to “support research to identify effective approaches for combining strategies that involve health policy, media or marketing campaigns, and legislative action to influence public attitudes and practices in healthy eating and physical activity” (2004: 51).

The recognition that changing public perceptions about obesity, raising awareness of the health risks of excess body weight and ultimately inducing healthier lifestyles requires a combination of health promotion, media attention and legislation is one that has been carried through all levels of US policy since 2004. The call for a national social marketing campaign mirrors that in the UK since 2004, and came to fruition in 2005 with the launch of *Small Step*, an Ad Council-directed, food-industry sponsored TV and print campaign to encourage small, incremental and achievable healthy lifestyle goals with messages emphasising social acceptance above scare tactics, or campaigns of persuasion

(figure 12). They highlight the social benefits of health, use non-specialist language (e.g. “love handles”) and lead people to sources of information to support behaviour change, itself a central tenet of social marketing theory. Government investment in this national campaign must be considered alongside the economic imperatives behind behaviour change. The US currently has the most expensive healthcare system in the world in both per capita and percentage of GDP terms, far outstripping all other OECD nations (figure 13) and costs are predicted only to climb. The American “patient-consumer” is a demanding member of the country’s “treatment-orientated society” (Carmona, 2003a), a situation that has come to haunt an administration fighting record deficits.

Figure 12 - Small Step print advert
(http://www.adcouncil.org/files/obesity_lostlovehandles_mag.jpg)



Figure 13 - Health care spending by country as a % of GDP and per capita (Source: OECD Statistics, 2006)

	Total expenditure (% of GDP)		Health expenditure (Per capita US\$ PPP)	
	1995	2004	1995	2004
Australia	8.0	9.2	1 741	2 876
Canada	9.2	9.9	2 055	3 165
Czech Republic	7.0	7.3	902	1 361
Denmark	8.1	8.9	1 844	2 881
France	9.4	10.5	2 028	3 159
Germany	10.3	10.9	2 271	3 005
Ireland	6.7	7.1	1 216	2 596
Italy	7.1	8.4	1 534	2 392
Japan	6.8	8.0	1 541	2 249
Korea	4.2	5.6	540	1 149
Netherlands	8.1	9.2	1 822	3 041
New Zealand	7.2	8.4	1 246	2 083
Portugal	8.2	10.0	1 096	1 813
Spain	7.4	8.1	1 193	2 094
Sweden	8.1	9.1	1 734	2 825
Switzerland	9.7	11.6	2 573	4 077
United Kingdom	7.0	8.3	1 385	2 546
United States	13.3	15.3	3 670	6 102

By 2005, the Republican Administration was being held accountable for mounting “healthcare inflation”, with personal contributions increasing by 84% since 2000 (Appleby, 2006). OECD data (table 13) shows that, from 1994 to 2004, healthcare costs have risen from 13.3% of GDP to 15.3% (*ibid*) to \$6,102 per capita. This extra spending, markedly higher than the UK’s \$2,546 and far exceeding that of any other neo-liberal economy, is largely the result of a system founded on a “crazy quilt of private insurers, for-profit hospitals, other players” including the government (Krugman and Wells, 2006: 37). The lack of any integration within this system is the result of “a free market ideology that is wholly inappropriate to healthcare issues” (*Ibid*, pp. 38). The politics of health have a particular salience in the US where there is a growing divide between those who have insurance – employer-based, Medicaid or Medicare - and those who do not.

In 2004, the US Census Bureau estimated 15.7% of the population to be uninsured. Indeed, this divide translates into real health outcomes when it is considered that among those diagnosed with, for example, colorectal cancer, those without insurance are 70% more likely to die over the next three years than those with insurance (*ibid*). Employer-based insurance is a very particular American institution that stemmed from the 1942 *Stabilisation Act* which limited wage increases, but allowed employers to lure scarce post-war workers through benefits such as health insurance. As commercial insurance companies responded to this trend and started to offer health insurance, enrolment increased from 20.6 million in 1940 to 142.3 million in 1950 (Health Insurance Institute, 1960). In 2004, 82% of full-time workers were insured, but the system may now be under strain as rising premiums threaten to undercut companies' bottom line. Consequently, to cut costs and ensure continued profit margins, some companies are starting to make hiring decisions based on projected employee health costs. For example, in a memo famously leaked to the *New York Times*, it was uncovered that Wal-Mart, long criticised for its poor worker benefits, was considering assigning physical tasks to prospective employees to ascertain potential future health costs (Greenhouse and Barbaro, 2005).

Rising rates of obesity in the US cross-cut wider debates on healthcare costs for several reasons. First, until 2006, neither Medicare nor Medicaid covered the costs of obesity treatments such as bariatric surgery, meaning greater incentives for those on the schemes to take preventative measures to reduce their BMI. However, Medicare and Medicaid do cover treatment for obesity-related co-morbidities and with recipients increasing year-on-year, the additional expected burden on the service presented by obesity is significant. In 2004, 37.5 million people in the US were receiving Medicaid, a leap of 8 million on 2000 figures (Krugman and Wells, 2006: 40). Furthermore, given that the majority of people on Medicaid are low income and of minority origin – those also at highest risk of

being obese – the burden of future costs also lies with specific, identifiable groups of people. This is an especially prescient given that obese adults also incur medical expenditures on average 36% higher than their non-obese counterparts (Finklestein *et al*, 2003). In 2004, 11.3% of non-Hispanic whites, 19.7% of African Americans and 32.7% of Hispanics were uninsured (US Census Bureau, 2005). Despite the fact that Hispanic average household incomes are \$14,000 a year less than those of whites (*ibid*), they remain less likely to receive Medicaid given the problem of asserting nationality status. Furthermore, as these groups also hold the least political power, especially when compared to the venerable Veteran's Association recipients of Medicare, this silence has allowed potent discourses to arise blaming specific groups and their communities for rising cost of health insurance to the rest of the population.

Healthcare costs both for government and insurers in the US are rising as a result of several factors including: improved but higher-cost treatments, an ageing population, rising numbers of uninsured, rising demand for prescription drugs and higher prescription co-payments. Since 1997 when the FDA relaxed its rules on 'Direct to Consumer' (DTC) drug advertising, pharmaceuticals have been able to run TV campaigns without disclosing every risk associated with the drug (Wilkes *et al*, 2000). Instead, the FDA asks only that manufacturers point viewers in the direction of four information sources including doctors, toll-free numbers, websites or print advertisements (Rosenthal *et al*, 2002). As a result, the old idea that physicians should diagnose and prescribe has been thrown out and a new ideology has emerged of the patient-consumer who is informed, capable of self-diagnosis and demands certain drugs by brand name rather than generic symptom alleviation (Rose and Novas, 2005).

The rise of DTC advertising has great salience in the context of obesity as, not only do weight loss drugs such as "Xenical" repeatedly occur in the top three for advertising spend, but the increasing demand for hypertension or cholesterol medication means that

they are unlikely to attempt the kind of lifestyle changes promoted in the obesity prevention campaigns considered in chapter seven (Wolfe, 2002). Furthermore, the Bush Administration views advertising prescription drugs as one way of ensuring an informed populace capable of making carefully evaluated, needs-based, cost-effective choices (Henwood *et al*, 2003). Proponents of drug advertising argue that adverts educate consumers, facilitating patient-doctor dialogue and thereby increasing treatment efficiency. Yet “better-informed consumers” (Wilkes *et al*, 2000:1) may just result in greater demand, irrespective of need. This is a particular trait in the US culture of health and healthcare and provides an interesting point of comparison to the UK, especially when overall health costs are considered.

While corporations have been reworking their business plans to include health, the federal government has been slower to show the same initiative. In 2001, the CDC announced that it would fund state-based *Nutrition and Physical Activity Programs to Prevent and Decrease Obesity* to address the two interrelated risk factors for obesity: physical inactivity and poor nutrition. The plan offers financial support to states to implement “science-based” public health interventions to be led by the DHHS. Two levels of funding: basic implementation and capacity building are now enjoyed by seven and 21 states respectively. Basic implementation states receive between \$750,000 and \$1.3 million from the CDC to develop their own ‘Strategic Plans’, assess and identify the scale of the problem, its risk factors, the cost to the state and to identify high risk populations. As one such state receiving \$1.25 million in CDC funding for ‘basic implementation’ between 2001 and 2003, this work will expressly focus on Texas as a case study illustrating the practical translation of federal imperatives to local implementation.

While public health priorities and targets are set at a federal level through documents such as *Healthy People*, states have a large degree of autonomy when it comes to budget

setting, resource allocation and addressing the particular health needs of their populations. The same localism also applies to USDA regulations which are set at a state and, in the case of school meal standards, school district level. Furthermore, since state agencies employ significant numbers of people, there are fiscal imperatives to reduce the burden of healthcare and insurance premium costs. In 2004, 400 obesity-related bills were introduced at state legislatures and 25% of these were passed into law (Tumulty, 2006). In addition, since its 2003 report, the National Governors' Association (NGA) has reinforced the idea that states should take responsibility for the health of their citizens and, in the process, reduce the burden of healthcare costs. In 2005, the NGA's role in the obesity debate was further intensified by the launch of Arkansas Governor Mike Huckabee's book *Quit Digging Your Grave With a Knife and Fork* detailing his battle to lose 110lbs after being diagnosed with Type-II Diabetes. The Arkansas Governor spearheaded the *Healthy America* challenge and a *Call to Action* in 2006 to enact state programs to help prevent further prevalence rises (Curry, 2005). As one of the nation's largest and most populous states, the Texan battle with rising obesity rates has captured the national imagination. The case of the "Lone Star State" will consequently be discussed in more detail in the rest of this chapter.

Figure 14 - Texas state map (<http://www.only-maps.com/texas-map.jpg>)



6.5 Placing Texas

At the time of the 2000 census, Texas had a population approaching 21 million concentrated in the major cities of Dallas, Fort Worth, Houston, San Antonio, El Paso and the state capital Austin. As a result of its location along the Mexican border (figure 14), the demographic composition of Texas shows marked differences to that of the US as a whole. As figure 15 shows, in 2000, 52.4% of Texans were non-Hispanic white, compared to 69.1% nationally. Hispanics composed 32% of the Texan population in 2000, almost three times the national average of 12.5%. The proportion of African American residents is however lower at 11.5% than the national average of 12.3%. Of

the 6.7 million Hispanic Texans, 5.1 million are Mexican (figure 15). Perhaps reflecting this demographic composition, the state also has a slightly lower average income than the rest of the country at \$19,617, although the presence of oil wealth and multinationals such as Dell mean that the state also houses some of the nation's highest earners. Crucial to the prevailing social climate conditioning interviewee responses in this work, Texas has the highest rate of uninsured residents in the nation at 25.1% (US Census Bureau, 2005) and the USDA recently marked out the state as the nation's worst for food access (USDA, 2005). With such distinct risk factors in place, it is clear why public health is a pressing issue.

Figure 15 - Texas and USA census data showing population size, racial composition and average incomes in 2000 (US Census Bureau, 2001)

DEMOGRAPHIC DATA	TEXAS	USA
Population (2000)	20,851,820	281,421,906
Non-Hispanic white (%)	52.4	69.1
Hispanic (%)	32.0	12.5
African American (%)	11.5	12.3
Asian (%)	2.7	3.6
Average per capita income (\$)	19,617	21,587

Figure 16 - US % Overweight and Obese, 2000 (Ogden et al, 2006:1552)

RACE/ ETHNICITY (USA)	GENDER	OVERWEIGHT (%)	OBESE (%)
Anglo	Men	40.1	27.3
	Women	27.2	30.1
Black	Men	22.6	28.1
	Women	27.9	49.5
Hispanic	Men	32.2	39.7
	Women	45.8	28.9

Figure 17 - Overweight and Obesity by race and gender in Texas, 2000 (TDH and UDSA, 2003)

RACE/ ETHNICITY (TEXAS)	GENDER	OVERWEIGHT (%)	OBESE (%)
Anglo	Men	46.5	21.8
	Women	27.9	18.9
Black	Men	41.9	32.3
	Women	33.2	34.2
Hispanic	Men	32.0	30.7
	Women	45.4	28.3

Just as the UK exhibits marked differences in health status by race within and between regions, the US also exhibits distinct spatial and social patterning. For example, in 2000 while 27.3% of Anglo men in the US were obese, just 21.8% were in Texas. Obesity rates among Hispanic men are also lower than the national average in Texas (see figures 16 and 17), further complicating the epidemiological picture when considered at different geographic scales. However, rates of overweight are consistently higher in Texas than the national average and given that this is a risk factor for obesity, it is unsurprising that in 2004, Texas ranked sixth highest in the nation for the highest climbs in prevalence, slightly behind Mississippi, West Virginia, Alabama and Missouri.

However, mirroring the situation in the greater London area, it is among children that rates start to exceed national averages. Nationally, 15.8% of 6-11 year olds were overweight in 2000, while in Texas 38.7% of fourth-graders and 29.4% of eleventh graders were affected (Hoelscher *et al*, 2004). The highest rates of overweight among children were found in Hispanic boys and African American girls suggesting that, as among adults, racial differences are pervasive (*Ibid*). Furthermore, with the highest rates among the youngest children, the TDH predicts that prevalence will escalate by 2040 (TDH, 2003). Since Hispanics already have the highest birth rates and lowest incomes,

and the proportion of this community composing the Texan population is set to increase, childhood obesity presents a dramatic future cost to the state and its citizens. Consequently, as in London, this has been used to legitimise interventions upon the lifestyle choices of the adult population.

While the CDC's BRFSS and NHANES data presents a picture of epidemiological risk at a variety of geographic scales, *Men's Fitness* magazine, by contrast, ranks the 'fatness' of cities according to a set of environmental or structural indicators. It is therefore at the city scale that Texas really comes to capture national and international attention as a place of aberration. All the state's major cities - San Antonio, Dallas, Fort Worth and El Paso - have found themselves consistently in the 'fattest' 25 (figure 18). From 2001-2005, Houston was named as the nation's fattest city four years running and only slipped to fifth place in 2006 as new parameters including commute time were added to the rankings. However, in George Bush's "oil-rich" state (Weil, 2005), one city has consistently bucked the trend. Austin, the state capital and home to the nation's largest university has, by contrast, reliably been placed in the top 25 'fittest' cities in the nation. Texas therefore presents an interesting take on the "obesity epidemic" because of the existence of spaces of fitness within a state otherwise best known for its fatness. Again, parallels can be drawn with London where high and low prevalence rates coexist (see chapter seven). As this chapter has shown, obesity is frequently presented by public health as an affliction "of epidemic proportions" (Surgeon General, 2001:1) that correlates with and exacerbates existing health inequalities. In Texas, the co-existence of nationally-recognised 'fat' and 'fit' spaces raises pressing questions about appropriate public health resource allocation and the legitimacy of intervention. Coupled with the fact that Governor Rick Perry has declared his dedication to addressing the state's rising rates of obesity and Austin's Mayor Will Wynn has made clear his intention to raise Austin to the nation's 'fittest' city by 2010 (City of Austin, 2006), there seems to be an

interesting coexistence of preventative public health and pro-active health creation in the same spaces.

Figure 18 - Texas 'Fat and Fit City' rankings (of 25) by *Men's Fitness* magazine 2001-2006

CITY	RANKING BY YEAR					
	2001	2002	2003	2004	2005	2006
Houston (fat)	1	1	1	2	1	5
Dallas (fat)	16	5	9	3	6	4
Fort Worth (fat)	11	8	16	6	14	13
El Paso (fat)	15	14	17	24	11	8
San Antonio (fat)	25 (fit)	7	13	4	10	12
Austin (fit)	17	16	19	19	19	23

Texas, and Austin in particular, therefore seems a valuable comparison to London, where measures to address health inequalities, high obesity rates, low physical activity rates and poor nutrition exist alongside efforts to engineer cultures of “healthism” (Greco, 1993) within the urban fabric, effectively branding cities as ‘fit’ places to invest, live, work and play. This interlocking demand for and supply of good health presents a very particular type of governance, where questions of duty and responsibility become more than the individual versus the state, but also an emotive plea to individuals to act collectively in the name of urban enhancement and re-branding. The same is true of London, with the 2012 Olympics acting as a focal point for Mayor Ken Livingstone’s aspirations to improve the fitness of the capital and its people, thus extending the question of personal duty and responsibility to community and urban wellbeing. Yet, the ways in which this sense of duty is articulated and the policy frameworks through which it is enacted vary greatly between London and Austin. These case study sites will be explored further in the next two chapters by drawing on the findings of quantitative, health statistics-based and qualitative, interview-based research detailing measures being undertaken to prevent obesity in the context of the policy objectives outlined here.

6.6 Conclusion

Since 1979, obesity has come to figure explicitly within the lexicon and rationale of a prevention-oriented healthcare system and its policies. As this chapter has discussed, the decadal *Healthy People* reports issued by the Surgeon General provide a useful gauge of the chief concerns of the USPHS through its chosen LHIs, objectives and health improvement goals. As with the UK white papers, *Healthy People* targets aim to reduce health disparities and thus ultimately reduce the cost of healthcare by acting upon the wider risk factors for health. The structure of the US political system means that targets may be set at a federal level, but states have autonomy in setting their own additional goals. This is very similar to the autonomy of UK Primary Care Trusts in priority setting and resource allocation to meet local needs. In practice, federal USPHS and DHHS policy acts as the benchmark conditioning the allocation of funding and priority-setting at a state level. However, despite being a federal state, the CDC provides the US with a far more centralised public health surveillance system than that offered by the UK's regional Public Health Observatories, provoking a very particular response to evidence of nationally rising obesity rates.

The Surgeon General's *Call to Action* (2001) framed obesity as an "epidemic". In this characterisation, the rapid rise in prevalence "signals a deterioration in American health" (Vandegrift and Yoked, 2004: 229) that must be urgently addressed. The CDC's maps of obesity prevalence changes by state seem to mirror infectious epidemic dispersion and diffusion patterns (figure 4), and have consequently been used by the Surgeon General and manifold stakeholders to justify calls for preventative policy and intervention within personal matters of lifestyle. The annual collection of public health surveillance data has not only permitted detailed temporal and spatial expositions of risk, but also led US policy to continually call for "science-based" or "evidence-based" interventions to achieve observable, positive changes in this data. In this instance "evidence-based"

means that interventions must be proven, through randomised controlled trials (RCT) to have a measurable effect on either BMI or the risk factors for obesity (for example, fruit and vegetable consumption or activity rates).

In 2004, the NIH *Research Strategy to Fight Obesity* formalised this agenda with the statement that it would be a key contributor to “solving the obesity epidemic through scientific research” (NIH, 2004:1). The statement is dense with assumptions: that obesity is a treatable epidemic and that the solution lies in scientific research. The American prevention agenda is surveillance-orientated, with interventions legitimated by the stamp of ‘best practice’. In the case of obesity, ‘best practice’ must also adhere to the targets, goals and guidelines set out in three key documents: *Healthy People*, the *Dietary Guidelines* and the *Surgeon General's Report on Physical Activity and Health*. Furthermore, the Surgeon General's assertion that obesity should be tackled as a problem of ‘health’ and not ‘appearance’ legitimates a strictly health promotion and education-orientated approach. Central to health promotion for obesity is the question of duty and responsibility for individual healthy lifestyles, giving the governance of obesity its distinctive character. Returning to Peterson's (2003) work discussed in the previous chapter, the “conduct of conduct” or, in this case, the practices and rationale of government which serve to normalise the regulation of “conduct”, exhibit broad differences by locale. Not only are governmental practices and their rationales different in the US and UK, but the transposition of these from a national to a local level is equally disparate rendering a comparative approach essential to teasing out the far broader tensions within the neo-liberal governance of health addressed in the fourth research theme of this thesis.

Between 2001 and 2005, health in general, and issues relating to diet, exercise and obesity in particular, became media favourites. News coverage of obesity has expanded in tandem with waistlines as the long tradition of self-help and group therapy discussed

in chapter three has allowed obesity viewed as a “dramatic redemption” (Stearns, 1997: 106) to occupy a particularly powerful place in the American psyche. The fact that Arkansas Governor Mike Huckabee’s 2005 book on his personal “conquest” over obesity reached the bestseller lists is testament to the power of this insatiable demand for local and individual tales of triumph. This media fascination with obesity is also exemplified by the huge interest generated by the *Pelman v McDonalds* case. Although unsuccessful, the legacy of the case has been open criticism of Presidential support for the food and farming industry’s continued demands for trade liberalisation, subsidy and tariff maintenance despite calls for coordinated efforts between government and industry to combat obesity. The fear of future litigation has meant that many individual states have passed “Personal Responsibility in Food Consumption” bills and industry has responded defensively by developing ‘healthier’ products. Yet, despite this, the President remains convinced that building a healthier America rests on creating a physically active culture of personal responsibility. Furthermore, and in contradistinction to the UK, this personal commitment to fitness has been publicly and frequently demonstrated by highly publicised runs and biking trips at his ranch in Crawford, Texas.

With a population fast approaching 300 million and huge regional variations in health status, the call for a culture of personal responsibility cannot be considered, this chapter has asserted, apart from the healthcare crisis currently being faced by the Bush administration. Numbers of Medicare and Medicaid recipients are expected to climb swiftly over the next ten years; the healthcare system is already the most expensive per capita in the world and, with advertisements calling for consumers to presage diagnosis by asking their physician for prescription drugs, is likely to remain in top place. When the predicted future cost of obesity and insurance premiums is then factored in, this justifies intervening in matters of personal responsibility.

This chapter has explored how creating such a responsibility culture can be best achieved at a variety of intervention settings (e.g. families, schools, workplaces, communities) at the state level. Some states such as Texas where 32% of the population are Hispanic (and some border towns may be over 90% Hispanic) face particular challenges with regards to obesity prevention. Documents such as *Healthy People* and the Surgeon General's *Call to Action* recognise that the risk of and prevalence rate of obesity exhibits a distinct racial and income dynamic. Consequently, effective prevention must be based on an understanding of how demographic factors intersect with structural constraints such as health insurance and food security.

Texas has found a special place in the obesity debate given that all of its major cities have consistently found themselves in the “fattest cities” league compiled by *Men's Fitness*. At the same time, with Austin bucking this trend, the complexity of obesity as a socio-spatial phenomenon (Swinburn *et al*, 2006) has become even clearer. Austin is an interesting case study as the city is simultaneously trying to address high obesity rates among the city's poor and minority neighbourhoods through traditional paradigms of health promotion while trying to attain the far loftier goal of becoming the nation's fittest city. Just as London is facing the same challenge of re-branding itself as a ‘healthy place’ in time for the 2012 Olympics, so too is Austin seeking to become a global player in the increasingly venerated leagues of ‘best places’ to live. In the two chapters that follow, examples of obesity prevention measures being undertaken in central London and Austin will be further explored through the lenses of “informed choice” and “personal responsibility” that have, as discussed here and in chapters five, become the lasting governmental rationale used to justify intervention upon individual lifestyles. This chapter has demonstrated that how obesity is framed as a problem legitimises, in turn, certain solutions. What must now be considered is how these proposed policy solutions are being operationalised through the increasingly varied and sophisticated

arsenal of governmental and non-governmental techniques to promote healthy lifestyles in both cities.

Chapter Seven: Preventing obesity through informed choice in central London

Our starting point is informed choice. People cannot be instructed to follow a healthy lifestyle in a democratic society. Health improvement depends upon people's motivation and their willingness to act on it. The Government will provide information and practical support to get people motivated and improve emotional wellbeing and access to services so that healthy choices are easier to make.

(John Reid, Health Secretary, *Choosing Health*, DH 2004:6)

7.1 Introduction

The *Choosing Health* agenda has been explored in some detail in chapter five, where it was suggested that the White Paper marked a distinct turn in the conceptualisation of obesity within public health. In 2004, under mounting public pressure, obesity was transformed from a risk factor for co-morbidities such as coronary heart disease and Type-II diabetes, into a public health problem in and of itself that would require not only a restructured and prevention-orientated NHS, but also a fundamental institutional shift in the conception of health and lifestyle. This chapter will expand upon the analysis of chapter five, by taking the ideas set out in *Choosing Health* forward to the present and into the empirical realm of policy implementation. In the two years since *Choosing Health*, the Labour government has strengthened its commitment to changing national attitudes towards health and addressing local structural barriers to healthy lifestyles. This movement, it is argued, has been guided and framed through the rhetoric of “informed choice” (DH, 2004:6), a governmental rationale that has gained momentum and been vitalised through recent moves to address lifestyle diseases in general and obesity in particular.

In July 2006, Prime Minister Tony Blair set out his vision of the future of public health in a series of public lectures entitled *Our Nation's Future*. The speech shied away from declaring the magnitude of the financial challenges facing public health, and instead set out the government's vision of an "enabling" state charged with "empower[ing] individuals to make the choices and decisions about the life that they want" (Blair, 2006). These words strongly echo the assertion that the government would "support people in making better choices for their health" but that ultimately "it is for the people to make the healthy choice if they wish to do so" (DH, 2004: 2). The state should not be overbearing, but rather offer public services to fit the demands created by modern lives and the economy. In short, in matters of public health, central government should be a commissioner of services with power shared between the state and individuals with "changes based on choices not [government] direction" (*ibid*). And, since power is to be shared, it follows that responsibility will also be shared. Within this delicate balance of power and responsibility, "choice" exists as the fulcrum enabling the equation to operate. Indeed, it may be stated that Labour's public health vision is based on a rationale of "informed choice" with the newly created Minister for Public Health, Caroline Flint (popularly dubbed the "Minister for Fitness"), assigned the role of transforming this government rationale into visible results.

The Labour vision of public health is one with a strong focus on national change and long-term health improvement. However, "informed choice" is also a matter for PCTs and local authorities meaning that discussions must always remain mindful of the local. As Newman and Vidler state, "the language of political and policy texts is interesting in its own right, not because it tells us about the policy context, but because it provides clues about what tensions are having to be negotiated in the construction of a credible narrative and how successful that narrative is" (2006:195). The "choice" narrative runs through efforts to promote healthy lifestyles and reduce obesity rates and is consequently

leveraged to frame the legitimacy of such interventions as “credible”. This chapter will consequently ground theoretical discussions of the “Choice Agenda” in the local context of two London boroughs to explore the tensions inherent at different scales of governance in the practical translation of government rationale. Government targets to reduce health inequalities are woven into the fabric of obesity prevention given the marked socio-economic gradient in prevalence, meaning that it is also pertinent to explore their extent at a borough level in Camden and Islington. Chapter five set out the existing health disparities across London and this chapter will commence by refining the geographic scale and using Census 2001 and Health Survey for England (HSE) 2002 data to map out two of London’s most central and diverse boroughs in order to contextualise discussions of the empirical research.

Following from this starting point, the chapter will then turn briefly to a theoretical discussion of the “Choice Agenda”, drawing on a recent critical body of literature within the sociology of medicine analysing *Choosing Health* as an incarnation of “consumerist” discourses at odds with the mounting recognition that “urban design has an important role to play in tackling the wider determinants of health, particularly in relation to providing quality housing, open spaces, transport links, safer environments and supporting vulnerable people” (Mayor of London, 2006: 26). The remaining three sections of this chapter will consider the practices and discourses of obesity prevention in central London, drawing on stakeholder interviews carried out in 2005 and 2006. First, the Mayor’s *London Food Strategy* (2006) will be examined as one of the “central planks” [26] for tackling obesity city-wide and ascertaining how this fits with existing borough strategies to promote healthy eating and physical activity. Second, the input of the “consciousness industries” (Lang, 2005: 310) such as marketing, advertising, PR and Think Tanks to develop the UK’s first national social marketing campaign to help meet national PSA targets for obesity. Third, how sustainable transport or ‘active travel’ has

promoted walking and cycling on a city and borough scale by re-framing transport through the language of health benefits rather than environmentalism. In London, inspired by the World Health Organisation's *A Physically Active Life* report (2002), getting people to turn away from public transport is now seen as one of the most effective routes to reduce obesity rates while simultaneously achieving a host of Mayoral urban regeneration objectives. These examples will then be used to revisit the notion of informed choice and thus question the compatibility of governmental objectives and the methods and goals of a widening array of stakeholders.

7.2 Camden and Islington

Camden and Islington, until July 2006, were located in the North Central London Strategic Health Authority (SHA), the smallest of London's five SHAs at 1.22 million people. The 2001 Census estimated Camden's population at 198,027, making it the seventh most densely populated borough in the city. Islington, slightly smaller at 175,797 (Census, 2001), notably has the second highest residential density in England. Both boroughs have high levels of long-term unemployment, low levels of owner-occupation and high rates of overcrowding. Camden has the highest rate of homes without their own bath or shower of any local authority in the country and the second highest housing overcrowding rates, both indicators of deprivation and most likely the result of high population density and the huge demand for low cost private housing among those ineligible for council accommodation. As Katie Williams, public health "Lead" of the Camden PCT *Obesity Task Force* suggests, both boroughs therefore "are vulnerable to the effects of inner cities" [8], suggesting that high rates of deprivation, crime and lack of infrastructural investment may play a significant role in health outcomes.

Like almost all Central London boroughs, Camden and Islington exhibit large ward-scale variations in income, socio-economic status and average housing price, as well as socio-

demographic indicators such as deprivation, health status (figures 26-30) and ethnicity (figure 21). Indeed, the notable variation between the 18 wards comprising Camden and the 16 making up Islington (figures 19 and 20) often serve, in the eyes of public health bodies, to “complicate matters” [8] in that borough-scale interventions cannot reach the fine geographic scales - such as street or council estate - at which risk is more often delineated. As a result, the area provides a good counterpoint to the discussions about Austin, especially due to the marked difference in the geographic scale of residential segregation between the two cities, and the implications of this for identifying intervention areas and/or high risk populations.

London is unique in its mosaic patterning of housing tenure, type, value, demographic and socioeconomic factors, where variations can be marked at scales as refined as a census tract. Unlike the US, where residential segregation often takes place over much larger geographic scales, London is an urban space in which two adjacent streets in Camden might house £2 million houses and a block of local authority flats (see figure 33). This is markedly different to Austin, where housing type, tenure and value are clustered at a neighbourhood scale (the equivalent of a ward in London). Census or HSE data at a borough, SHA level or ward may, therefore, mask huge variations within these spaces. For example, within Camden itself, life expectancy by ward varies between 81.2 and 74.3 years (NHS Community Health Profiles, 2006). Unemployment is correlated with poor health status and it is therefore notable that rates of long-term unemployment range from 2.9% (Hampstead Town) to 12.1% (St Pancras/ Somerstown) (figure 29). Yet, despite patches of affluence and house prices far exceeding the London average (Land Registry, 2006), Paula Cooze of Islington PCT [30] highlights that “distinctly mixed” Camden and Islington remain two of the most deprived boroughs in the country, with Islington taking 6th place in England and Camden 18th place in the 2004 ODP’s

Indices of Deprivation report – a fact that many visitors to the leafy expanses of Hampstead Heath or gentrified Clerkenwell might find difficult to believe.

Self-reported health status exhibits marked variations by housing tenure, illustrative of broader socio-economic and class divides within the boroughs. For example, variations in health status between owner occupiers and those in social rented housing are notable. For example, 18.4% of those in social rented housing in Hampstead Town reported their health as “not good”, while only 4.7% of owner occupiers in the ward agreed (figure 30). This correlation between housing tenure and health underpins micro-scale variations in health status (given that housing tenure is also patterned at this scale). As over 50% of Islington’s housing stock is under local authority ownership (Mayor of London, 2006:15), there are both clear health and political imperatives for local authorities to address the “raw environments” of many inner city estates (Mayor of London, 2006:12). One of the London Health Commission’s aims has therefore been to address the racial health inequalities clearly discernable from LHO data (drawn from HSE, 2003). These variations by race are most marked for long-term limiting illnesses, affecting 68% of Islington’s Bangladeshi residents aged 50-64, compared to 33% of whites in the borough (figure 24) and a 27% London average (figure 22). Self-reported health status shows fewer perceptible variations, with the exception of Islington’s Black British residents aged over 65 (figure 27), who are 50% more likely than the Black British London average and 88% than the London average for all races to report their health as “not good” (figure 25).

Obesity is inextricably linked to other indices of poor health and deprivation, but given the micro-scale patterning of these risk factors, differences in obesity rates at the original regional SHA level (before merging in July 2006) are indicative of broader infrastructural and socioeconomic variations in the city. Figure 32 shows the original SHA boundaries where obesity rates vary among men from a high of 22.6% in the South

West SHA to a low of 14.4% in the North West SHA (figure 31). For women, rates are also highest in the South West SHA at 25.9%, with the North Central SHA (housing Camden and Islington) falling far below the London average (22.8%) and England (22.0%) at 18.8%. Male rates of overweight exceed those of women in the capital, standing at 42.6% and 33.3% respectively. Again, figures vary by SHA, with rates for both men and women standing at 38.7% in England, 36.6% in London, 38.2% in South East London and 35.3% in North Central London.

Such inconsistency in obesity and overweight rates by gender across the SHAs serves to corroborate the view held by Katie Williams that obesity is “horribly complex” given that the spatial patterning of prevalence “really isn’t logical” [8]. As a result, from a public health and policy standpoint, identifying significant areas of high risk as viable targets of government investment to reduce health inequalities and improve overall wellbeing becomes difficult to justify, not least as high risk areas are most often located at a geographic scale far finer than that of the HSE. As a result, as Alison Blackwood from the Camden Health Forum suggests, risk is denoted far more easily with reference to those “hard to reach” or “seldom heard” [17] groups consistently marked out as in need of intervention. North Central London SHA’s generally low rate of overweight and obesity compared to the rest of the capital (figure 31) would seem to characterise it as the kind of space of “best practice” to which many in the business of obesity prevention aspire. However, high deprivation rates mean that poverty, poor housing, a proliferation of budget retailers and low incomes circumscribe people and places as highly vulnerable to the health effects of their local environment and personal economic constraints.

Figure 19 - Camden ward map (Camden PCT, 2006)

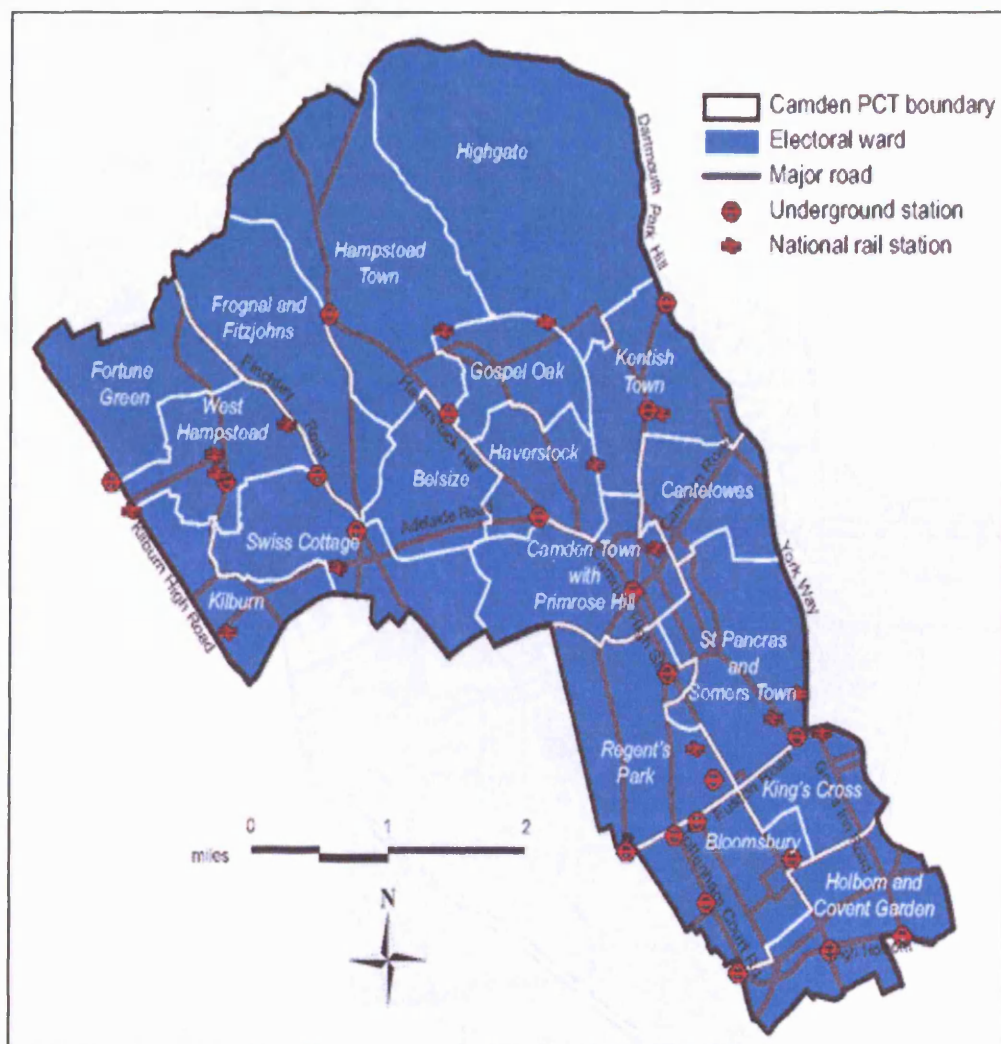




Figure 21 - Camden and Islington racial composition (from Census 2001 data)

ETHNIC GROUP	CAMDEN	ISLINGTON	LONDON	ENGLAND
White (all)	73.2	75.4	71	9.1
Asian/ British Asian	10.4	5.4	12	4.6
Black/ British Black	8.3	12	11	2.3
Chinese/ other	4.4	3.3	2.7	0.9

Figure 22 - % with a long term limiting illness by race in London (Health Survey, 2003)

LONDON: % with a long term limiting illness by age	All Persons	White British	Asian – Bangladeshi	Black British and Black Caribbean
16-49	9	9	12	11
50-64	27	24	56	46
65+	50	50	65	54

Figure 23 - % with a long term limiting illness by race in Camden (Health Survey for England, 2004)

CAMDEN : % with a long term limiting illness by age	All Persons	White British	Asian – Bangladeshi	Black British and Black Caribbean
16-49	10	10	13	14
50-64	30	28	61	42
65+	49	48	66	53

Figure 24 - % with a long term limiting illness in Islington (Health Survey for England, 2004)

ISLINGTON: % with a long term limiting illness by age	All Persons	White British	Asian – Bangladeshi	Black British and Black Caribbean
16-49	11	11	12	16
50-64	37	33	68	46
65+	55	54	69	60

Figure 25 - Self reported health status in London by race (Health Survey for England, 2004)

LONDON: self-reported health status (%)	All Persons	White British	Asian – Bangladeshi	Black British and Black Caribbean
Good	71	70	70	64
Fairly good	21	22	22	26
Not good	8	9	8	10

Figure 26 - Self-reported health status by race in Camden (Health Survey for England, 2004)

CAMDEN: self-reported health status (%)	All Persons	White British	Asian – Bangladeshi	Black British and Black Caribbean
Good	71	70	70	62
Fairly good	20	20	22	26
Not good	9	10	8	12

Figure 27 - Self reported health by race in Islington (Health Survey for England, 2004)

ISLINGTON: self-reported health status	All Persons	White British	Asian – Bangladeshi	Black British and Black Caribbean
Good	68	69	68	58
Fairly good	21	21	23	27
Not good	11	11	10	15

Figure 28 - Self reported health Islington and Camden wards (Health Survey for England, 2004)

Camden Ward	% good health	% fairly good health	% poor health
Belsize	75.5	17.3	7.2
Bloomsbury	72.2	19.4	8.4
Camden Town with Primrose Hill	71.3	19.2	9.5
Cantelowes	69.4	20.7	9.9
Fortune Green	73.9	18.3	7.8
Frognaal and Fitzjohns	77.4	16.6	6.0
Gospel Oak	68.0	21.5	10.5
Hampstead Town	77.0	16.3	6.6
Haverstock	67.8	21.2	11.0

Highgate	71.3	19.9	8.8
Holborn and Covent Garden	68.4	20.8	10.8
Kentish Town	69.5	21.1	9.3
Kilburn	67.6	20.8	11.6
King's Cross	71.4	19.7	8.9
Regent's Park	67.3	22.3	10.5
St Pancras and Somers Town	66.3	21.4	12.3
Swiss Cottage	74.5	18.3	7.2
West Hampstead	74.8	17.6	7.5
Camden Average	71.3	19.6	9.1
Islington Ward			
Barnsbury	69.8	20.4	9.9
Bunhill	66.3	22.1	11.6
Caledonian	65.1	23.5	11.4
Canonbury	67.5	21.1	11.4
Clerkenwell	69.1	20.5	10.5
Finsbury Park	67.1	21.2	11.8
Highbury East	71.3	19.4	9.2
Highbury West	69.4	20.9	9.6
Hillrise	68.8	20.9	10.3
Holloway	64.8	23.3	11.9
Junction	66.8	21.4	11.8
Mildmay	68.2	21.5	10.4
St George's	67.7	21.3	11.0
St Mary's	69.2	20.0	10.9
St Peter's	69.3	20.3	10.4
Tollington	68.3	21.3	10.4
Islington Average	68.0	21.2	10.8
London Average	70.8	20.9	8.3

Figure 29 - Camden and Islington ward socioeconomic status (Census, 2001)

Key: I (Large Employers and higher managerial), II (Higher professional and lower professional/ managerial, III (Intermediate occupations and small employers/ account workers), IV (Lower supervisory and technical occupations, semi-routine and routine), V (Never worked/ long term unemployed), VI (Full time student/ unclassifiable)

Camden Ward	I	II	III	IV	V	VI
Belsize	7.8	45.1	12.5	9.1	4.6	20.9
Bloomsbury	3.1	29.7	8.7	11.5	4.5	42.5
Camden Town with Primrose Hill	5.6	37.2	13.1	12.1	7.8	24.1
Cantelowes	4.5	33.9	13.3	15.1	7.3	26.0
Fortune Green	7.0	42.5	13.5	12.1	5.7	19.2
Frognal and Fitzjohns	8.3	44.5	12.4	7.5	4.3	23.0
Gospel Oak	4.3	33.1	12.3	16.2	7.7	26.4
Hampstead Town	8.9	49.7	10.7	7.0	2.9	20.8

Haverstock	4.2	30.8	12.3	17.5	8.7	26.5
Highgate	5.0	40.2	13.8	13.6	4.9	22.5
Holborn and Covent Garden	4.5	33.9	11.4	15.1	8.2	26.9
Kentish Town	4.7	36.5	14.0	14.4	7.4	23.0
Kilburn	4.5	32.0	13.8	16.9	8.9	23.9
King's Cross	2.4	23.1	8.4	15.4	9.1	41.6
Regent's Park	3.3	26.0	12.4	18.6	9.6	30.0
St Pancras and Somers Town	2.0	20.7	12.7	23.9	12.1	28.8
Swiss Cottage	8.3	44.6	12.7	8.8	5.2	20.4
West Hampstead	7.8	45.2	12.5	11.8	5.3	17.4
Islington Ward						
Barnsbury	5.6	35.9	12.8	15.7	7.5	22.6
Bunhill	4.2	28.8	13.0	19.0	7.9	27.0
Caledonian	3.6	27.8	12.5	21.0	9.4	25.6
Canonbury	5.1	31.9	13.7	18.8	6.8	23.7
Clerkenwell	5.1	31.4	12.8	15.5	5.7	29.5
Finsbury Park	3.7	29.9	12.0	19.1	10.0	25.3
Highbury East	6.5	42.1	12.0	13.2	6.3	19.9
Highbury West	4.8	35.6	12.9	17.0	7.6	22.0
Hillrise	3.6	32.0	13.8	18.2	8.8	23.6
Holloway	2.8	24.5	12.7	19.7	9.1	31.2
Junction	3.6	32.5	13.6	17.0	7.0	26.2
Mildmay	4.8	34.3	14.0	16.7	8.5	21.7
St George's	4.1	34.3	13.0	17.0	7.6	24.0
St Mary's	6.3	38.0	12.5	15.1	6.3	21.9
St Peter's	6.1	35.4	12.5	15.4	6.7	23.9
Tollington	4.4	31.4	13.9	17.9	9.6	22.7

Figure 30 - Ward variations in self-reported health by housing tenure in Camden and Islington (Census, 2001)

Camden Ward	% owned in good health	% owned not in good health	% social rented in good health	% social rented not in good health	% private rented in good health	% private rented not in good health
Belsize	95.6	4.4	84.5	15.5	94.4	5.9
Bloomsbury	93.2	6.8	84.2	15.8	92.2	8.5
Camden Town with Primrose Hill	96.1	3.9	85.1	14.9	94.8	5.5
Cantelowes	94.9	5.1	84.5	15.5	93.8	6.6
Fortune Green	95.1	4.9	84.5	15.5	94.1	6.2
Frognaal and Fitzjohns	95.3	4.7	84.0	16.0	95.3	4.9

Gospel Oak	95.1	4.9	83.6	16.4	95.6	4.6
Hampstead Town	95.3	4.7	81.6	18.4	95.0	5.3
Haverstock	94.0	6.0	84.6	15.4	94.7	5.6
Highgate	95.0	5.0	84.9	15.1	95.1	5.1
Holborn and Covent Garden	94.4	5.6	84.8	15.2	94.5	5.9
Kentish Town	94.9	5.1	85.4	14.6	93.8	6.6
Kilburn	94.2	5.8	83.8	16.2	92.4	8.2
King's Cross	92.2	7.8	87.5	12.5	93.9	6.5
Regent's Park	92.9	7.1	86.2	13.8	93.3	7.1
St Pancras and Somers Town	93.0	7.0	85.6	14.4	93.6	6.8
Swiss Cottage	94.9	5.1	85.4	14.6	95.2	5.1
West Hampstead	96.0	4.0	84.4	15.6	94.8	5.5
Islington Ward						
Barnsbury	95.6	4.4	84.5	15.5	95.0	5.3
Bunhill	94.1	5.9	85.1	14.9	93.4	7.0
Caledonian	94.6	5.4	84.3	15.7	94.9	5.4
Canonbury	94.7	5.3	83.4	16.6	94.5	5.8
Clerkenwell	93.9	6.1	84.3	15.7	95.6	4.6
Finsbury Park	92.5	7.5	84.3	15.7	93.8	6.7
Highbury East	94.2	5.8	83.5	16.5	96.0	4.2
Highbury West	93.9	6.1	85.2	14.8	95.0	5.3
Hillrise	94.4	5.6	84.8	15.2	94.5	5.8
Holloway	92.9	7.1	82.1	17.9	95.2	5.1
Junction	94.2	5.8	82.1	17.9	93.8	6.6
Mildmay	94.4	5.6	84.7	15.3	95.1	5.1
St George's	94.5	5.5	83.1	16.9	92.8	7.8
St Mary's	95.9	4.1	82.7	17.3	94.4	5.9
St Peter's	95.3	4.7	83.9	16.1	94.6	5.7
Tollington	93.5	6.5	85.1	14.9	94.5	5.8

Figure 31 - Overweight and obesity rates by original London SHA 2002 (HSE, 2004)

	HSE 2002 rates					
	OVERWEIGHT			OBESE		
	% men	% women	% all	% men	% women	% all
ENGLAND	44.6	33.3	38.7	20.8	22.0	21.4
London	42.6	31.1	36.6	18.2	22.8	20.5
N. Central	39.4	31.5	35.3	18.1	18.8	18.4
North East	40.9	34.5	37.6	17.4	23.8	20.7
North West	41.9	28.9	35.2	14.4	22.1	18.4
South East	43.3	33.5	38.2	17.9	20.5	19.2
South West	46.7	28.3	37.1	22.6	25.9	24.3

Figure 32 - New Strategic Health Authority map (source: <http://www.clha.nhs.uk/publications/New%20SHA%20Map.pdf#search=%22strategic%20health%20authority%20map%22>)

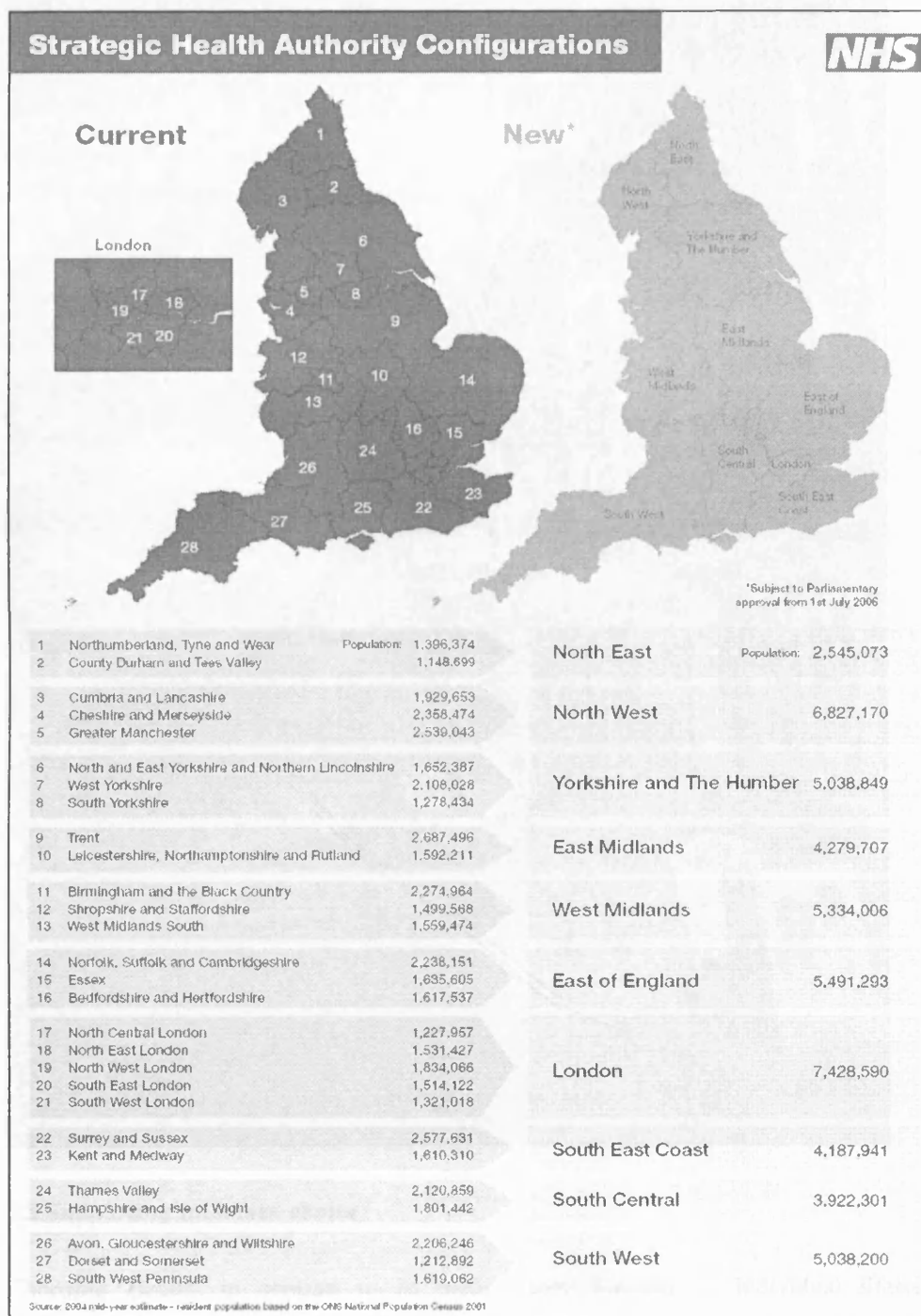
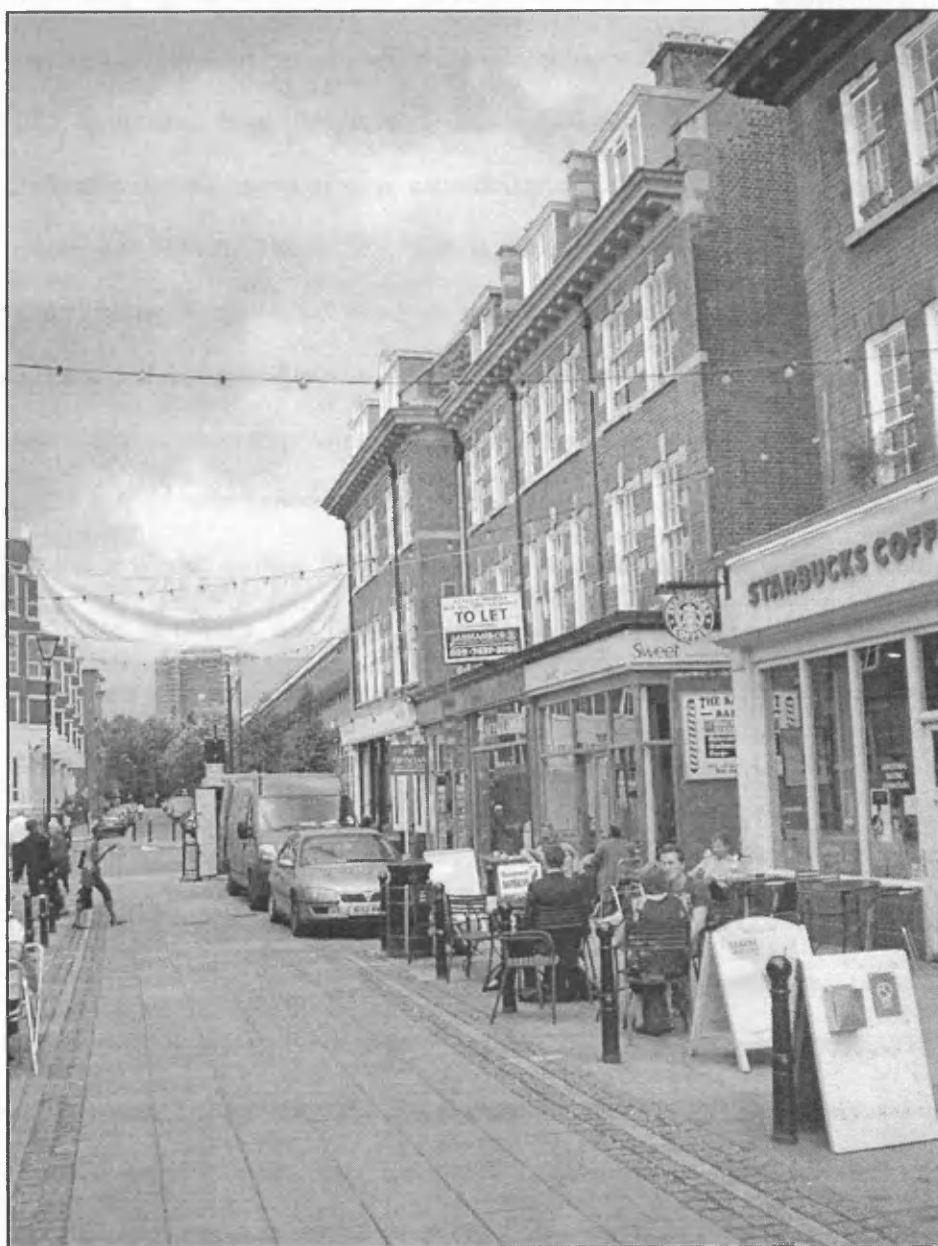


Figure 33- Gentrified Exmouth Market in Islington with local authority housing behind
(photo, author's own)



7.3 Supporting informed choice

Choosing Health, in contrast to its predecessors, focused on individual lifestyle underpinned by the need for “informed choice” and “personalisation” of service delivery (Hunter, 2005). “Informed choice” is not a new idea, but has enjoyed a discursive renaissance within New Labour’s “Choice Agenda”, a fundamental constituent of its

“Third Way” neo-liberalism. This political “organising logic” (Newman and Vidler, 2006: 207) represents, in effect, a “marketisation of public policy” underpinned by five key features: the language of choice; a greater reliance on the individual as a bearer of risk; a thinner, more transactional and contingent state-citizen relationship; the preference for consumerism over collectivism and for public-private partnerships in policies and services (Hunter, 2005: 1011). As a defining feature marking “New” from “Old” Labour, “Third Way” has been heavily criticised for a seemingly incongruent devolution of responsibility onto individuals, paired with a tendency towards heightened surveillance, increased spending on state services and internal auditing (Temple, 2000). As a result of New Labour’s seeming synonymy with over-zealous governance, the “Choice Agenda” suffers from a degree of internal inconsistency that renders its application to obesity, and public health more broadly, deeply problematic. Some of these issues will be briefly discussed before turning to three sets of empirical examples to explore this in practice.

The healthcare reforms that have taken place since Labour’s election in 1997 have been both profound and highly criticised in equal measure. Healthcare spending rose from £33 billion a year in 1996/1997 to £67 billion in 2004/2005 and the government has pledged to increase this investment to £90 billion by 2007/2008 (Crinson, 2005: 507). Yet despite such heavy investment, profound gaps still remain in service delivery and uptake, especially among “seldom heard” groups. PCTs now control 80% of national healthcare budgets, are the central purchasers of healthcare goods and services and, as Maggie Barker [26] points out, the scale at which national policy is implemented and targets must be met. Labour’s NHS is, moreover, now subject to a far greater degree of regulation and independent scrutiny than ever before. The Clinical Governance Framework (CGF), National Service Frameworks (NSF), National Institute for Clinical Excellence (NICE) and the Committee for Health Improvement (CHI) now continually

audit and monitor the NHS, raising the question of whether such increased investment has been funnelled into the endless internal and external scrutiny of the service itself. These institutional changes merit mention because it is from within this new “consumerist” conception of the NHS (Newman and Vidler, 2006) that the “Choice Agenda” has rendered both necessary and possible an ideal, informed public appropriate to the dictates of both a modern NHS and society.

At root, as Maggie Barker points out, the “Choice Agenda” is formally defined as allowing patients on waiting lists for longer than six months the choice of alternative service providers and ensuring that patients are involved at all stages of decision-making in their treatment [26]. Within this rationalised and “needs-based” NHS, “choice” is a device used within political rhetoric and policy as both a *tool* to ensure and *evidence* of the modernisation of the health service as well as a statement of the kind of citizens that such policy requires. This dual role of choice was highlighted by a number of interviewees, but it should also be added that its use in political texts is as much an advertisement/public assurance of Labour’s ongoing work on the NHS as it is the outcome of this work. As such, the existence of choice in the NHS serves as evidence that the service now fits the expectations of immediacy, constant availability and endless variety that consumers associate with other purchasing decisions in the wider marketplace. The emergence of choice as the organisational principle underpinning the public health drive to address obesity has not been sudden or unforeseen, but is rather a logical tool augmenting Government’s capacity to successfully address the political exigency of health inequalities.

The “Choice Agenda” creates and necessitates a certain consumer in order for the system upon which it is predicated to function efficiently and, in turn, for it to be thought of as legitimate. The *empowered* consumer makes “informed choice” plausible, but this also relies on the promise of an *enabling* state. Yet, the process of individual empowerment is

frequently left undefined, with the responsibility falling on either individuals to access information resources available to them or for Area-Based Initiatives (ABIs) to help by addressing the wider conditions of social exclusion and inequalities that both perpetuate and are perpetuated by obesity (Rankan *et al*, 2006). However, as Clare Pritchard points out, it is debateable whether a singular rationale of informed choice is equally applicable and practicable to decisions relating to both food and physical activity [37], a crucial point often neglected within the optimism of policy literature and frequently dissociated from the related call for ‘joined-up thinking’ within governance. As the state role has been redefined as one of enablement and the political agenda has come to be occupied to an ever-increasing degree by public health, the individual has been rendered a site of tension for, as Bryony Butland asserts, “it is not just about giving out information, but making choices possible” [36]. With these contentions in mind, the rest of this chapter will build on this brief discussion of the theoretical idea of “informed choice” by exploring interview findings from three broad examples of current obesity prevention and healthy lifestyle promotion measures in central London: the London Food Strategy, the work of the “Consciousness Industries” and active travel.

7.4 The London Food Strategy (LFS)

Obesity prevention in London is a patchwork of overlapping efforts to encourage healthier diets and more active lifestyles, with schemes usually addressing one or both sides of the energy balance equation (chapter four) and demonstrating interviewees’ frequent criticism that, as Bryony Butland states, “there are too many actors involved” [36]. These three examples aim to highlight this complex array of interventions, their broad variety of stakeholders, range of remits and scales of operation. Within this, the LFS has been cast by its proponents, including its Deputy Director Maggie Barker, as the “major plank” for addressing obesity at a city scale [26]. Underlying the *LFS* is the belief that “befitting its world city status, London has an extraordinary food culture”. However,

despite this resource, “too many people...particularly young people, are suffering from obesity... and are not able to exercise the choices enjoyed by the majority” (Mayor of London, 2006:8). Therefore, the strategy’s first objective is to improve health and reduce inequalities. The London Food Strategy is a city-wide plan, with £3.87 million in funding over three years, that cuts into other Mayoral policy documents including *The London Plan*, the *National Strategy for Neighbourhood Renewal and Sustainable Communities* (DCLG, 2005) and aims to improve the sustainability of the built environment and wider ‘foodscape’ within the structures imposed by borough-level strategic plans to address obesity. How such overlapping agendas function - both practically and theoretically – will be discussed here with reference to the overriding national goal of supporting informed choice in questions of lifestyle.

The *LFS* explicitly addresses the need to balance the food economy with its negative externalities, of which the most paradoxical, Maggie Barker points out, are the highest rates of childhood obesity in the country in a city that has some of the lowest rates of adult obesity [26]. In 2004, the London Food Board was established reflecting the idea that food could be instrumental to achieving other policy agendas such as social exclusion and public health improvement. The *LFS* also draws on the *Food and Health Action Plan*’s recommendation that “government policies need as far as possible to make it simple for people to make food choices that support health, and fit their way of life” (DH, 2003a: 11). Within that statement, two confounding issues arise: the need for government to enable healthy choices and the need to make these culturally-relevant and amenable to the dictates of a plurality of *ways* of life. These two goals reveal the often marked divide between the aspirations of policy makers and the reality of implementation among groups that may be markedly different in terms of their cultural understanding of health and the role and value they accord to food consumption. Martin Carahers’ criticism of the *LFS* for being “too medically-focussed” [33] and, furthermore,

for food policy more widely to concentrate on obesity (rather than broader issues of equity, access and availability) risks, he suggests, placing blame for poor health disproportionately at the door of those with consumption habits seen as outside the norm.

While the *LFS* acknowledges that London's multiculturalism is crucial to its food economy, ironically, interviewees from a public health background such as Paula Cooze from Islington PCT, were more likely to cite culture as a barrier to healthy lifestyles [30]. Consumption trends increasingly favour eating out and an ever-widening array of 'ethnic' foods and dishes. In line with this, the Mayor, Ken Livingstone, has been an avid supporter of multicultural London, promoting a long list of food events including the Brick Lane Festival, the London Mela and the Chinese New Year and presenting a publicly unified face of the city with the "We are Londoners. We are One" campaign (figure 34). As an integral feature of the *LFS*, these events have now shifted from being confined to specific populations such as the Bangladeshi population of Tower Hamlets for the Brick Lane Festival to capturing the attention of Londoners regardless of ethnicity. Central to broadening the appeal has no doubt been the ever-rising appeal of food within such events. Yet, as Clare Pritchard from the Greenwich Community Development Partnership suggests, food tourism, while beneficial to the city's economy, does little to address the broad income and structural inequalities that limit access to affordable, healthy choices among many minority groups [37], issues currently being tackled by a large number of community ventures such as estate-based cookery clubs and fruit and vegetables co-ops.

Figure 34 Campaign graphic from the Mayor's 'We are One' follow-up to the 2005 'Seven Million Londoners, One London' appeal (Source: <http://www.london.gov.uk/onelondon/images/we-are-londoners/we-are-londoners-640x480.gif>)



According to Clare Pritchard, the *LFS* has six priority areas: to ensure commercial vibrancy; secure consumer engagement; leverage the power of procurement (within public services); develop regional links; to support healthy schools and reduce waste [37]. Alongside these broad aims, the *LFS* also outlines certain London-specific issues such as the fact that the city's high density means that almost all residents can access food without the need for a car and that the 'eating out' culture (supported by over 12,000 restaurants) is a far greater influence on dietary health than in other locales. As a result, certain factors affecting consumption are distinct to or more marked in London: long hours; a large proportion of working women; higher average incomes (but a greater income gap) and innovative retailing trends. As an added complication, London's heterogeneous urban space, detailed at the start of this chapter, means that the *LFS* must be implemented at a borough level to account for local structural capacity, retailing

trends, budget constraints and population need. It should also be noted that the *LFS* sits alongside current measures to transform London into a city fit enough for the 2012 Olympics, a link remarked upon by a number of interviewees [26, 33, 37].

The UK is not globally revered for its cuisine. As such, one of the major thrusts of the *LFS* is to present a different culinary face to the world – one in which Londoners may be able to gain reward card points for healthy food choices, street markets are supported as cheap sources of healthy foods and community cohesion (see figure 35), cultural food events are numerous and the UK's inordinately powerful retailers are pressurised into offering price promotions on healthier foods. Indeed, with food retailers increasingly understood as “gatekeepers” to healthy lifestyles, as Sue Dibb at the National Consumer Council suggests [18], the ability to “secure consumer engagement” to “enable positive behaviour change and promote consumer choice” (*LFS*, 2006: 86) is inextricable from securing the support of supermarkets. Yet irrespective of this acknowledgement that the wider political economy of food retailing must be addressed, the *LFS* has instead focussed on awareness raising and encouraging behaviour change through a “public health-led communication campaign” (*Ibid*, p.88).

Figure 35 - Affordable fruit and vegetables at Chapel Market, Islington (photo, author's own)



This communication campaign will be “consistent with the core plank of informed choice – building on the recent political and public momentum generated by the *Choosing Health* White Paper and the *Food and Health Action Plan*, and linking other key communication initiatives (e.g. 5 a day)...and acknowledge the benefits to employers of London having a healthy workforce” (LFS, 2006: 88). While the exact nature of this communication campaign is not actually developed further in the document, it does highlight the importance of working public-private partnerships, and those between sub-regional and local bodies, the voluntary sector and Londoners themselves (and in particular disadvantaged and BME groups). However, despite these

optimistic plans to fundamentally alter the way food is marketed, bought, sold and procured in the capital, the *LFS* suffers from a problem of scale. The communication campaign would be city-wide, but boroughs are charged with implementing the document and individuals are asked to “take responsibility for the health, environmental, economic, cultural, social and security impact resulting from the food choices they make” (LFS, 2006: 11). However, Martin Caraher points out, borough agendas are set for the next two years (funding, targets etc) and so the capacity to put any of the *LFS* goals into practice is fundamentally limited. In addition, he suggests that the *LFS* underplays the role of the wider local economy in health outcomes, as local economic vitality and prosperity are as important for health as service provision [33]. At a local level, efforts are already being made to try and change eating behaviours to address obesity and there is the possibility that the *LFS* could find itself competing against rather than complementing such goals.

The internal coherence of the *LFS* conceived at a city-scale is rendered deeply problematic by the methods and priorities of borough-scale governance and the huge array of individual needs that have to be addressed across a range of structural settings. The Camden and Islington PCT’s (at that time a single Health Action Zone) *Strategic Review and Action Plan for Obesity in Camden and Islington 2003-2006* acknowledges that “in a multicultural area such as Camden there will be cultural aspects of body weight which may conflict with the public health agenda” (Camden and Islington PCT, 2003: 14). Over the same period, *Eating for Health in Camden 2003-2006* was published to try and tackle above-average heart disease rates in the boroughs (Camden PCT, 2003b). The document surveyed eating habits in the borough, concluding that despite lower obesity rates than the national average, residents not only ate fewer fruit and vegetables, but, according to a Gallop Poll commissioned were also less receptive to the 5 a day messages than the nation as a whole (Camden PCT, 2003). Furthermore, among all

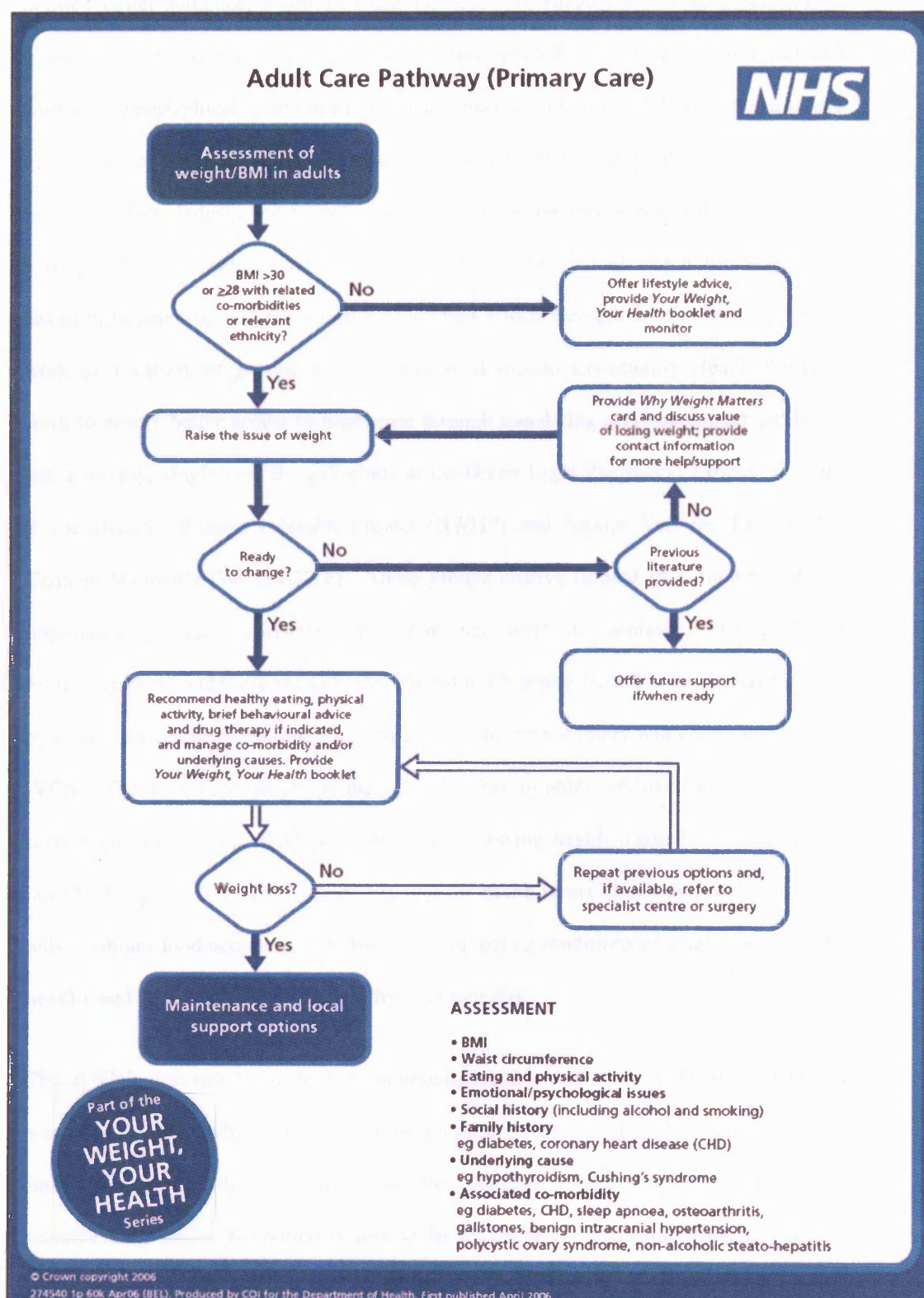
residents, Bangladeshis – the largest minority group - were found to have the highest fat intakes and lowest fruit intakes (only 15% of men ate fruit 6 times a week), reflecting the high fat content of traditional diets and a preference for vegetable dishes rather than fruit.

These findings suggest that a communication campaign promoting, what Maggie Barker proudly refers to as the “whole systems approach” of “London Food” may be slightly premature [26], when, as Martin Caraher points out, the “upstream” structural causes (e.g. access, availability and awareness) of obesity may be far more profound than the “downstream” cultural forces on consumption habits [33]. The Camden *Eating for Health and Physical Activity Review and Strategy* had both run their course by 2006 when funds available to carry out projects like ‘5 a day’ also ended. Camden PCT’s Obesity Task Force is instead now devoting its efforts, and funding amounting to a “pointless” £18,000 - according to member Paul Chadwick [13] - to designing an appropriate care pathway for the condition, with even the head of the Task Force making no mention of the *LFS*.

Care pathways, as Hannah Pheasant from the London SHA explains, are models outlining the progression and time frame of treatments and their appropriate care settings (figure 36) and have become a crucial prerequisite of the PCT arsenal in an oppressively audited system [34]. However, concentrating on developing these models has meant that Camden PCT has strayed away from the *London Plan’s* recommendations to address the wider structural determinants of health, leaving that in the hands of urban planners and the voluntary sector, with whom they have little communication or contact and about whom they have little awareness. Katie Williams, public health lead at the task force explained that their main concern was access to treatment and coordinating obesity care pathways so that patients received the best care [18] – an attitude that fits Martin Caraher’s criticism that public health “has no sense of social planning” [33] – and holding firm to the belief that primary care is the most effective setting for obesity

prevention. Interestingly, prevention takes second place to cure in the PCT's work, despite *Choosing Health's* call for a prevention-oriented NHS. Unlike Islington PCT's health promotion department, which, under the leadership of Paula Cooze has taken a proactive and integrated (coincidentally also the name of its healthy living brand) approach to health promotion to address physical activity and healthy eating [30], Camden's Task Force seems to have difficulty moving beyond the idea that the intense inter-mixing of residents means that identifying target areas for intervention "really isn't logical" [18].

Figure 36 - Adult care pathway for obesity (NHS, 2006)



Successful intervention strategies in public health prevention efforts rely on a clearly defined target audience, a problem that Paula Cooze suggested was also pressing in Islington where poverty and wealth are so interspersed as to make meaningful and workable geographical delineations of risk almost impossible [30]. By contrast, and despite Katie Williams' assertion to the contrary, Camden has relatively residentially segregated Bangladeshi and Somali populations in the poorest wards in the south of the borough. While considered outside the remit of the Obesity Task Force, this population has been targeted by voluntary health promotion efforts through the tireless community work of a variety of groups including the West Euston Community Health Project's work to ensure better access to healthcare through translating services, longer GP hours and a weekly, single-sex, Bengali clinic at the Green Light Pharmacy, Kowser Zannath at the Bengali Women's Health Project (BWHP) and Sandra Van der Feen at the Camden Women's Forum (CWF). These groups receive limited PCT funding but the importance of their cost-effective community work in achieving the goals of "empowerment" and "informed choice" set out in *Choosing Health* is not underestimated by a DH increasingly devolving implementation to the voluntary and community sector (VCS). The work of these groups demonstrates that, in order for city-scale interventions such as the *LFS* to be effective while also addressing health inequalities, local needs must be foregrounded. This is especially true for health where ethnic diversity means not only a vibrant food economy, but also many competing renditions of what it means to be healthy and who holds the responsibility to ensure this.

The BWHP operates through five community centres in some of the most deprived wards in Camden which also have high proportions of Bangladeshi residents. When interviewed, Zannath explained how the concept of preventive public health underpinning health promotion is new to Bangladeshi communities. Instead, health is perceived as a black or white affair, with illness requiring medical treatment and health

being cause for inaction [21]. Zannath's community work demonstrates that, for many communities, eating is a private matter thought to be outside the remit of government or officials, meaning that state healthy eating messages may be immediately discounted as irrelevant, inappropriate or impossible to operationalise. Bangladeshis have far higher rates of cardiovascular disease and diabetes than the London average (Chowdhury and Grace, 2003), with opinions mixed as to whether this is the product of genetic or lifestyle changes brought on by greater access to snack foods in the UK and physically undemanding labour. However, Zannath believes that the community does not correlate diet and health outcomes with food choices, as food, especially among older generations, is conceived in purely social or cultural terms. Furthermore, in stark contrast to the "Choice Agenda", the idea of being individually responsible for health is also not recognised, with doctors expected to bear full responsibility for their patients' health.

The same ideas pertain to exercise, where, Zannath argues, the concept of *choosing* to be active to improve health is not recognised since, for older British-Bangladeshis, exercise is still associated with the idea of low-grade physical toil [21]. Complicating such cultural differences are Muslim gender relations. Zannath's work with Bangladeshis and Van der Feen's with Somalis has necessitated modifying generic health promotion messages to specifically target the women in charge of preparing meals. However, given the patriarchal nature of Muslim families, even the knowledge acquired from healthy eating messages and cookery classes may not function in practice as men frequently control money to buy food and therefore have the last say with regard to household eating habits [20]. Furthermore, restrictions on the acceptable degree of public visibility for women means that promoting the use of public space for exercise is unworkable for many groups [21]. As a result, places such as the Chatswell Healthy Living Centre in Camden have assumed a pivotal role in helping Bangladeshi women stay active by providing a women-only gym (see Rankin *et al*, 2005 for a good account of the

development and significance of Healthy Living Centres in the UK). Such work reveals the extent to which the language and concepts that underlay Labour's most recent public health policy statement arise from and are dependent upon a shared understanding of ideas such as "informed choice" in relation to health, and furthermore, on universal ideas of education and the most appropriate means of communication. As Clare Pritchard points out, when groups do not share these and act according to their own norms, such as by learning from community members rather than "experts", the opportunity and temptation arises to deem the resultant behaviour irresponsible or the groups themselves "hard to reach" by virtue of their seeming continued resistance to the norms laid down in the language of policy [37].

As both Maggie Barker and Martin Caraher acknowledge, the *LFS* treads a fine line between an explicit focus on obesity and undermining this goal by favouring a broader remit to tackle the wider issues of social justice and inequality [26, 33]. While Barker seems convinced of the merits of the strategy's holism [33], claiming it to be "sexier" than just concentrating on obesity alone, Caraher is unrepentant about the limitations of its individualising focus on obesity [26], however both perspectives inevitably foreground the debate over informed choice. The report asks whether poor health results from a lack of choice (due to, for example, living in a "food desert") or from being uninformed. The conclusion reached, and highlighted by Caraher, is that since food shops in London are almost always accessible by public transport or on foot, knowledge is perceived as the missing link thereby justifying placing the onus for education on local scale community food projects, despite the admission that without the express engagement of supermarkets, the chance of widespread public health success is slim. It is ironic that at the same time as ethnic diversity is being pushed by the *LFS* as a vital component of London's "vibrant" food economy (see figure 37), minority groups themselves are being seen as problematising the drive to optimise dietary health by

adhering to the cultural values so lauded in other contexts. Food now both promotes and threatens ethnic diversity. However, as interviewees involved in the VCS were at pains to highlight, diversity also brings competing renditions of informed choice that threaten to undermine the veneer of coherence and continuity offered by public health policy documents such as *Choosing Health*.

Figure 37 - Local Halal food store in Bangladeshi south Camden (photo, author's own)



Preventing further rises in obesity will require profound cultural and social shifts to normalise the ideology that health can be *chosen* and render unhealthy behaviours either social unacceptable or impractical. This is still a long way off, as the notable

incongruities of the *LFS* demonstrate, but engineering individual and group behaviour change is now an industry in itself, and one to which the DH is more devoted than ever. Behaviour change to normalise informed choice is a goal that cuts across socio-economic, ethnic and other groups when “motivation” and “willingness” to act are considered the main points of leverage. While the *LFS* is a useful means through which to explore the tensions between obesity prevention at the London and borough scales, the ideas developed here can be further elaborated through the work of the “consciousness industries” and their aim to steer the public towards making the *right* choices through promoting products, brands, ideas and concepts. Within what Tom Macmillan of the Food Ethics Council terms the “territorial battle” for control of obesity [23], consciousness industries have now, surprisingly, become the allies of government. A variety of agencies are now charged with delivering the same branding of healthy lifestyles as they have done for other, less salubrious products, further complicating the promise of informed choice in the process.

7.5 The “Consciousness Industries”

Obesity is unusual among the wide range of behaviours and conditions classified as public health “challenges” for its diffusion beyond governmental actors into the broad realms of the not-for-profit and commercial worlds. Somewhat paradoxically, a good indication of the issue’s social and political salience is its dispersion beyond the state and into the interdisciplinary Think Tank domain. Indeed, interviews among some Think Tank employees about ongoing research projects show the rapid rise of obesity and its associated theoretical and policy questions up their organisation’s agendas. For example, the Institute for Public Policy Research (IPPR) has a ‘Behaviour Change and Personal Responsibility’ project and the Fabian Society hosted an obesity seminar chaired by MP Caroline Flint in 2006 [24]. Demos researcher Jack Stilgo is working with Bryony Butland, lead of the Department of Trade and Industry’s (DTI) ‘Foresight’ Obesity

project and, when interviewed, seemed interested in the issues explored in this thesis only to help develop an innovative new research angle within what is fast becoming a saturated field [29]. By contrast, Melba Wilson from the King's Fund was less enthusiastic about the topic, criticising their one-day conference on obesity for diverting attention from more pressing urban health issues such as Afro Caribbean mental health [38].

Theorising and criticising public health policy has now become an established Think Tank practice and, aided by the media, their findings and proscriptions aim to have an impact on public consciousness and awareness and, thus, behaviours. Furthermore, as public health has become more attuned to the complexities of understanding and regulating individual behaviours in the context of the heavily differentiated risks of obesity, the work of Think Tanks, advertising, media, PR agencies and a host of other actors has assumed a salience unparalleled for previous 'epidemics'. *Choosing Health* highlighted the need to market "health in a consumer society" (DH, 2004a: 18) to induce the widest possible shifts in public behaviour. However, as Nancy Stanley from advertising agency DNA points out, without its own marketing department, the DH has been forced to look elsewhere to achieve this [1]. As a result, it has turned to the National Consumer Council (NCC), which as Sue Dibb points out, is perhaps best known for its supermarket *Health Competition Reports* [17], to design an effective strategy to achieve the behavioural and cultural changes needed to achieve informed choice. Sue Dibb explains that *Choosing Health* also marked a turn in the NCC's own work, and by raising questions of duty and responsibility, inspired the organisation to examine supermarkets as effectively 'gatekeepers' of informed choice in a market characterised by the increasing commoditisation of health [17]. Given the huge public exposure of obesity and the current turn within public health methods towards social marketing (chapters five and six), selling healthy lifestyles is now a transatlantic policy

priority. Indeed, government commitment to this strategy in both the US and UK as a means of preventing further rises in obesity and cutting healthcare costs will offer an interesting point of comparison between the two case studies in chapter nine.

Ironically, while the government is drawn to these consciousness industries for what they might offer the challenge of meeting PSA targets, interviewees repeatedly highlighted how they have been subject to ardent criticism for their role in childhood obesity. For example, in 2003, during consultation for the *House of Commons Health Committee Report on Obesity*, Clare Hutchinson and Annabelle Watson from advertising firm AMVBBDO were called upon to defend their Walker's crisps and Pepsi campaigns [2, 3]. Both interviewees understood the potential role of their clients' products on obesity, but Annabelle Watson highlighted that this was complicated as the risks of obesity were "largely unquantifiable and vary so much by individuals" [3]. Despite the backlash against the food industry, *Choosing Health* effectively assigned the consciousness industries a role and duty to put their skills into practice selling health or "making health something people aspire to" (DH, 2004a: 20).

Promoting health as a brand has emerged in response to the particularly problematic and contested interplay between the political economy of food (supply) and consumption (demand) set out in chapter three, and, as yet, has not received much attention within health geography, despite the fact that selling is always grounded in places of consumption (Bell and Valentine, 1997). This is especially true of health, where selling the benefits of healthy lifestyles through mediums such as social marketing will only achieve returns if local environments enable this messaging to be put into practice. As a result, as Camden Council Transport Manager Paul Davis suggests, there is currently a split between "hard" (or structural) measures that address questions of food accessibility, affordability and nutritional knowledge through making the built environment more "liveable" (to be discussed in the next section) and "soft" (or behavioural) measures to

change public attitudes towards and motivation to adopt healthy lifestyles [4]. This split suggests that there is still a lack of joined-up thinking on the topic, with Nancy Stanley from advertising agency DNA suggesting that the “narrow focus” and “division of labour” at the DH precluded the kind of conversations needed to amalgamate the increasingly diverse range of actors within the field of obesity prevention [1]. Furthermore, with a variety of agencies trying to find a single, effective way of marketing health while addressing the overriding agenda of the DH, Rachel Eaton’s (CABE) belief that “public health practitioners have their own language” [14], might seem to preclude integration still further.

Developing a high profile social marketing campaign is now the domain of the NCC and its newly-created National Social Marketing Centre (NSMC). The NCC is essentially an independent organisation, although with 81% of its funding derived from the DTI and the same department adding obesity to its long list of Science-Society ‘Foresight’ projects, there are clear working links between the two. The newly formed NSMC sits institutionally between the DH and the NCC, with staff employed on both sides to develop a national social marketing campaign to try and reduce obesity levels in the long term. This example not only contrasts well with the discussion of Austin’s *i thrive* social marketing campaign in chapter eight, but it also demonstrates the conceptual and governmental limits to selling health as a means of obesity prevention. Furthermore, two interviews a year apart with project leader Catherine Slater highlight a demonstrable loss of initial enthusiasm and optimism for the task ahead, much as befell Kevin Tuerff, CEO of Austin environmental PR company Enviromedia when his ‘Zerobesity’ campaign to address childhood obesity failed to attract sponsorship in 2005 [7, 35, 46, 60].

In early 2005, the NCC was enthusiastically “mapping the situation” and “gathering stakeholder opinions” and adamant that without social marketing, “it [would] not achieve an impact” [7]. Their proposed target audience was to be 2-10 year olds (matching the

PSA target group) and thereby avoiding a situation where the DH could be accused of behavioural proscription. Slater conceded that it was virtually impossible to live in the UK and not know in basic terms what might compose a healthy lifestyle such is the media commitment to the topic. Despite this awareness, informed choice would only emerge when consumers were aware of the relative risks of being obese and a national-scale social marketing campaign would be the best way of achieving this.

When Catherine Slater was interviewed almost a year later, this optimistic tone had faltered considerably after a spending freeze from DH as the *Choosing Health* budget was absorbed by the development of the world's largest non-military IT system for the NHS. Instead of the campaign approaching completion, the delivery date had now been set back to late 2007 [35]. Furthermore, the campaign's main focus had shifted away from obesity and been re-branded "health living". The target audience had also been redefined as those 'at risk' of obesity (or pre-obese) rather than those already obese. This change had come at the recommendation of their expert group, who also suggested that the NCC segment their target audience by shared behaviours rather than bodyweight. The NCC consequently commissioned market research giant Taylor Nelson Sofres (TNS) to undertake a national survey of lifestyle attitudes allowing them to identify a high risk group upon which to carry out more detailed qualitative research. As Catherine Slater rightly asserts, the causes of obesity are, in many cases, so subtle that no prevention campaign will succeed without insight into behavioural triggers and motivators to find "the highest point of leverage" [35] in what essentially, in discursive terms, resembles a bargaining process.

Alongside their work on this national campaign, the NSMC has also been actively pushing its own profession. Catherine Slater points out that the culmination of 18 months of "mapping out the situation" have been: *It's our health!*, a document setting out the necessity of social marketing for changing health-related behaviours; a national

conference arguing for the development of social marketing as a government priority and academic discipline; and the *small change, big difference* brand. Indeed, justifying the need for social marketing and defining its remit seems to have been the most tangible outcome of the NCC's work. As a result, the pragmatic advances have been less impressive, with Slater admitting that she didn't "know how we're going to deliver", was not sure if the DH or NHS logo would work best for the campaign and that, despite their best promotional efforts "it is the marketing that people have an issue with in social marketing" [35]. Despite her enthusiasm for the rise of social marketing's profile, her optimism for its ability to help meet national PSA targets had ironically faltered. She conceded that during the course of their work, obesity as a problem has become "more complex" with more "shades of grey" appearing and that she now "hates obesity", especially given the fact that it has "so many players" involved, making negotiating these contradictory prerogatives a barrier to designing solutions [35].

To meet the lofty goals set out in *It's Our Health!*, the *small change, big difference* campaign strapline was adopted and launched in May 2006. The brand's public health role is to "improve areas where people cannot exercise personal responsibility", "build willingness to make positive changes" and to "ensure support is available to change" (NCC, 2006) and draws heavily on rhetoric and rationale of the CDC's *Small Step* (www.smallstep.gov) campaign. The individualising tendency of this is clear in its message that it is a "personal" matter, based on individual "willingness" to adopt new habits and this will be helped through personal support. Despite stating that the campaign must identify and "interrupt" the barriers to change, there is no mention of linking up with ongoing work to alter structural inequalities, despite CAGE's recent series of workshops examining the need to address obesity within the context of the built environment. Indeed, of the NSMC's 13 partner organisations (including the BBC and Nestlé) none are related to transport, planning, housing or environmental issues. As a

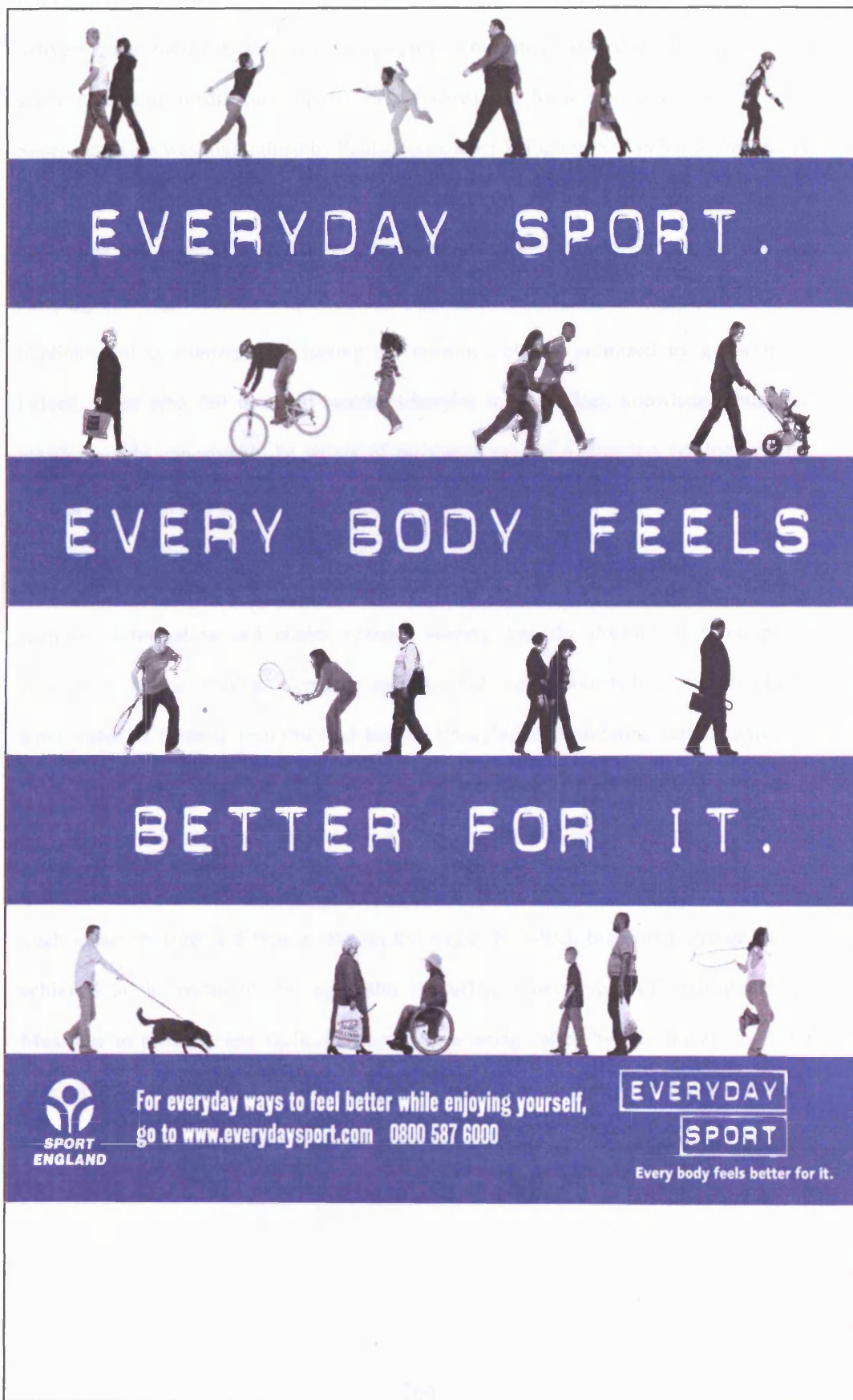
result, Maggie Barker suggests, the NSMC's focus on individual behaviour "feels horribly like victim blaming" [26], with Paula Cooze fearing that the potential for vilification could worsen the already significant psychological risks associated with obesity [30].

The NSMC's wide variety of partners and focus on individual behaviour change problematises the pursuit of informed choice. Clive Blair-Williams of the NCSM suggests that "what matters is the script that gets written after policy is published" [16], reinforcing the ideas explored in chapter three that policy to govern biomedical risks is merely a starting point, which gathers a complex script as implementation is contested, debated and haltingly proceeds. *Small change, big difference* is based on the possibility of exercising informed choice, but renders this a misnomer by doing little in the way of conceptualisation or action to make this practicable, a chief cause of Catherine Slater's lack of certainty of how the marketing messages would be delivered and to whom. By leaving the wider structural constraints to healthy behaviour to other government agencies and campaigning non-profits such as Living Streets and the Ramblers Association, NCSM consistently falls short in delivering *Choosing Health's* faith in the marketability of health.

While the NSMC may be the official partner of the DH in the pursuit of obesity prevention, it is important to note that it is not the only one. Informed choice is not only rendered problematic when structural questions of inequality or access are ignored, but also when sources of information risk becoming overly diffuse and thus contradictory. For example, Sport England's *Everyday Sport* campaign, trialled in North East England in 2004 and extended to London in 2005, thanks to £1.9 million from the National Lottery, is also supported by the DH and DCMS (although notably do not display their logos on their creatives, preferring to retain the brand image of Sport England) to help meet the obesity and physical activity PSA targets. Taking a similar approach to the

NSMC, the campaign (see figure 38) audience is unsegmented and highlights the ease with which anyone can be active. The *Everyday Sport* message is backed by a number of celebrities including Rio Ferdinand and Jonny Wilkinson, a media campaign in London and local borough sporting events promoted under the *Everyday Sport* brand. Consumers are directed to the website where downloadable toolkits to chart activity levels and monitor individual, team or workplace progress towards better fitness are available. In addition, the *Everyday Sport* campaign, as PR account manager Sally Jarvis explained, is also backed by the *Active Places* (www.activeplaces.com) database allowing people to find local sports events and facilities, many of which are provided free through Everyday Sport funding [5]. To reinforce the structural component of the programme, Active Places also has a “Power Site”, an online planning tool for local authorities to identify areas in need of sporting facilities. Everyday Sport therefore suggests that informed choice is possible when backed by clear, practical information clearly linked to local provision.

Figure 38 - Everyday Sport creative (Sport England and Team Saatchi)



EVERYDAY SPORT.

EVERY BODY FEELS

BETTER FOR IT.


SPORT
ENGLAND

For everyday ways to feel better while enjoying yourself,
go to www.everydaysport.com 0800 587 6000

EVERYDAY
SPORT

Every body feels better for it.

The split between the NCC campaign which, although being high profile and the DH's flagship, is still without any clear vision of how its concepts and research will be delivered, and the *Everyday Sport* campaign that has matched structural change with a social marketing media campaign is clear. Indeed, the local success of the Everyday Sport campaign was highlighted by Paula Cooze from Islington PCT in her assertion that their planning tools had provided them with a "springboard" to promote and invest more heavily in the borough's recreational facilities [30]. Yet, the coexistence of the two campaigns, alongside innumerable other initiatives to sell health, merely diminishes the likelihood of consumers ever having the informed choice promised by government. Indeed, those who fail to adopt healthy lifestyles may not lack knowledge, but their inaction might conceivably be an act of resistance against a situation veering towards over-proscription and over-saturation.

Making certain choices logical and easy may be the most effective way of profitably reuniting information and choice without veering into the domain of proscription. Behaviour change involves changing attitudes and motivation, both of which can be ameliorated to foster a desire to lead healthy lifestyles by facilitating certain activities. As a result, yet another set of stakeholders in the enterprise of obesity prevention is beginning to shift their own remit to try and reunite the two terms through concrete and pragmatic attempts to reengineer urban space in order to facilitate more active lifestyles. Such measures offer a different take on the means by which behaviour change can be achieved in the realm of 'selling health' by offering new types of healthy choices. Measures to promote and facilitate what is now being called "active travel" are often seen as irrelevant to those being undertaken by social marketers to foster behaviour change and, it is telling that very few interviewees outside the field considered it to be a pertinent method of obesity prevention. Yet, for London and its boroughs, making local

environments more conducive to walking and cycling may well prove to be the most sustainable way of “making healthy choices the easy choices”.

7.6 Active Travel

While social marketing campaigns may segment their target population by behavioural/attitudinal factors, a small, but growing, number of obesity prevention measures have focussed their efforts on places rather than people. One such example is the recent turn to market individual transport choices through the language of positive health benefits rather than environmental impact avoidance. London, with the UK’s most comprehensive public transport system and some of its lowest levels of individual car ownership (Census, 2001), is consequently a good site for exploring these issues in practice at both the city and borough scale. Furthermore, the topic of active travel and its particular rendition of informed choice presents some interesting points of comparison to the work of the *LFS* and *NSMC* and it is noteworthy that none of the interviewees involved in these two enterprises did not, at any time, identify active travel as a potential means of preventing obesity despite their ardent criticism of the lack of ‘joined-up thinking’ on the topic.

London’s transport network is run by Transport for London (TfL), formed in 2000 under the Greater London Authority (GLA) and charged with implementing the Mayor’s *Transport Strategy*. Aside from managing the tube, rail, bus, tram and boat network, TfL also assumes a strong role in walking and cycling promotion (also known as sustainable transport or active travel) across the capital, with its messages running alongside those of local borough councils. In 2004, TfL formalised its commitment to sustainable transport promotion by adopting the Good Going campaign. This movement, started by the enigmatic Dave Pye in Tower Hamlets, is now formalised by TfL and used in all 33 boroughs including Camden and Islington [12]. Good Going work with a variety of government departments including the DH and, interestingly, *Everyday Sport* to promote

active travel as a lifestyle choice rather than environmental initiative. Health is now being used as a rhetorical tool, or as Tom Franklin from Living Streets puts it, “a hook” [10], to promote walking and cycling. This merits further consideration, not least as it demonstrates the extent to which the Choice Agenda and its expectation of an informed consumer now extends far beyond the medical realm of the “expert patient” (Clarke, 2005) in matters of public health.

As chapter four suggested, causal explanations for obesity usually fall on the side of either diet or physical activity. On the physical activity side of the equation, measures to induce behavioural change - epitomised in London by *Everyday Sport* – have received positive reinforcement in the capital by work to promote and enable walking and cycling. It is worth noting that this concern for the built environment has, ironically, been branded the “New Public Health” (Goraya and Scrambler, 1998: 141). Neatly mirroring the “Old” public health and hygienist movements of the nineteenth century, this latest incarnation aims “to redirect the attention of public health theorists and practitioners back towards structural and environmental influences on health and health behaviours” (*ibid*). The “new” label is, however, rightfully appended to obesity as enabling healthy lifestyles, in contrast to past public health challenges, requires the active promotion of structural modifications to the built environment in the language of responsibility and duty to justify public investment. Indeed, the discursive shift from “green” to “active travel” also reflects this changing vision and construction of the consumer. “Active”, according to Paul Davis, transport planner for Camden, suggests individual benefits and agency rather than the self-sacrifice associated with “green” living [31]. Encouraging people to adopt healthier lifestyles in a consumer society involves communicating personal benefits and the language used often alludes to issues of control and ownership.

Unlike many other cities in the UK and US, London does not lend itself to anti-car messaging. Indeed, with over half Camden and Islington households without a car (Census, 2001), messaging centred on car use will clearly have little effect on activity rates in central London, especially given that the congestion charge already provides adequate financial disincentive to driving. Unlike other UK cities, TfL have had to seek innovative ways to ease congestion on the central London public transport network (TfL, 2005: 6), using the Good Going brand as an umbrella for the integration of borough initiatives to promote walking and cycling and practical tools such as TfL's online travel planner. As Paul Davis points out, the latter's mapping technology is crucial to the success of active travel as "understanding distances is key to a modal shift" [31]. Indeed, as he goes on to state, "London is the victim of the tube" [31], suggesting that the way in which the tube map obscures geographical reality and any conception of the location of places relative to each other and the distances in between is one of the chief, and most fundamental, barriers to walking and cycling in the city.

Cycling, in particular, has become subject to huge public and political interest in the capital, not least after recent figures claiming that the number of cycle trips in London had risen by 50% to 450,000 over the last 5 years, with almost all of this growth occurring in the past 2 years (Woolcock, 2006). Yet, despite the call for 'evidence-based practice' in public health, the reasons for the rise have not been researched and little is therefore known about whether it is the result of cycling lane or bike stand provision or a more generalised attitudinal change among commuters. Broadly, according to Paul Davis and Katherine King at Islington Borough Council, the rise has been accredited to environmental concerns, the overcrowded and expensive public transport system, the drive for fitness, extra TfL funding and the fear inspired by the July 2005 bombings [4, 25]. Yet, while investment climbed to £24 million in 2006/7 and the cycle route network in London is set to reach 560 miles by 2010 (Woolcock, 2006), it pales in comparison to

cycling provision in many European cities. As a result, cycling has risen to the status of local and city-scale urban political cause, backed by varying appeals to issues as diverse as rights, morality, health, cost and choice.

While cycling is starting to court the attention of the Mayor with his latest decision to clamp down on “Lycra louts” for their renegade use of pavements and disinterest in red lights by introducing registration plates for bikes and £2,500 fines for not using bells; bike use has long been a pressing structural question for local borough councils, with Camden and Islington no exception. As summed up nicely by one *Guardian* journalist, “the eternal paradox of the bicycle seems to be that at the very time it is most popular, it is destined also to be at its most unpopular” (Seaton, 2006). Now more than ever, this “militant” means of transport [25], characterised in London by the “siege mentality” of its proponents [31] is being promoted as a lifestyle choice, money saver, means of weight loss and route to better fitness.

Health was not an explicit concern of Good Going’s original messaging, but TfL have modified this in line with Mayor’s revised role in meeting the PSA physical activity targets. Its 2006 cycling promotion posters proclaim “Extend your life. Cycle” with the ambiguous strapline “You’re better off by bike” (figure 39), hinting towards the manifold associations of “better” in health terms and beyond. It is notable that research conducted for TfL showed a marked change in the public perception of this messaging, with the proportion of those associating the adverts with health and fitness climbing from 22% in September 2005 to 41% in April 2006 (Adrian Bell, TfL, private communication, 2006). Acting alongside TfL’s pan-London promotional strategy, Camden and Islington put lifestyle messaging to work designing concrete local infrastructural improvements enabling people to walk and cycle easily and safely and then using the rhetoric of health benefits to justify such expenditure.

Figure 39 - Transport for London cycling promotion campaign poster summer 2006 (TfL, 2006)



As set out in chapter four, obesity has reopened the debate on the effect of the built environment on health, with government agencies such as CABI working on projects looking at the relationship between the quality and quantity of open space and physical activity rates [14, 39]. This work, as Bruce McVean points out, is timely, as the National Institute of Clinical Excellence (NICE) prepares to release its physical activity guidelines, which will also recommend certain environmental modifications to enable physical activity and especially walking and cycling [39]. Highlighting the importance of the built environment, TfL and the Central London Partnership (CLP) also recently commissioned design firm AIP to research a new “wayfaring” (or map and signage) system for central London to increase active travel under the project name *Legible London* [40]. Furthermore, research findings linking the built form to instrumental rather than recreational activity such as those discussed in chapter four are now also being used to modernise the agendas of non-profits such as Sustrans, Living Streets and the Ramblers Association towards more marketable and current societal concerns.

Local provision of cycling routes, wider pavements, signage indicating walking times (figure 40), Clearzones (urban redesign to address air quality and congestion), healthy travel initiatives (partnerships with local business to ensure the provision of, for example, cycle parking and showers) and school schemes such as ‘Walk on Wednesdays’ are now, as Katherine King suggests, being combined with work undertaken by PCTs to try and help meet physical activity PSA targets [25]. The idea is that getting people to walk and cycle as part of their daily commute fits the assertion that “thirty minutes of moderate walking a day will only be achieved by helping people build activity into their daily lives” (CMO, 2002: 43). In the case of walking, Camden has been heavily promoting infrastructural investments such as ‘Clearzone’¹² improvements in Holborn through its “Urban Gym” brand, advertising the idea that the local

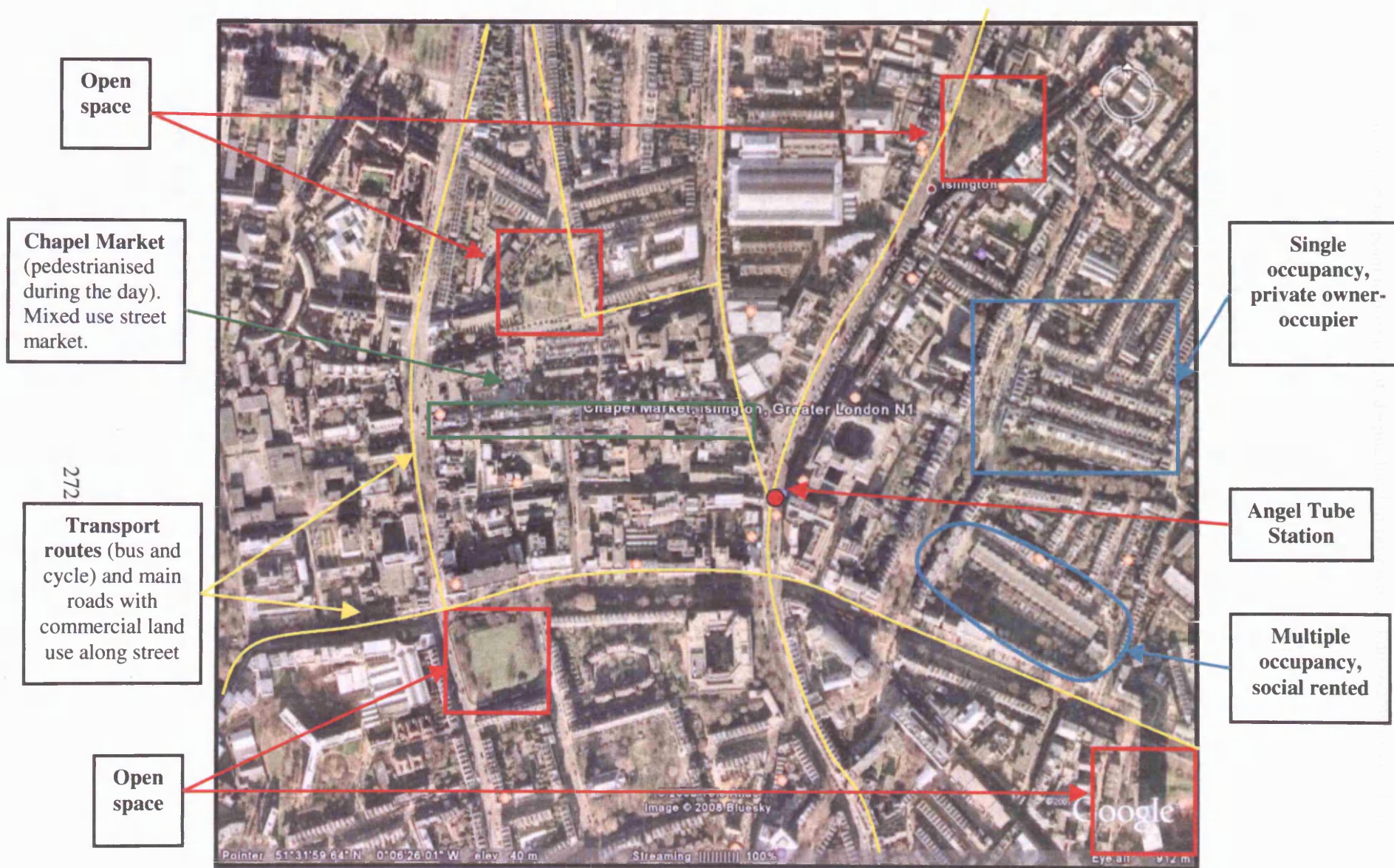
¹² Clearzones are designated traffic reduction areas, where it is hoped that the associated reduction in pollution, noise and improved safety and cleanliness will inject vitality and streetlife into the area by encouraging walking, socialising and lingering (Paul David, personal communication).

environment is as conducive to exercise as the gym, with the benefit, attractive to many Londoners, that it is free.

However, moving from policy goals to reality, when interviewees were asked to identify particular traits of the built environment in either borough that might either increase or decrease the risk of obesity, no specific examples were forthcoming. Indeed, the attention of interviewees to general features or typologies that might make an environment 'good' or 'bad' has had the effect of eliminating any attempt to examine the entanglements of the social and spatial in the boroughs at a variety of scales. For example, turning again to the photo of Islington's Chapel Market (figure 35), certain features of the environment are worth highlighting for their possible positive influence on health, in the sense of both making activity possible and supporting this choice by facilitating the decision making process.

The immediate street scene captured in the photo is vivacious, ethnically mixed, pedestrianised, has convenient and affordable public transport routes and the market provides a variety of fruit and vegetable stalls at competitive prices that generate sociality as much the capacity for better diets. As shown on the satellite image (figure 40), the surrounding area is mixed use (combining residential, commercial and institutional purposes and open space), densely populated, with a variety of street sizes and degrees of traffic density and adequate provision of pavements shielded from traffic (and therefore giving the impression of safety) by parked cars. These features mean that not only is walking possible and practical in the neighbourhood, but it is also desirable due to the attractions offered by dense, mixed-use areas along routes. Such concern with the materiality of neighbourhoods and the uses these may inspire should be of central concern to those implementing policy, but all too frequently, as interviews demonstrated, are forgotten in the rush to generate codes of conduct, best practice or 'one size fits all' models.

Figure 40- Satellite imagery of Chapel Market, Islington (Google Earth)



An interesting point to note is that, despite local infrastructural improvements now being sold by London borough councils and non-profits as a public health good to help meet obesity-related PSA targets, the idea of risk groups within this is poorly developed, with promotion to induce behaviour change just targeting general commuters. When asked whether such measures might ameliorate health and social inequalities in Islington, Katherine King dismissed the relevance of the issue by replying that “hard to reach” groups were the domain of their “cultural team” [25]. However, with the DfT angling to change behaviour through making the concept of transport personally resonant, both Good Going and TfL are moving into a more targeted marketing phase, segmenting its target audience to personalise its messaging [31]. This signals an increased sophistication of the conflation of transport and health through the medium of obesity prevention as audience segmentation could theoretically be used to highlight need and address residual inequalities in the provision of factors that contribute to the ability to exercise informed choice (e.g. open space and safe, well lit streets) across the boroughs.

Active travel and its reliance on structural capacity problematises the overgeneralisation inherent in the assertion that “New Labour’s citizens are moralised, choice-making, self-directing subjects” (Clarke, 2005: 451) who are expected to play an active role in reducing their own cost to and burden on the state. Furthermore, it begs the question posed by Des de Moor from the Ramblers Association: “is health really a motivating factor? Maybe enjoyment is the bigger draw?” [19]. The assumption that underlines all three of these examples is that health is a sufficient motivator for behaviour change, but given that health touches on far wider issues of wellbeing and quality of life, these factors might play a more significant, albeit, largely unquantifiable role. As a result, the degree to which active travel will “support people in making better choices for their health” (DH, 2004:2) is open to question, not least as little definitive evidence exists from London or elsewhere linking active travel promotion to uptake rates or health

outcomes. However, despite the criticisms, as part of a broad suite of approaches, active travel in London has great potential to catalyse infrastructural improvement and investment and encourage citizens to make use of these for their own good.

Figure 41 - Signage for walkers in central London (photo, author's own)



7.7 Conclusion

This chapter has taken chapter five's analysis of obesity's emergence as a public health policy concern in the UK over the past 25 years and situated it within three broad empirical examples of ongoing obesity prevention measures in London and the boroughs

of Camden and Islington. Measures such as the *LFS*, the NSMC's *small change, big difference* campaign, *Everyday Sport* and active travel promotion in central London demonstrate the range of narratives of informed choice being enacted by governmental and non-governmental stakeholders in putting the aims and objectives of *Choosing Health* into practice. *Choosing Health* identifies the government's role as one of enabling and creating the conditions whereby positive lifestyle choices are rendered easier for the majority. However, the examples demonstrate that enabling is often a far more difficult and contentious task than informing in a city in which disparities are marked at even the finest geographic scale. The three examples explored in this chapter are united by a common devotion to the idea of communicating information and, in the process of doing this, demonstrate the extent to which the rhetoric of choice is underpinned by the need to *sell* or market health to a public viewed as essentially malleable, but whose capacity for scepticism and resistance to change is acknowledged but repeatedly defined as a limit to governance.

As suggested in chapter three, the processes of problematisation condition possible solutions. This is true of obesity, where the 'Choice Agenda' renders it an individual problem rather than one of inequalities of access and availability, thereby favouring communication campaigns over grassroots, local efforts to intervene upon the obesogenic environment. As Maggie Barker asserts, "it goes with this individualist approach in public health at the moment" and this "mindset" [26] then inevitably guides the solutions proffered as plausible and workable. As a result, she continues, "that is why obesity is something you *choose*" (*Ibid*, my emphasis). This statement insinuates that framing obesity as a public health problem through the lens of informed choice gives the impression that the public has (or at least should have) active control over their health outcomes. As a consequence, this legitimises not only victim blaming, but also viewing the built environment as distinct from and irrelevant to issues of choice. The discursive

foundation of *Choosing Health* is thus, at root, symptomatic of the broader tensions within neo-liberal governance. This is especially evident in the way it renders choice both a problem and a solution to obesity, while often neglecting to unpack the fundamental tenets of the concept itself in relation to an increasing marketisation of public policy and the “new” public health’s concern with the effect of the built environment.

London seems to confound public health through its fragmentary morphology and complex mosaic of incomes, lifestyles, cultures and, therefore, health outcomes. Inequalities, as this chapter has asserted, are marked at almost all scales: borough, ward and even at the street level. As Katie Williams at Camden PCT suggests, this patterning complicates the pursuit of public health objectives, as the very large differences at small spatial scales mean that targeting, for example, specific wards marked as high risk by virtue of poverty status will not necessarily achieve the most equitable and efficient outcomes [8]. Furthermore, the availability of health survey data at the variety of fine spatial scales needed to really accurately delineate risk is either absent or its analysis is outside the remit of PCTs. Despite the refrain from stakeholders across all three examples that obesity is complex, responsibility to act is multilayered and progress will not be made until efforts are coordinated, information is shared and change monitored; very few had baseline data against which to measure progress toward the PSA targets. In Camden, for example, unknown to the Obesity Task Force, interviewee Kate Jones was undertaking some fine-scale GIS modelling of socio-economic and health indicators in the borough, but there was no movement to actively use this, relying instead on the well-worn health education paradigm [27].

All three empirical examples discussed are inextricable from the growing strength of the Mayor’s responsibilities for and power over health. The recent call for Health Strategies to 2012 make tackling obesity even more pressing. Moreover, the Mayor’s health agenda

is being further reinforced through its elision with other objectives such as economic vitality, social cohesion and the vibrancy of public space. Consequently, measures to address obesity in London are inextricable from broader Mayoral policies to invest in urban regeneration and infrastructural improvement, promote civic pride and create a global image of a city with a high quality of life. These empirical examples demonstrate clearly that health is no longer compartmentalised at a policy level, but is rather edging into almost every domain of government. Yet, this increasing porosity of policy agendas with respect to health still seems to have escaped the attention of public health, whose practitioners were repeatedly criticised by those within other government departments for being, in the words of Katherine King, “difficult to work with” as “they see their agenda as the most important thing” [25]. Beyond the tensions within government, health is also transforming a growing host of non-governmental organisations who are drawing on this powerful discursive currency to update and promote their own agendas and attract funding. “Supporting informed choice” to prevent obesity is thus an ambitious task, not least as the choices and information available are now coming from a greater number of internally contested directions than ever before.

It is interesting that Bryony Butland, the lead investigator of the DTI *Foresight* project on obesity, places the possibility of choice in doubt, critiques that will be taken up in chapter nine. As she states, “I question the existence of choice in this issue as people have an inflated sense of what government can do” [36]. In the UK, the promise of the NHS means that the expectation of government responsibility for public health is conflated with a public aversion to ‘Nanny Statist’ over-proscription. The fine line between constructing an environment in which healthy choices are inescapable and fostering freedom of choice (ironically the root of the commodified diversity in the *LFS*) is thus one of the central conceptual tensions besetting obesity prevention in London. This geographic specificity therefore demands a counterpoint. The intersection between

the government and public in matters of health assumes a markedly different form in the US, not least as the public, government, healthcare system, non-governmental actors, built form and culture are themselves very different to the UK. Thus, chapter eight will extend the discussions of chapter six by exploring how, in contrast to the UK, public health discourse in the US has been framed in the language of “personal responsibility”. Using three examples of obesity prevention measures drawn from fieldwork in Austin, the chapter will then explore the conceptual tensions this poses to those trying to translate policy into practice.

Chapter Eight: Personal responsibility and the “fit city” in Austin

One of the things I talk a lot about is the need to really work on cultural change in America to encourage a culture of personal responsibility, to encourage people to be responsible for the decisions they make in life... We are responsible for our own health. By making the right choices, we can make the right choice for our future. By making healthy choices we can do the right things for our future.

(President Bush, Speech at the Lakewest YMCA, Dallas, Texas, July 2003)

8.1 Introduction

In 2003, President George W. Bush launched his “President’s Challenge” under the guidance of his assembled President’s Council on Physical Fitness, a new initiative as part of the long-standing *Healthier US* scheme. His launch speech, at the Lakewest YMCA in Dallas, was prescient. Not only did he introduce his assembled crowd of expert advisors, but he also laid out his own view of the US “obesity epidemic” and how it might best be addressed. Just as the previous chapter took the principles of informed choice and “making healthy choices easier” set out in *Choosing Health* as its point of departure, so this chapter will explore the notion of encouraging “a culture of personal responsibility” so that “people are responsible for the decisions they make in life” using three broad empirical examples drawn from interviews in Austin before drawing together the two case studies in the discussion chapter which follows.

The difference between “making healthy choices easier” and encouraging “a culture of personal responsibility” highlights the appropriate and expected role of the individual and state in both preventing and ameliorating obesity’s present and future ramifications. Both epistemologies encapsulate a particular biopolitical reading, where citizens constitute a “stakeholder society” (Peterson, 2003: 194). In this vision, “citizens are increasingly expected, as a condition of access to health care services, to play their role in minimising their contribution to healthcare costs by becoming more responsible healthcare consumers and adopting appropriate practices of prevention” (*ibid.* p.195). As

Rose and Novas aver, “activism and responsibility have now become not only desirable but virtually obligatory – part of the obligation of the active biological citizen to his or her life through acts of calculation and choice” (2005, 451). In the US, private insurance-based healthcare provision means a very different climate of public opinion concerning individual rights to treatment and who should bear the wider costs of poor health. For those with no insurance, unlike in the UK where the NHS carries the complete burden of cost, treatment is a question of individual capacity to pay. Moreover, with individual insurance premiums not just a reflection of personal risk status, but also the wider burden placed upon resources in local healthcare catchment areas, other people’s health behaviours are afforded a direct and quantifiable personal cost. Consequently, both “calculation” and “choice” in the context of personal responsibility take on very different meanings in Austin to those attained within the context of the NHS’ promise of universal and free healthcare.

This chapter draws on empirical research on a wide array of governmental and non-governmental obesity prevention programmes in Austin and stakeholder opinions on obesity. Mirroring the last, this chapter will therefore first depict Austin as an urban space, focussing on its demographic composition, economy, political culture and society. It will then briefly explore the notion of obesity as a matter of personal responsibility, drawing on both theoretical literature and interview material. This will be followed by a detailed discussion of the three empirical examples to examine the tensions inherent in improving health within the doctrine of personal responsibility. As in London, the examples chosen intentionally reflect certain particularities concerning the unfolding of obesity prevention and its associated climate of public opinion in Austin. First, the concept of the “Hispanic Paradox” (Suarez-Orozco and Paez, 2002) will be analysed in order to contextualise examples of the ways in which race and public health function in a city which, like many in the US, exhibits visible residential segregation. Second, as a

counterpoint to the discussion of the *small change, big difference* campaign in chapter seven, the CDC-funded *Steps to a Healthier Austin's* 'i thrive' campaign will be analysed, with particular reference to its delineation of a target audience and intervention area. Third, the instrumental use and marketing of Austin's divided space is examined in relation to the city's aspirations to become the nation's 'fittest'. These three examples will then be used as the basis for reconsidering the concept of personal responsibility and the plausibility of attaining such a culture in a heterogeneous urban space in which diversity is both lauded and the source of local political contestation.

8.2 Austin, Texas

Austin, the state capital of Texas, is located in Travis and Williamson counties and in 2003, had a population of 672,011 (Census Bureau, 2005) with a 2.1% annual growth rate. The area comprises one of the most economically prosperous and fastest-growing urban centres in the United States with both Motorola and Dell calling it home (Florida, 2005: 79). The University of Texas at Austin (UT) is one of the country's largest, and combined with Concordia University and Austin Community College makes the city an important regional centre of education. Aside from being a high-tech magnet, the city is also home to a liberal sentiment not unlike that which continues to define Berkeley, California. Staunchly Democrat in a Republican state, Austin is often referred to as "an island of liberalism in a sea of fundamentalism" by those seeking to highlight that Texas' Republican image is not universally applicable. As if to reinforce this, Austin is central to the nation's live music scene, hosting, among other events, the annual South by South West (SXSW) festival in March. The moniker "Keep Austin Weird" serves as the city's unofficial slogan after being graffitied on a wall near UT and underscores the population's dedication to keeping independent traders in business and a culture of outdoor living. Pertinent to issues of health, as this chapter will later explore, the liberal

politics also translate into a high-earning city with average per capita incomes of \$25,883 in 2000, over \$6,000 more than the Texas average.

One of the highlights of the city is, without doubt, Town Lake to the south of downtown. Essentially a stretch of the Colorado River, Town Lake Metropolitan Park covers 509 acres and serves as the focal point for other major city parks, including Zilker Park (351 acres), Barton Creek Park (1,022 acres) and Walter E. Long Metropolitan Park (3,802 acres) (City of Austin Parks and Recreation Department, 2006). The city's Parks and Recreation Department oversees a total of 16,682 acres of land, comprising 206 parks and 26 greenbelts (*ibid*), making it little surprise that the residents of the city Lance Armstrong calls home take great pride in the quality of its open space and the opportunities for recreation that this affords.

While green spaces may characterize the city in one sense, Austin is also (in)famous for its road system and is the only US city to be served by just one interstate. The two-tiered I-35 was opened in 1962 and runs from Laredo on the Mexican border to Duluth, Minnesota. The highway bisects Austin, skirting just to the east of downtown, making it an unavoidable obstacle in the everyday life of Austinites. More than being a physical barrier, eyesore and perpetual source of frustration due to a constantly high traffic load, the "scar of the city" as the *Austin Chronicle* named it, also marks the boundary between Austin and East Austin beyond. East Austin is (officially) the area delineated by Town Lake to the south, Airport Boulevard to the East and I-35 to the West, comprising neighbourhoods including Central East Austin and Crestwood (identified within Figure 41). However, residents frequently refer to any area east of the I-35 as East Austin, a sweeping term delineating, on the one hand, racial and socioeconomic difference, but on the other, a part of the city in the early stages of gentrification and seen as an affordable place to get an authentic burrito.

City of Austin

Neighborhood Planning Areas

- Adopted Neighborhood Plan & Zoning
- Neighborhood Plan in Progress
- Future Planning Areas
- Other Cities

Note: Downtown NPA will not be effective until October 27, 2005

283

African Americans \$88,300, reflecting both purchasing power and place of residence. The same pattern is replicated when the percentage of households classified as living in poverty is considered. In 2000, 9.5% of white families in Travis County were living in poverty, while 19.5% of Hispanics and 17.6% of African Americans fell into the category. While the proportion of Hispanic families living in poverty is over twice that of whites, such figures are confounded by income disparities. Average per capita white income in Travis County was \$30,636 in 2000, over twice that of Hispanics at \$13,733 and far exceeding African Americans at \$17,631. Thus, Hispanics, who compose 28.2% of the Travis County population and 30.5% of Austin's population, have significantly lower incomes, live in poorer neighbourhoods (as defined by property prices) and are more likely to live in poverty than their white counterparts.

When census data is segmented by zip code - 787 zips (City of Austin) to the West and East of the I-35 - a spatial pattern of deprivation and privilege emerges. For example, while Austin residents have a per capita income of \$34,563, East Austin residents earn on average \$17,398 (Figure 42). This disparity also reflects the fact that in Austin, 77% of residents are white, 13% Hispanic and 3% black, while, by contrast on the East Side, 39% are white, 41% Hispanic and 14% black (figure 43). This minority-dominated area is one where 43% of residents speak a language other than English at home (figure 44) and 14% of families live in poverty— a proportion over three times that of Austin (Figure 45). It is also notable that in East Austin, only 44% of Hispanics have health insurance, while among white residents the figure leaps to 83% (Austin/ Travis County Health and Human Services Department, 2005). The higher rate of uninsured among Hispanics and their relative deprivation also means that Texas has the highest rate of uninsured in the nation, making 'minority health' of great political concern given the potential future fiscal burden it threatens to place on the state (Denavas-Walt *et al*, 2005).

These risks are magnified by the fact that Texas also has the highest rate of “food insecurity” in the country at 16.4%. Defined as the inability to access enough food for “active healthy lives for all household members at all times of the year” (Nord *et al*, 2005), rates are highest amongst those living in poverty, African Americans and Hispanics. The USDA’s report also shows that weekly average household spending on food shows marked racial differences, with whites spending \$41.67 and lower income black and Hispanic families limited to \$32.50. When combined with the residential segregation of the city, these figures demonstrate the marked racial divides that exist between the ability to afford the fundamental constituents of a healthy diet.

That socioeconomic and racial inequalities (or disparities) exist can be taken as read, the far more pressing question being how, with the addition of health survey data explored later in this chapter, they are transformed from a statistical occurrence to a public health target. Unlike the UK, the US Census does not record self-reported health, therefore findings from the Behavioural Risk Factor Surveillance System (BRFSS) in Austin will be examined later in this work. The framing of health disparities and thus areas and communities ‘at risk’ within discourses of personal responsibility adds a potent moral filter to public health, especially when encouraging citizens to make the “right” choices.

Figure 43 - Austin and East Austin Income Levels (US Census, 2001)

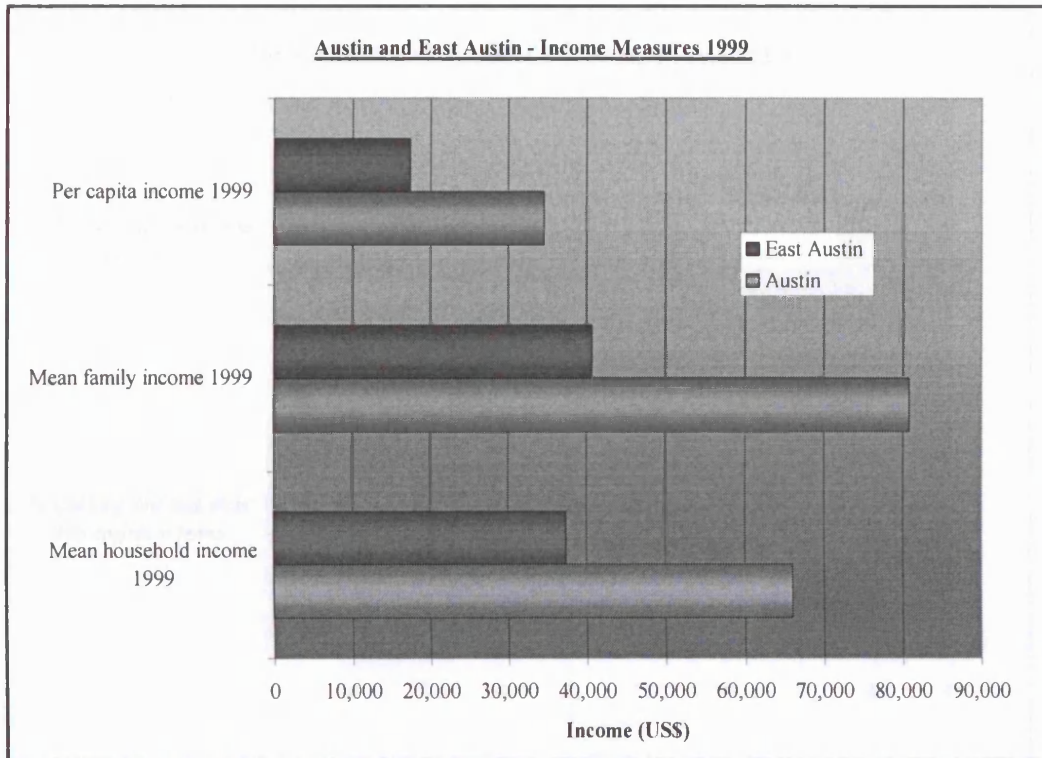


Figure 44 - Austin and East Austin racial composition (US Census, 2001)

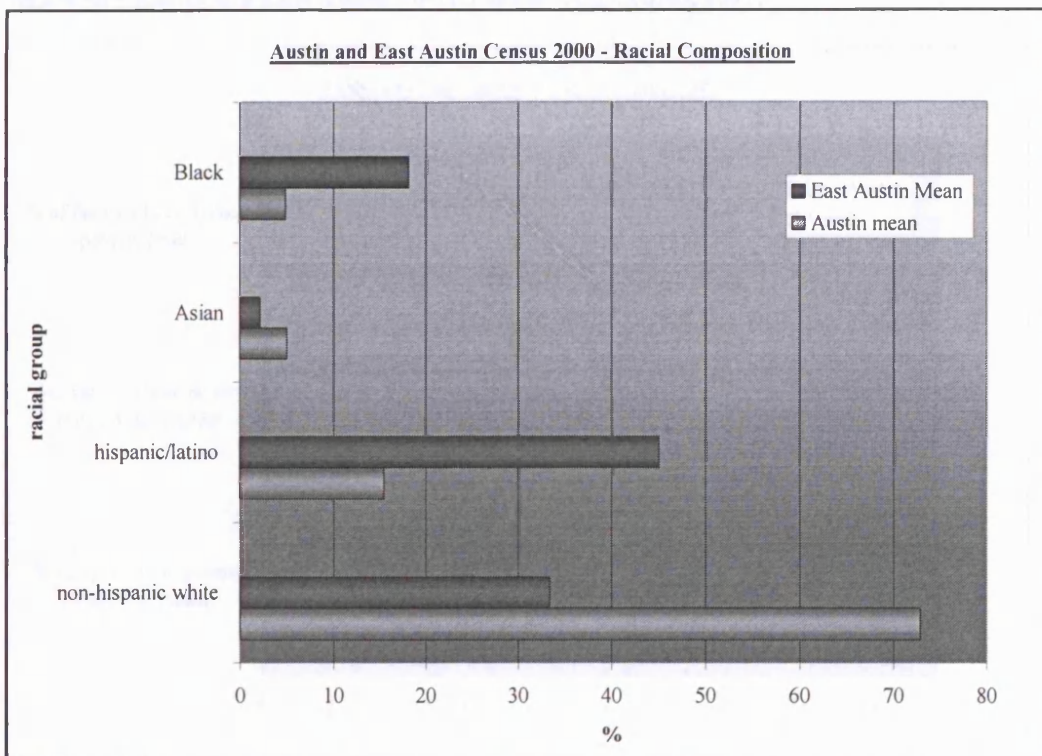


Figure 45 - Austin and East Austin English language use (US Census, 2001)

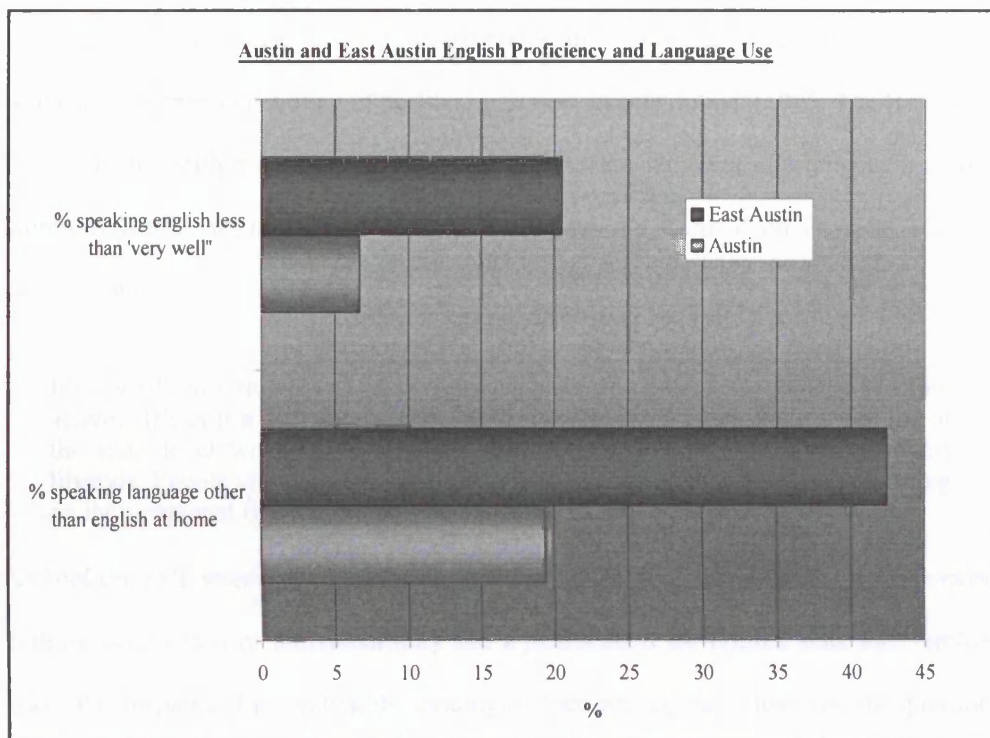
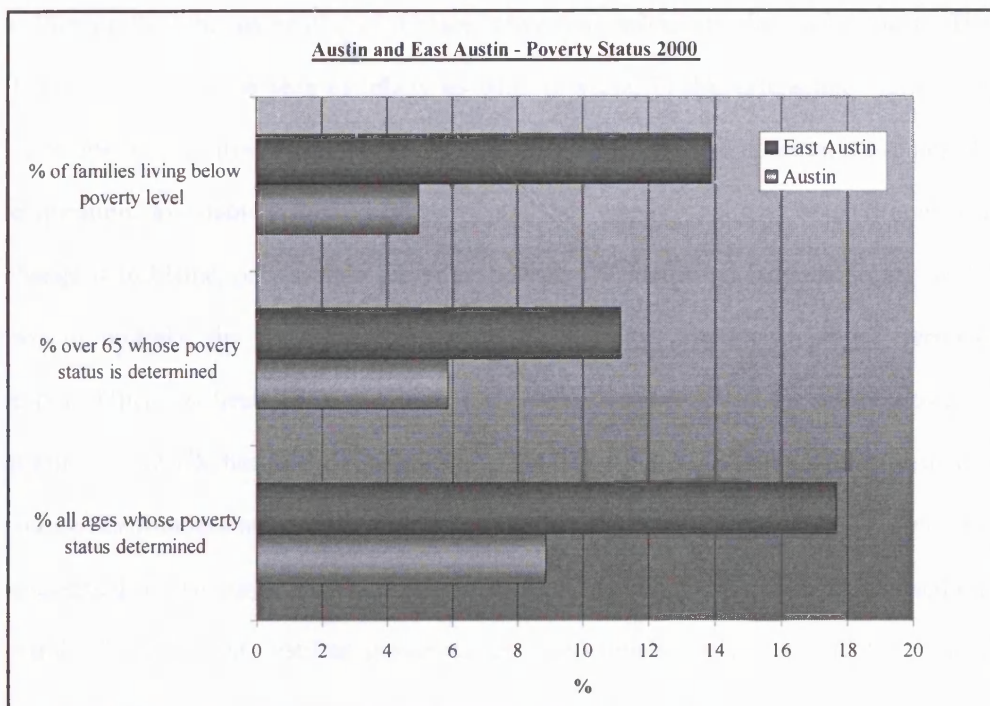


Figure 46 - Austin and East Austin Poverty Status (US Census, 2001)



8.3 Creating a personal responsibility culture

It increasingly appears that “the dominant representation of health in contemporary health promotion has been the notion of health as personal responsibility” (1995: 72). However, when situated within a city, such conceptual ideas are far from unproblematic as the words of Heidi McConnell, advisor to the Governor’s Council on Physical Fitness, demonstrate:

It’s one of those things you can’t really legislate, you can’t tell people to be more active...It’s still a question of personal responsibility. I guess there’s nothing at the state level we could have done to change that person’s mind about his lifestyle. People view any intervention by government, at any level, as infringing on their personal rights.. [80]

As McConnell’s words suggest, the expectation of personal responsibility incorporates both an assumption of individual duty and a justification for limited state intervention under the auspices of protecting the sanctity of “personal rights”. However, the question of where the duty to act lies is, it should be noted, inextricable from far broader questions concerning the aetiology of obesity (see chapter four). As Wilkinson asserts, “health and wellness reflect the nature of the interface between ourselves and the environment...The illness we get may be seen as telling us what is wrong in that interaction” (2005: 8). Since obesity prevalence has really only escalated in the past two decades, it is plausible to question, as chapters three and four examined, whether cultural or environmental change is to blame, or if certain places perpetuate a fundamental incompatibility of the two to provoke the manifold risk factors for obesity. The discourse of personal responsibility for health is not new, but its latest deployment in the crusade against obesity in the US has become a vantage point for monitoring and judging particular culture/environment interactions and their outcomes. Personal responsibility can thus be understood in two ways: a necessary constituent of an effective neo-liberal state and the moral discourse that justifies governmental intervention upon this. If the former

represents the expectation of government, then the latter may be thought of as the judgement of how well this has been met. These two ideas will be explored in turn.

Personal responsibility emerged as a government strategy in the 1970s with the adoption of Reaganite neo-liberalism. Budget cutting necessitated by the \$60 billion debt accrued under the leadership of Jimmy Carter (Garrett, 2000) meant that between 1981 and 1982, Reagan cut public spending from \$1.9 billion to \$1.2 billion, a move justified and underpinned by the “belief that open, competitive and unregulated markets, liberated from all forms of state interference represent the optimal mechanism for economic development” (Brenner and Theodore, 2003: 350). Just as markets should be free from state interference, so too should citizens be expected to behave in a way that would optimise their health, free from unnecessary regulation. While the idea of personal responsibility for health has historically been a powerful discourse (see Olshinsky, 2005), this most recent manifestation has emerged as a response to the broader challenges and changes currently facing public health and society more widely.

The confluence of rising numbers of uninsured throughout the early 1980s, the high profile declaration that diet and exercise were risk factors for cancer and heart disease and the ‘War on Drugs’ precipitated by rising crack cocaine use among African Americans all conspired to transform personal responsibility from an underlying pragmatic assumption of the neo-liberal model to an outspoken governmental expectation, the need for which was expressly reinforced by health promotion literature (Garrett, 2000, Lupton, 1995). Indeed, when then Secretary of Health and Human Services, Louis Sullivan, stated that “responsible and enlightened behaviour by each and every individual truly is the key to good health” (DHHS, 1990: v; cited in Guttman and Ressler, 2001: 117), he was making an important assertion regarding the necessary preconditions for an efficient neo-liberal public health system.

Second, personal responsibility is a rhetorical tool that is frequently deployed through health promotion as a justification for intervention. The discourse of personal responsibility, just like the rhetoric of informed choice, functions as a tool of government to subtly coerce self-monitoring and is best understood within the specific geographic and political contexts of its deployment. In the case of obesity in the US, appeals to personal responsibility function far more effectively as a means of evoking behaviour change than they might do in the UK due to the structure of the healthcare system. In the UK, individuals do not directly bear the rising costs of obesity as they have no control over National Insurance contributions and do not have to contribute to the cost of treatments covered by the NHS. There is therefore little incentive for people to adopt healthy behaviours to reduce the cost the condition poses to the state (see NAO report, 2001). The economic cost borne by an obese individual in the UK does not differ from someone who is non-obese. Therefore utilitarian arguments of an individual's personal responsibility to reduce the burden on state services do not function to effectively incentivise individual change.

By contrast, since insurance premiums in the US are calculated on the basis of individual risk, the cost of being obese is borne directly if not by the individual themselves, then by their employers. With insurance receipts of employers rising, as a result both of obesity and more general rises in healthcare costs, there are clear motives to impel employees to adopt healthy behaviours through a variety of means (Finklestein *et al*, 2005). Moreover, even when insurance premiums are “pooled”, higher population-scale rates of obesity prevalence result in higher overall premiums, thereby assigning individual risk-taking a population-wide cost. Although individual accountability with respect to the state and fellow citizens differs markedly between the two countries, public health practitioners are all acutely aware of the current and future absorption of tax revenue by obesity. Indeed this is especially prescient given that, as Kim Bandalier of the Texas Department

of Health (TDH) adds, “[they] need to make a business case for preventing obesity” [55]. Casting health in fiscal terms permits a culture of blame in which those deemed ‘high risk’ are held responsible for the burden (then carried by more responsible citizens) on Medicare, Medicaid, rising insurance premiums and a greater proportion of tax dollars funding treatment rather than schools or other essential services. The rest of this chapter will build from these discussions of personal responsibility through three broad domains of obesity prevention in the city: the Hispanic Paradox and targeted intervention, social marketing and Austin’s drive to become the nation’s fittest city.

8.4 Explicating the “Hispanic Paradox” and targeted intervention

The Hispanic urban experience has been written about extensively, with Mike Davis’ *Magical Urbanism* (2000) providing one of the most compelling sociological accounts of the creative interplay of Hispanic culture and the urban fabric. His discussion of the rapid growth of the Hispanic population - principally in the south western states of New Mexico, Texas, Nevada and Arizona, and California – teases out the cultural tensions generated by the rapid demographic changes occurring across the US. By 2050 Latinos will compose 25% of the population (Suarez-Orozco and Paez, 2002: 1) and, although becoming more dispersed across the US, Texas and California are likely to continue to house the largest share. Hispanic health is thus already a major public health policy concern at a national scale and is simply inescapable in Austin both in discursive terms and in more pragmatic attempts to put policy into practice. This section therefore starts from the assertion that the category of race is a “critical tool in the working of the state apparatus” (Suarez-Orozco and Paez, 2002: 4) and even more so in Texas.

Understanding how and why health status varies across racial groups is essential to forward policy planning and resource allocation, especially given that the younger average age of Hispanics (28 years versus 35.5 years for Anglos) combined with above-average fertility rates means that the composition of the Texas population is becoming

ever more Hispanic (Murdock *et al*, 2002). The significance of Hispanic health is formalised through the state surveillance structure in the form of the CDC's dedicated Hispanic Health and Nutrition Examination Survey (HHANES) that builds an epidemiological picture of health risks, outcomes and behaviours. The large number of Medicaid-eligible Hispanics also means that the present and projected health of this population group is of crucial importance to federal and state budgets (see chapter six) - an idea especially relevant to attempts to reduce the prevalence and economic burden of chronic disease - and thus has clear resonance with obesity.

The 'Hispanic Paradox' is an epidemiological anomaly in which the assumptions of the socio-economic gradient model of health (that poverty is a risk factor for poor health) is turned on its head, problematising some of the founding assumptions guiding the practice of public health. In brief, the paradox, first proposed by Teller and Clyburn (1974) emerges from the fact that "although Latino populations may generally be described as low income and low education with little access to care, Latino health outcomes are generally far better than those of non-Hispanic whites" (Hayes-Bautista, in Suarez-Orozco and Paez, 2002: 222). The reality is that Hispanic age-adjusted death rates are 20% lower than non-Hispanic whites (Escarce *et al* in Tienda and Mitchell, 2006). In addition, the main causes of death for Hispanics are very different to those for whites, with mortality rates for heart disease, cancer and stroke far lower among Latinos, but significantly higher for diabetes (*ibid*). Various hypotheses have been set out to account for these results, with the healthy behaviours of Hispanic mothers, the effect of social capital, migration and reporting bias and a more abstract "cultural effect" among the possibilities (Palloni and Arias, 2004).

These epidemiological anomalies have resulted in widespread calls for a new, dedicated "Latino health research agenda" (Suarez-Orozco and Paez, 2002) to contest the normalisation of health with reference to a shrinking Anglo population. It is interesting

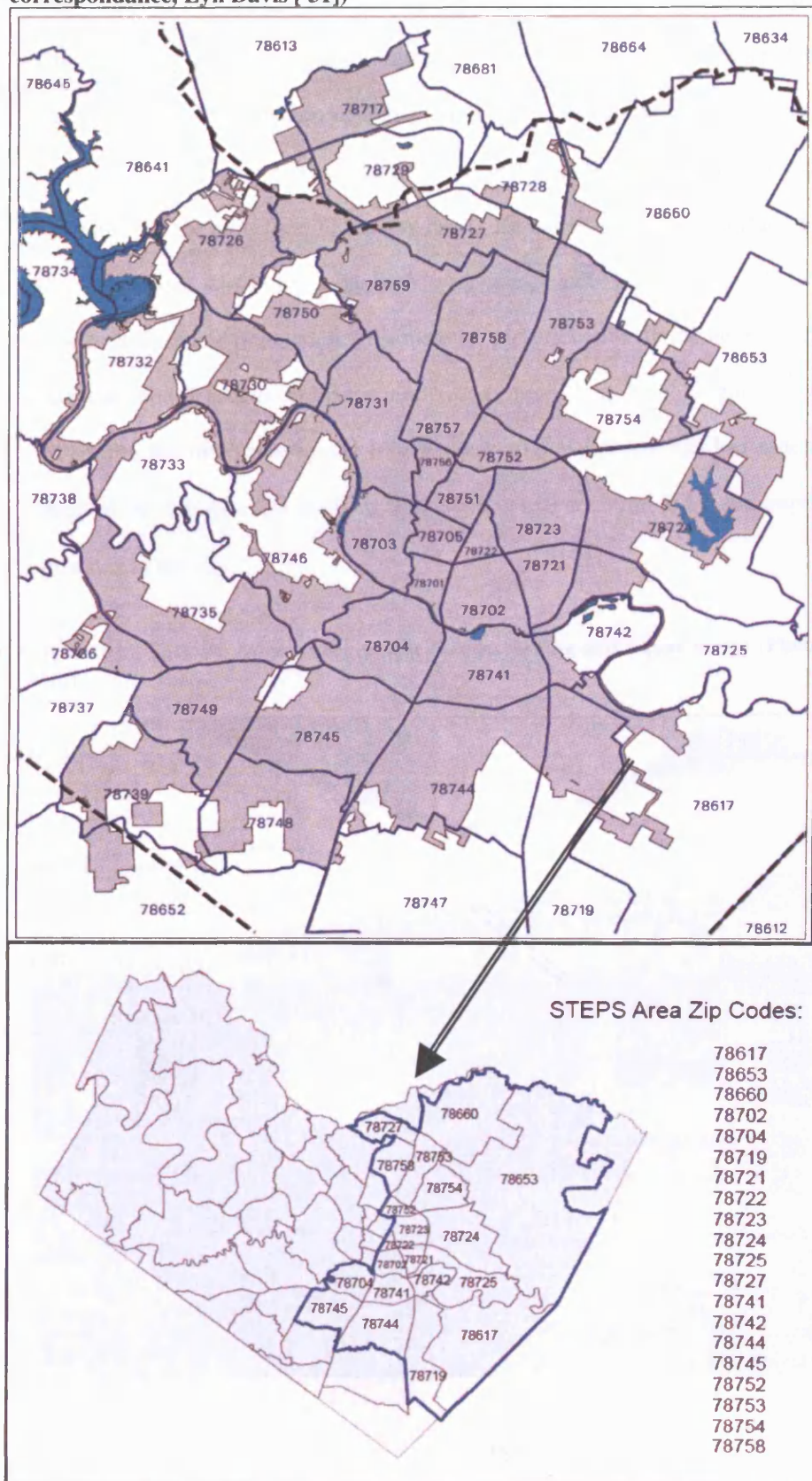
to note that even the BMI is normed on a white population - one of the main reasons why Asian nations such as Singapore have lowered the risk threshold for obesity to a BMI of 27.0. The NIH *Revitalization Act* (1993) was one of the first formal recognitions of the need for medical science to be based on a representative cross section of the US population (see Epstein, 2004; Hussein-Gambles *et al*, 2004) and this has been extended to demands for Hispanic-based statistical norms to reflect significant intra-ethnic variation between Hispanics. Yet despite such variations, minority health is most frequently classified as “health disparities”, marking it out as different to that of the Anglo population *tout court* and justifying policy calls to “reduce health disparities among racial and ethnic subgroups of the population” (NCHS, 1998: 23) through a wide variety of public health-led interventions.

Austin provides a good site to examine the additional complexity wrought by the Hispanic Paradox upon public health. The permeation of the socio-economic model of health into public health rationales means that minority status and poor health are often assumed to be synonymous, seemingly offering an automatic justification for intervening upon a population classified by ethnicity. Furthermore, the known causal relationship between obesity and Type-II diabetes means that higher incidences of diabetes among Hispanics are seen as a predictor of higher obesity rates at a population scale. This correlation means that, “when race is used as a variable in research, there is a tendency to assume that the results obtained are a manifestation of the biology of racial differences. Since this presupposition is seldom warranted, this kind of comparison may be taken to represent a subtle form of racism” (Osborne and Feit cited in Epstein, 2004: 197). While this work does not assert that that public health is racist, select interviews in Austin did demonstrate a palpable rather than “subtle” form of racism inherent within the methods, rationale and deployment of public health obesity interventions. For example, Heidi McConell’s belief that “Hispanic populations have been more prone to high levels of

obesity and that's related to diet and other things...you know, they don't exercise" [80] clearly shows the presumptions inherent within explanations of health status variations across the city. To explore these conceptual ideas in more detail, interview findings with the *Steps to a Healthier Austin* coalition partners will be examined in order to provide some context for the discussion of their social marketing programme in the next section.

In 2004, the CDC granted the *Steps to a Healthier Austin* \$2 million to be spread over 5 years. In basic terms, *Steps* delivers funding for community interventions to address the risk factors for obesity, diabetes and asthma with the overriding aim of reducing health disparities more generally. The *Steps* funding provides several full-time staff and facilitates coalition building among a broad range of stakeholders including the Parks and Recreation Department (PRD), Austin Independent School District, the American Heart, Lung and Cancer Associations, Texas Department of Health (TDH), Capital Metro, sports store RunTex, the YMCA, the Sustainable Food Center and several churches including the huge El Buen Samaritano complex. The *Steps* programme does not aim to effect change in physical activity uptake, healthy eating targets, obesity rates and diabetes across the entire city, but rather a 22 zip code intervention area in East Austin with 450,000 residents (figure 46).

Figure 47 – City zip codes with *Steps* intervention zip codes shown below (map, personal correspondence, Lyn Davis [51])



Intervention areas can be geographically delineated in a number of ways: risk factors for obesity such as low rates of fruit and vegetable consumption or sedentarism; poverty and ethnic minority population (based on the socio-economic model); or by epidemiological data (e.g. BMI). The creation of *Step's* intervention area in Austin is inextricable from both the assumptions and presumptions encapsulated with the Hispanic Paradox and the very nature of the built form of the city itself. Ed Gomez, leader of El Buen Samaritano church, criticises Austin for being both “very white” and “very segregated” [72] in spite of its large Hispanic population. This material and discursive divide between the affluent downtown and Westside and the minority-dominated ‘East Side’ (Figures 47 and 48) is carved into the landscape by the I-35 freeway (figure 49) and has had a demonstrable effect on the rationale and methods used by the *Steps* coalition to try and improve health outcomes in the city.

Figure 48 - East 6th Street, East Austin cheque cashing and liquor stores (Photo, author's own)

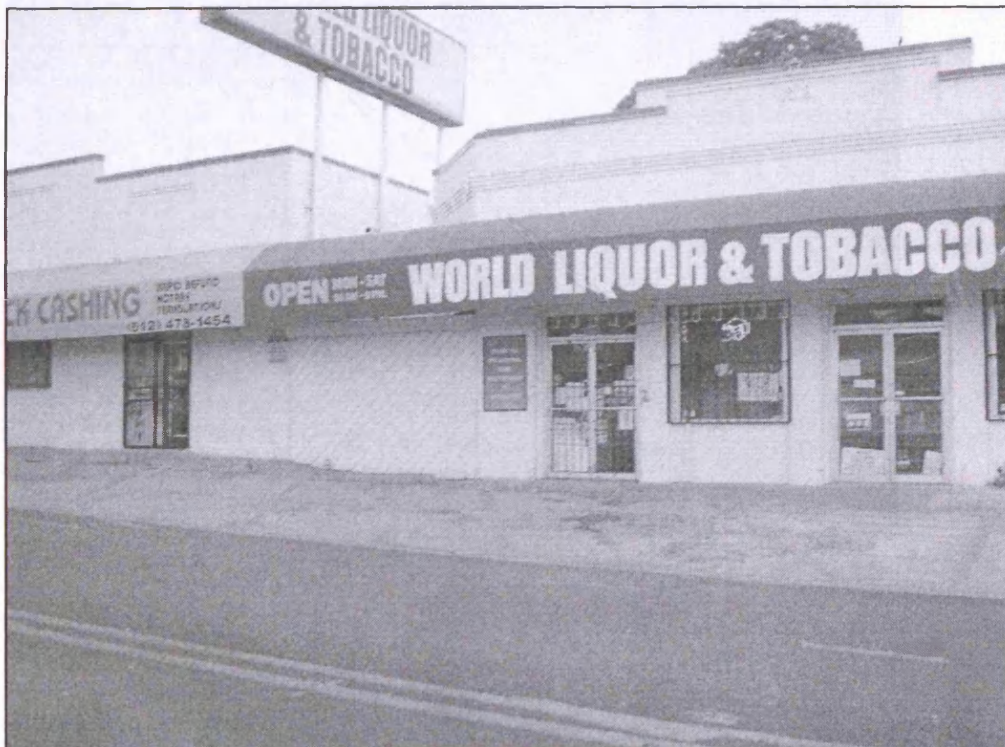


Figure 49 - East 6th Street looking towards downtown - dive bars (Photo, author's own)

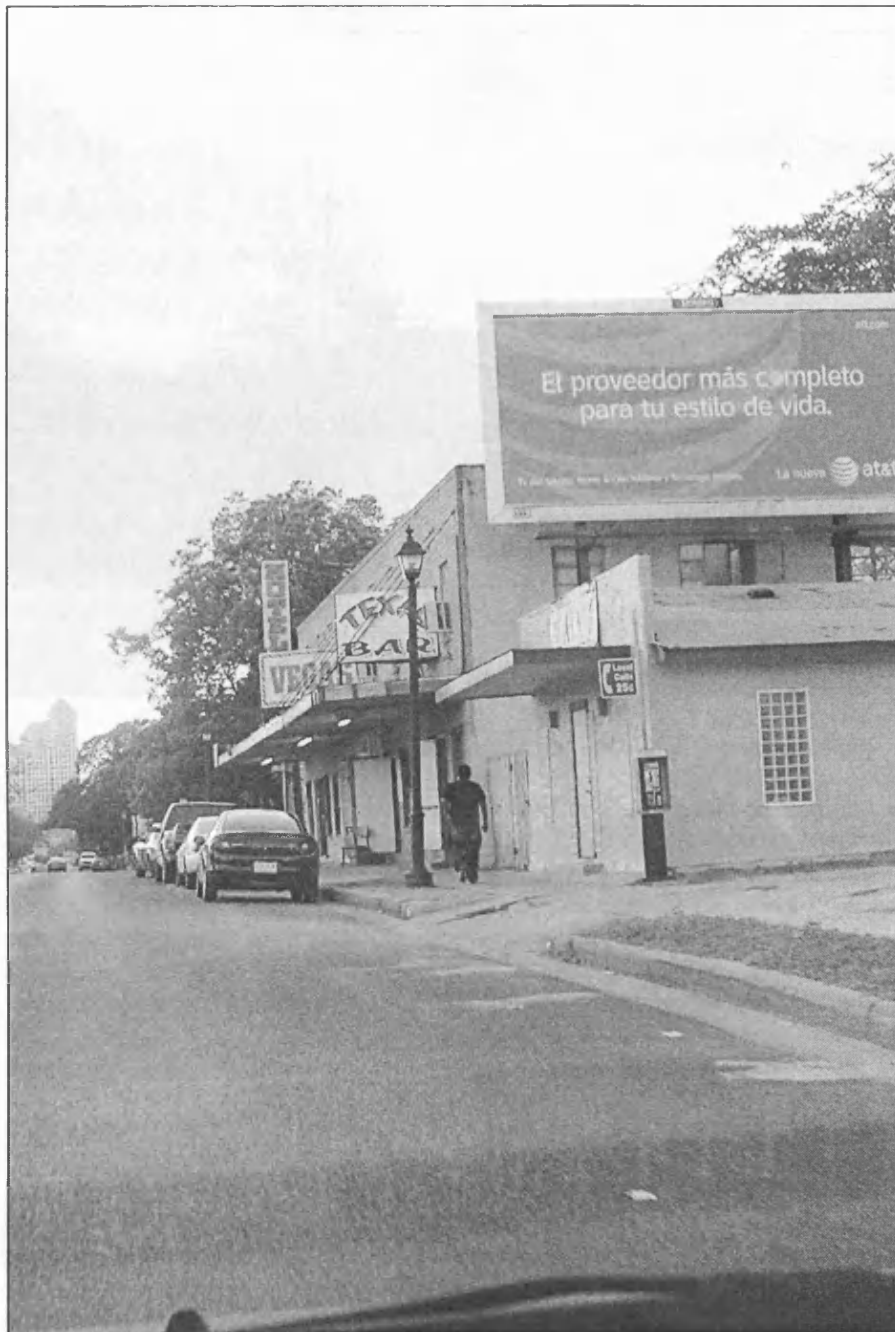
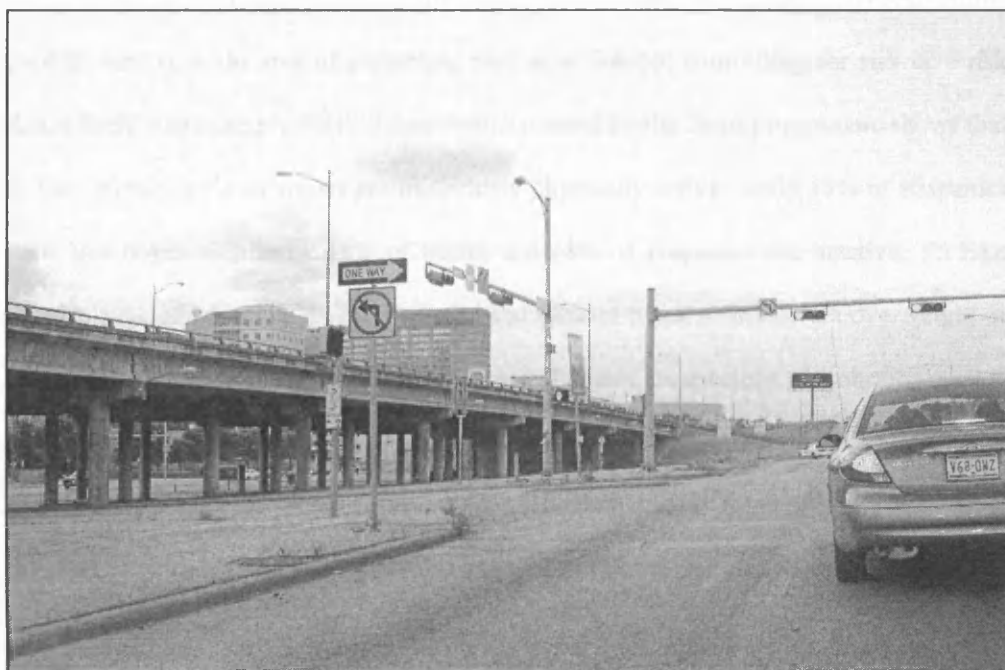


Figure 50 - I-35 freeway seen to the left of the photo. Shot captured in East Austin heading south (Photo, author's own)



The census figures discussed paint a portrait of the East Side as a space of risk where low incomes, poor healthcare access, language barriers and lower educational attainment heighten vulnerability to poor health. However, it is interesting to note, that such data sets were not used to delineate the intervention area. Instead, as the Hispanic Paradox might predict, the variables of race and socioeconomic status are conflated by public health, to justify delineating the poorest and most Hispanic area of the city as the unhealthiest. Since *Steps* targets the East Side, it also, by extension, targets its majority Latino population, thereby creating a racialised discursive regime around the call for personal responsibility. Given Austin's reputation as a place where, in the words of Melody Myers from the American Diabetic Association, "people are generally fit" [63], issues surrounding the responsibility of the unfit have unhappily segued into those of blame.

Epidemiology studies argue that low incomes, low educational attainment and poor access to healthcare are predictors of poor health and these outcomes will be worst

among ethnic minorities as these risk factors are more prevalent. In this “pathogenic world of social inequality” (Farmer, in Suarez-Orozco and Paez, 2002: 258) segmenting data by race runs the risk of presenting race as a variable controlling for risk or a risk factor itself. For example BRFSS data commissioned by the *Steps* programme shows that in East Austin, 55% of whites are moderately physically active, while 43% of Hispanics meet this target. Similarly, 18% of whites and 48% of Hispanics are inactive. In East Austin, 57% of whites, 62% of Hispanics and 68% of black residents are overweight or obese. While the disparity between white and Hispanic overweight and obesity rates is only 5%, these mask major differences in activity levels (Austin/ Travis County Health and Human Services Department, 2005). The conclusion often drawn from these differences is that, given that lifestyle is a matter of culture as much as education, it must be some facet of Hispanic culture that leads to such high rates of sedentarism. Interviewees from *Steps* and the 56-strong Mayor’s Council on Physical Fitness thus, in designing appropriate solutions to obesity, repeatedly conceptualised the aetiology of obesity through a conflation of culture, lifestyle and behaviour filtered through the assumption of racial difference permitted by marked spatial segregation.

According to Heidi McConell, Texas is facing a particularly and potentially serious situation with respect to obesity primarily because “we certainly have a very large Hispanic population” [80]. This idea is reinforced by Kim Bandalier’s opinion that Texas’s unique challenge is “ethnic diversity” as “they share more of the burden of obesity” and, as a result, “a lot of our problems have to do with the culture” [55]. In the case of Austin, the same belief is repeated: “Austin is always touted as the fittest city but I know that isn’t true about those who live east of I-35. I know it’s a lot harder for them to take advantage of some of those opportunities when they are just worried about living from day to day” [55]. This sentiment is repeated by the PRD *Steps* member Ginny Barr with her belief that “there are many more life challenges over here [the East Side]... it’s

just not easy, you know? And again, I don't really know why that is... it might be some cultural things I don't understand" [76]. Such preconceptions about life in Austin's "other side" often get elided to form a picture of particularly Hispanic risk factors for obesity that guide targeted interventions. For example, efforts to get those in the *Steps* intervention area to increase their physical activity participation rates demonstrate the (patronising) opinion that, "these people [in the intervention area] are the beginners" and "we just want to get them moving and to stop their kids from playing video games" [78]. As Hayes-Bautista rightly asserts, but never fully explicates, "in the matter of health, culture matters" (cited in Suarez-Orozco and Paez eds, 2002: 234). This is especially true in the case of obesity in Austin where Hispanic culture, frequently and simplistically reduced to the high fat content of many Mexican dishes and the assumption that "the interest [in fresh fruit and vegetables] just isn't there" [54], is afforded causal significance. As a consequence, creating the lauded "culture of personal responsibility" relies on identifying and modifying such "culturally sanctioned" risky behaviours.

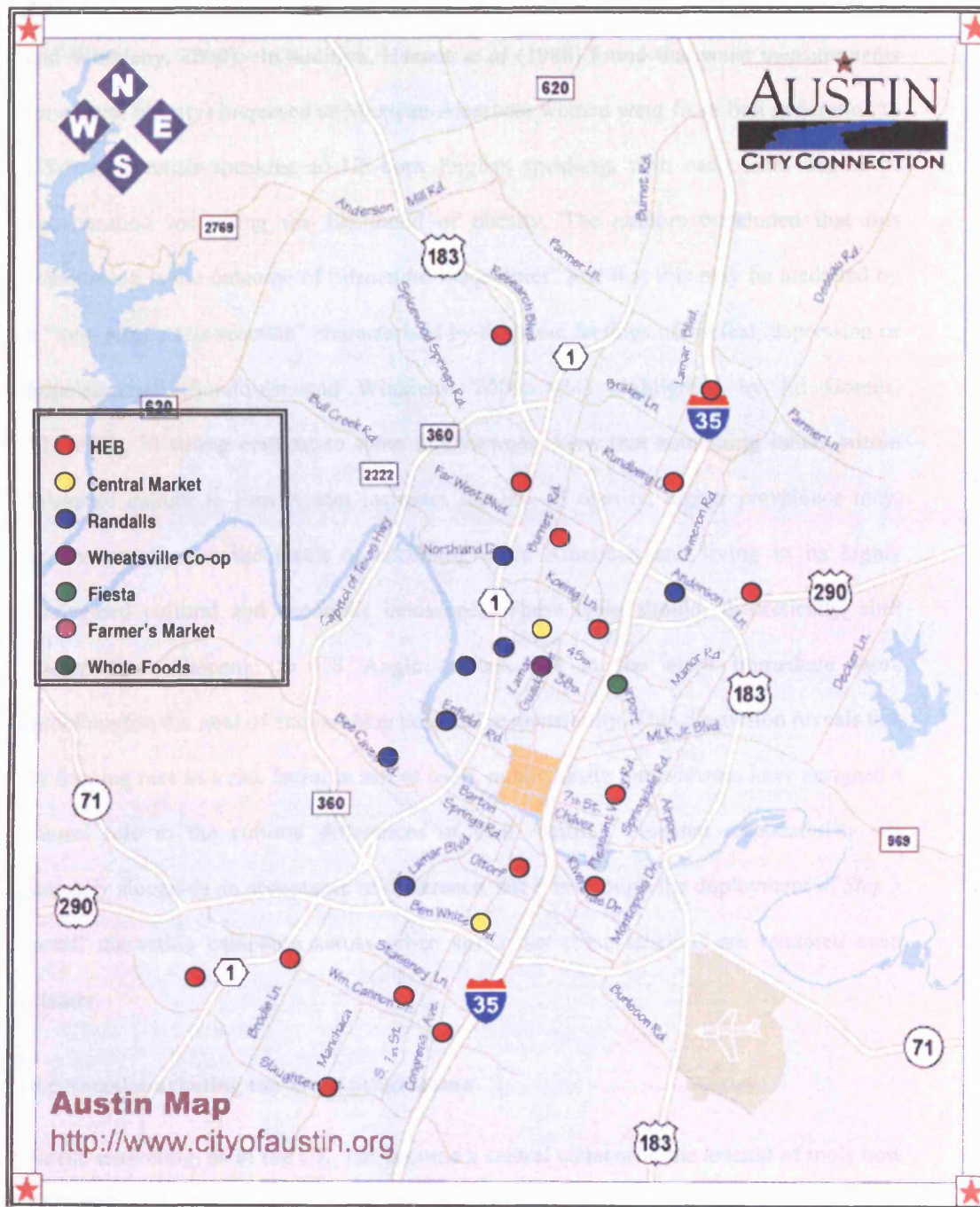
Interviewees from Austin's government agencies cast Hispanic Austinites as both cause of high obesity rates in the city and thus the sole target for health promotion interventions. However the assertions of Jeanette Chardon, director of the East Austin Community Health Partnership and a *Steps* partner provide an interesting counter example to their perspective. The East Austin clinic provides subsidised basic medical care to those on Medicare or Medicaid, with low incomes or without papers. She suggests that the barriers to healthy eating in East Austin transcend questions of personal responsibility and depend on cost, local availability, transportation and cultural inertia or traditional eating habits [62]. In contrast to the devotion of many *Steps* partners to the "knowledge deficit" model, she suggests that Hispanic residents have "a lot of information", but that a "poverty culture" leads families to prioritise issues other than health. Both she and Ed Gomez assert that stress and depression are common among

Hispanic Austinites [62, 72] and that these, rather than wilful sedentarism or unhealthy consumption habits, may be major causes of obesity and diabetes. The marked income divide between whites and non-whites fuel unhealthy diets due to the punitive workings of the political economy of food in the city. Poor areas to the east of the freeway have higher numbers of fast food outlets (figure 50) and a dearth of supermarkets (see figure 51), so that food insecure families on a limited budget and without a car often eat out rather than buying groceries which may be either a long bus ride away or prohibitively expensive (Barnett, 2005). The question therefore becomes not the culpability of Hispanic culture, but rather the impact of acculturation to both American culture and, importantly, its built form.

Figure 51 - Wendy's , East 6th Street (Photo, author's own)



Figure 52 - food retailers in Austin (mapped from store addresses from corporate websites)



Despite the optimism permitted by the Hispanic Paradox, rates of obesity are increasing faster among Hispanics than any other population group and, undermining the tendency to blame Hispanic culture, there is strong evidence to suggest that obesity results from US acculturation (Escarce *et al*, 2006). NHANES data for Mexican-Americans shows

that obesity prevalence was higher among Hispanic women than white women, and that average BMI among Hispanics also increased with the degree of deprivation (Sundquist and Winkleby, 2000). In addition, Hazuda *et al* (1988) found that waist measurements (or central obesity) increased as Mexican-American women went from first generation to US-born Spanish speaking to US-born English speaking, with each extra degree of acculturation increasing the likelihood of obesity. The authors concluded that this relationship is the outcome of “structural inequalities” and that this may be mediated by a “long term stress reaction” characterised by the same feelings of “defeat, depression or hopelessness” (Sundquist and Winkleby, 2000: 474) highlighted by Ed Gomez. Therefore, in strong contrast to some interviewees’ view that something innate within Hispanic culture in East Austin increases the risk of obesity, higher prevalence may, controversially, be the result of becoming more American and living in its highly variegated cultural and economic landscapes. These ideas should, theoretically, shift blame from Hispanic to US Anglo culture, but in the more immediate term, problematise the goal of encouraging personal responsibility. This discussion reveals that in framing race as a risk factor in and of itself, public health interviewees have assigned a causal role to the cultural differences of East Austin. Personal responsibility sits uneasily alongside an acceptance of difference, but it is through the deployment of *Step’s* social marketing campaign across urban space that these tensions are rendered even clearer.

8.5 Social marketing the Steps programme

Social marketing, as in the UK, has become a central element in the arsenal of tools now available to public health practitioners. The CDC now “encourages programs to apply the principles of social marketing to public health problems in order to increase the effectiveness of interventions” (CDC, 2005). As the example of the NSMC in London demonstrates, departments of health are increasingly becoming reliant on the commercial

experience of external advertising and marketing firms in order to induce behaviour change to reach government targets. The need to “address deeply engrained and long established cultural phenomena” (Hastings, 2002: 37) means that social marketing functions by conceptualising the target audience as a consumer segment delineated by common risk behaviours, motivations or information channel preferences. In Austin, the *Steps* programme coordinators decided that long term behaviour change would be best achieved by spending a large proportion of the CDC grant funds on a social marketing campaign to be developed by Austin advertising firm TKO. This example not only provides a good point of contrast to the rationale behind *small change, big difference* and the attitudes of its advocates, but also provides a novel lens through which to further interrogate some of the conceptual ideas relating to race, culture and the urban environment set out in the previous section.

TKO was given a creative brief by the *Steps* coalition to create a brand that would serve as the umbrella for the huge array of initiatives undertaken by its stakeholders and partners. In the first place, Lyn Davis suggests, this brand had to obscure the link between the government (TDH and CDC) and *Steps* [52] to obfuscate state “infringements on personal rights” [80]. TKO undertook the campaign’s creation in three stages, the first being market and interview-based research to ascertain the most effective consumer segment to target within the East Austin intervention area. Debra Gabor explains how TKO employees stopped people at various “intercepts” in the city to ask them about their lifestyle habits behaviours and their barriers to healthy behaviours [47]. It is notable that when interviewing (mainly Hispanic) people in these poorer neighbourhoods, they stopped people at such locales as bus stops or the Latino supermarket, Fiesta Foods. The lack of pedestrian traffic is not particular to East Austin as pavements devoid of people are a feature common to almost all American cities, but intercepting people at bus stops would not be possible in the car-orientated, wealthy

neighbourhoods to the west of the freeway. Despite targeting a Hispanic population, which, as the previous section showed, are so often cast in derogatory terms by those in public health, TKO started from the assumption that people possess baseline knowledge, know how to be healthy, but lack the impetus to undertake this. Therefore, Gabor asserts, a lack of knowledge is not the problem, but rather the absence of motivation and willingness to change [47].

TKO's research concluded that "our greatest opportunity is with people who have the potential to thrive" [45]. In sharp contrast to the UK, where public health attempts to encourage healthy lifestyles are targeted at "hard to reach" groups (ethnic minorities, unemployed, teenagers etc), in Austin the target audience is conceptualised in terms of *motivation* rather than *ability* to change. Consequently, TKO identifies its target group by an attitudinal category bordering dangerously on the indefinable or inoperable rather than by clear demographic or socio-economic attributes. The conclusion of TKO's East Austin research is a target consumer group characterised as "self-aware trail blazers", "engaged and productive", who can "recognise the importance of the message and take personal responsibility" [45]. With personal responsibility thus an attitudinal prerequisite of inclusion within the *Steps* target group, assuming a degree of accountability for individual actions in effect becomes a contractual obligation to receive the benefits provided by *Steps*. This use of personal responsibility as a persuasive tool in health promotion is interwoven with the notion that "care of the self is bound up with the project of moderating the burden of individuals on society" (Peterson in Peterson and Burrows eds. 1997: 194), an idea inextricable from the work undertaken by *Steps*.

Figure 53 - i thrive logo (www.ithriveaustin.org)



After a period of consensus building with *Steps*' numerous stakeholders and partners, TKO pitched the *i thrive* brand with the strapline, "Love what you do. Live all you can. Thrive". The logo (figure 52) tries to convey the mission statement "to motivate people to make healthy lifestyle choices so that they can live longer, more fulfilling lives". It is only when consumers scroll to the bottom of the website that tiny letters proclaim the involvement of the city of Austin and Travis County Health and Human Services. Only the intrepid will ever learn the government link, assuming instead that *i thrive* is an autonomous brand, or a non-profit. Obscuring the governmental link is designed to reinforce consumer trust, problematizing the assertion that "media campaigns are directed at creating docile citizens, who accept the truth of public health authorities without question" (Lupton, 1995: 106).

The TV and print adverts for *i thrive* convey the message that lifestyle change is simple, achievable and, like the idea behind *small step, big difference*, can involve any number of activities. Interestingly, *i thrive* markets the positive externalities of healthy lifestyles as commodities, with the front page of its website asking, "energy, joy, vitality. Want some?" Furthermore, the choice of the verb "to thrive" is notable. As Lyn Davis asks, "what are the ways you can thrive? Being healthy is just one of those ways. We're not really placing the emphasis on health" [52]. To thrive, in this context, implies maximising individual capacities to flourish or prosper, with Davis' assertion that they are not emphasising health sitting uneasily with the CDC's funding. However, despite the seeming originality and creativity of this marketing language compared to traditional

health promotion, attendees at a *Steps* committee meeting were still adamant that the messaging must make reference to the Surgeon General's physical activity recommendations "because that's what we measure". In spite of the optimism garnered by the application of commercial marketing techniques to public health, the example of *i thrive* neatly demonstrates the incongruities between marketers' aim to "initiate an internal dialogue" [47] and the target-meeting goals of public health practitioners.

As a consequence, while great faith is being placed in social marketing to deliver the kind of cultural shift needed to make healthy lifestyles the norm rather than the exception, the approach is not without its critics. In Austin, interviews conducted in 2005 when the campaign was just being rolled out were characterised by enthusiasm for the project. Lynn Davis, Project Coordinator for *Steps* seemed confident that the bilingual messaging of *i thrive* ("yo prospero" in Spanish) was inclusive enough to have more impact than measures being undertaken by the Texas Department of Health [52]. She believed that the campaign would work where other TDH efforts had failed as "a lot of people in public health...who've gone through different training, different social work backgrounds, have a hard time making that leap from, you know, giving people information to actually making environmental changes" [52]. In a follow up interview in 2006, in stark contrast to her optimism for the different approach that *Steps* planned to take, Lynn Davis admitted that the impact of *i thrive* had been "nothing much" and that they needed a more demographically-targeted phase to correct the lack of brand awareness in East Austin. She described the adoption of *Steps* as a "complicated switch" for practitioners "used to doing public health in a certain way" [61], a criticism vastly at odds with the TDH's Obesity Task Force lead Kim Bandalier's wish that *Steps* would just "know that we are here" and "keep us up to date with what's going on" [57].

Steps marketing manager Andrew Ortagon was more stinging in his criticism, branding the campaign "a waste of \$210,000". He concedes that while people like the brand logo

and promotional give-aways, very few know what the campaign is about [78]. Both he and Ginny Barr were quick to criticise the campaign for its poor website design, lack of information or adequate links to the *Steps* partners. Websites have become integral to contemporary health promotion (Parr, 2002b; Gillett, 2003; Seale, 2005) with campaigns such as *Small Step* supported by a comprehensive site signalling behaviour changes needed to prevent obesity, how to practically achieve these and sources of further support. Ginny Barr described the campaign as “very nice looking” but added that in the third year she felt there should “be more going on” [76]. The inefficiency of the marketing message was clear as other interviewees were unaware of the campaign, despite all working in the field of obesity prevention in Austin.

Despite Lynn Davis’ assertion that *Steps* represents a different approach to public health, purportedly addressing the environmental factors leading to sedentarism, poor diets, smoking or asthma through three working groups (obesity, diabetes and asthma), interviews made it clear that the dialogue between the partners extends no further than a reiteration of their own goals. While *Steps* claims its devotion to the socio-ecological framework when designing interventions to encourage healthier behaviours, it is clear that the *i thrive* brand does nothing to reduce the structural barriers to being healthy. Furthermore, as Richard Parish notes, without capacity-building through infrastructural improvements, the language of health promotion can make “people feel responsible and culpable for their health status” (Parish in Bunton *et al* eds. 1995: 51). By creating a brand based around the cultural connotations of thriving, the messaging consciously and problematically omits those unwilling or unable to thrive. Those living in intervention communities may, theoretically, have the capacity to thrive, but despite Lynn Davis’ assertion that *Steps* represents a different approach to public health through its focus on environmental change, there is little evidence that this has occurred. Furthermore, without this reliable evidence base from which to work, the coalition partners have

assumed a degree of baseline knowledge about healthy living and have thus not questioned why thriving may be low on the list of priorities, assuming instead that people have the capacity but lack the motivation to change. In reality however, rhetorical appeals to this sense of personal responsibility do not alter the environmental triggers for the risk factors of stress and depression already borne by many poor Hispanics.

The choice of the verb “thrive” therefore seems misplaced given that the income and health gap between East Austin and the rest of the city make thriving a goal extraneous to the task of making a living. As Debra Gabor notes in reference to the East Austin intervention area, “people are not empowered by their environment over there” [47]. She further suggests that people “over there” do not feel part of the city of Austin (west of the I-35), and would rarely venture there for recreational purposes. Their feelings of exclusion (for many worsened by not owning a car) meant that *i thrive* could not be based on overly “Austin-y” messaging. Thus to make the campaign “relevant” and “resonant” (in the language of TKO) means effectively shutting out references to the city itself. Austin as an urban space is consequently glossed over in the rush to appeal to cultural attitudes. This omission may fit the behavioural psychology models used in advertising and marketing, but it does not match the socio-ecological thinking by which *Steps* claim to differentiate themselves. *I thrive* makes personal responsibility implicit, but neglects the fact that it is far easier to be responsible in resource-rich areas than in the intervention communities. If *i thrive* aims to appeal to the sense of self-care, then the Mayor’s drive to make Austin the nation’s fittest city looks instead to appeal to a collective sense of urban and civic pride as a motivation for behaviour change, providing an interesting point of contrast to the rationale of social marketing.

8.6 Branding urban fitness

South of downtown, the Colorado River bisects the city creating a huge lake ideal for recreation. A “hike and bike” trail (figure 53 and 54) circles the perimeter of Town Lake

for ten miles, through Zilker Park to the West (figure 55) and into East Austin (see figure 56). Despite the torrid summer climate when temperatures rarely dip below 100°F, running and cycling are big business for the city. Austin is the home of Lance Armstrong and the number of dedicated road bikers training on the city's peripheral freeways and surrounding Hill Country is clear testament to his influence. This is in stark contrast to other Texas cities where, Robin Atwood suggests, even walking "is just something that's not done" as "if you were walking down the street someone would probably stop and ask you if you wanted a ride" [54]. Austin is also home to the nation's largest privately-owned running shoe store, RunTex and its owner, Paul Carozza, occupies coveted places on the President's, Governor's and Mayor's Councils on Physical Fitness (figure 57). He is also a personal friend of the President, a fact made clear when entering his office and seeing the walls emblazoned with letters from George Bush and a pair of his old trainers framed with a personal note thanking Paul for his advice and friendship [59]. Austin thus has an enviable pedigree in wanting to be crowned the nation's fittest city.

The idea of competition between cities on the basis of their environmental fitness is relatively recent, but is becoming more powerful as polls for the "best places to live" increasingly sway locational decisions (Rogerson, 1999). The quality of life offered by a city, as the annual numerous polls collated by *CNN*, *Forbes*, *The Economist Intelligence Unit* and *Business Weekly* demonstrate, is a strong factor in decision-making and, as Lou Earle asserts, represent an opportunity to "make Austin a global player" [79]. Indeed, among the long list of "Best place to...", urban fitness (or the opportunities afforded by the urban environment for leisure and recreation) is becoming an ever-more powerful category, even as the correlations between attributes of the built form, physical activity, diets and obesity remain, as chapter four asserts, not only far from conclusive, but also geographically and demographically specific.

Interviews in Austin demonstrated, more than anything however, the tendency to assume rather than know the nature of local built environments and their possible relationship to obesity rates among local residents and those living further afield. Taking downtown Austin, shown in satellite image (figure 54) below, as an example, the city covers a relatively small area in comparison to the surrounding residential and commercial areas. The proximity of the freeway can be clearly seen , but it is only at street level (figure 55) where the more immediate and fundamental barriers to an activity as simple walking become apparent. In summer, temperatures regularly exceed 100 degrees and the pavement shown in the photo demonstrates the lack of shade to be found anywhere on the city's streets. As a result, the lunchtime pedestrian traffic is virtually zero as workers instead climb in their air conditioned cars to head to South Congress Avenue (south of downtown) or 6th Street to eat. Downtown Austin is well policed, safe and has a abundant array of cafes, restaurants and stores, but walkers are still uncommon and walking to work virtually unheard of, with the temperature and the lack of interest on the route combined with an absolute lack of fellow foot traffic appearing to be the main barriers to participation.

Figure 54 - Downtown Austin (circled), with I-35 to the East, Colorado river to the south and residential areas to the west, east and north (Google Earth)



Figure 55 - downtown Austin (photo, author's own)



Figure 56 - Cherrywood, Austin. Red line indicates the quickest route from house A to nearest supermarket (circled) on foot. Green line indicates route on foot to circled retail area across freeway (image, Google Earth, 2007)



**Figure 57 - Austin Town Lake hike and bike trail (shown dashed around perimeter of lake)
(Austin Parks and Recreation Department, 2005)**



Figure 58 - Town lake Trail downtown and its well-maintained environment
(www.americantrails.org/nationalrecreationtrails/pages2/TownLakeTrailAustin_png.htm)



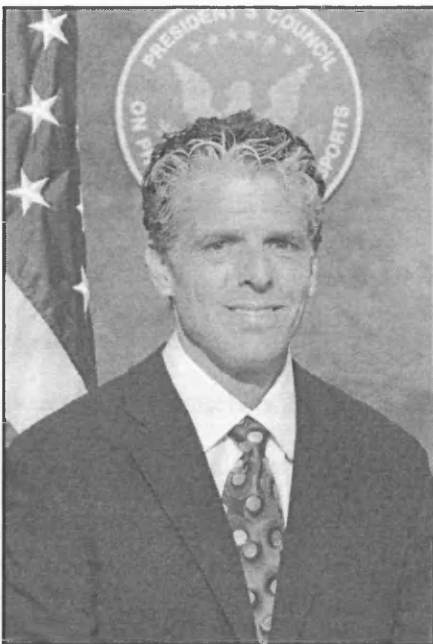
Figure 59 - Zilker Park (photo, author's own)



Figure 60 - Town lake Trail east of I-35 – note how the condition of the trail and the surroundings deteriorate in comparison to the west side (<http://austin.about.com/library/tour/blvt-tl-hikebikeeast.htm>)



Figure 61 - Paul Carrozza, founder of RunTex and member of the President's Council on physical fitness (http://www.fitness.gov/bio_carrozza.htm)



Men's Fitness magazine has published rankings of the nation's fittest and fattest cities since 2000. The Texan cities of Houston, Dallas, Fort Worth, San Antonio and El Paso

have risen to notoriety as their top positions in fattest city rankings have made national news year after year. Austin however, has consistently bucked the trend of its neighbours by being placed among the nation's fittest cities. The 17 categories used in the rankings are interesting to geographers as they not only foreground obesity's environmental risk factors, but they also lay bare the quality of urban space, shaming Mayors and City Councils into action (Marvin and Medd, 2006). The methods used by *Men's Fitness* draw on a range of sources above and beyond BMI to paint a portrait of a city's health and, crucially, its *potential* to facilitate healthy lifestyles. Being placed at the top of the fattest cities poll is shaming enough to catalyse action to improve the indicators (e.g. gym memberships, liquor stores, junk food outlets, fruit and vegetable consumption, TV viewing etc) and fall back down the table. Furthermore, as some categories, such as proximity to lakes, mountains and rivers and climate cannot be altered, attention turns to the modifiable factors such as parks and open space. These ideas offer a new spin on personal responsibility for the rankings sideline the issue of individual behaviour in favour of analysing positive features of the built form.

In 2006 a new category entitled "motivation" was added to measure how residents take advantage of local opportunities or overcome obstacles to exercise (as measured by the number of people using trails *despite* an unfavourable climate, or the ratio of gym members to gym usage). However, unlike the version of personal responsibility expounded within *i thrive*, the rankings place the duty of care on city officials as much as the residents themselves. As Lou Earle explains, two additional categories were added in 2006, "mayoral and city leadership" and "obesity-related legislation" [79] to reward the actions and example set by the Mayor in promoting city-wide sporting events, research on anti-obesity efforts and current obesity prevention programmes. Points are also awarded to cities with snack taxes, state-based nutrition and physical activity programmes and participation in *Steps*. In 2005, Austin ranked 19th fittest. The following

year, the city had dropped to 25th, catalysing a drive to reverse the downward spiral and rise again.

When Mayor Will Wynn was re-elected in 2006, he promised Austinites that he would make the city the nation's fittest by 2010. While the *Men's Fitness* rankings measure personal responsibility only in terms of the motivation to exercise despite an adverse climate or by the personal example set by the Mayor, the Mayor's own promise has reverted to pleas for a "commitment to personal health and fitness" (City of Austin, 2006). The Mayor's Fitness Council was established in 2004 to help achieve Mayor Wynn's goal, but as Austin has fallen down the modified rankings, the Council has called for the city to devise its own system. The new motivation category harmed Austin as the city's temperate winter and ferocious summer heat meant that motivation was still ranked low as the climate is more conducive to exercise than a city like Baltimore (ranked #1). This is at odds with Paul Corozza's view (whose company provides 10,000 cups of free water a day to Town Lake Trail users) that Town Lake trail is so over-used that it resembles a "freeway" [59]. The Mayor, *Steps* and his Fitness Council have thus worked to develop the city's own Austin Fitness Index (AFI) which ranks cities according to four "pillars" of health: physical activity, nutrition, healthy weight and tobacco use [79] using *Healthy People 2010* targets and BRFSS data (LeBlanc, 2006). The results offer a portrait of urban health as the aggregate of individual behaviours and physiological attributes, rather than the aggregate of structural factors conditioning such outcomes. Instead of measuring the potential a city offers to its residents for healthy living, the AFI measures the physiological and behavioural manifestations of residents' responses to these. As a result, the AFI falls back onto personal responsibility and the moralised discourses of the same behavioural change models that dominate the *Steps* social marketing and community intervention work.

Paul Carrozza is inescapable in Austin and he is repeatedly labelled, as Holy Riley, Director of the Texercise programme states, one of the city's principle "go getters" [71]. RunTex serves as a meeting place and community focus for those wishing to train for one of the one hundred fun runs held annually in Austin. Moreover, Carrozza's personal take on obesity in Austin has doubtlessly shaped the Mayor's and Governor's attitudes. RunTex sponsors almost all the charity runs taking place in the city, the aim being, in Carrozza's words, "to get the haves to raise money for the have-nots" [59]. For him, the idea is to get residents west of I-35 to raise money for East Austin non-profits such as Marathon Kids that provide services to help overcome some of the barriers to participation. Carrozza further believes that "getting ready for the event is part of the solution for the have-nots" [59] and that the best way to motivate children and adults to be active is through competitive charity runs. Carrozza's view is that such runs provide a way of "bringing those East Side kids into the mainstream" as "exposure is what public education is all about". He claims that unless the "government really gets on it", which, despite being on the President's Council and a personal friend of Bush, he admits that "they are not", the only way to tackle the problem is at a local scale. In that respect, he adds, Austin is in a very fortuitous position as it has enviable natural resources for recreation in the shape of Town Lake and numerous other trails. Despite its potential, Austin still is still not as "fit" as he might otherwise expect. Indeed, branding Austin as a fit city through running events and heavy promotion of the city's recreational amenities may not actually make urban space any fitter in terms of the infrastructural quality of the most deprived neighbourhoods.

The Mayor's visibility as a runner and his annual participation in the Capitol 10,000, Texas Round-Up and frequently publicised jogs to work fulfil a few of the new criteria for *Men's Fitness* magazine and earn the city extra points in the league table. However, it also demonstrates that personal responsibility in this context now extends to those

governing as well as those being governed. Furthermore, the Mayor's drive to make Austin to the fittest city by 2010 also supports Lou Earle's assertion that "it's big money to promote health and fitness" [79], especially when such promotion translates into several high-profile events, rather than more universally accessible forms of promotion. But, as Earle also points out, shifting the AFI in Austin's favour will really mean "hitting a certain part of the city", a move justified by *Steps*' delineation of the East Side as its intervention area [79]. In this theorisation, East Austin holds a strategic role in the city's wider goal to become a healthy place, with the AFI requiring individuals to adopt healthy behaviours regardless of the barriers posed by the built environment. In the *Men's Fitness* formula, responsibility falls on the city. However in the AFI, responsibility becomes an individual burden, once again highlighting the difference between the two sides of the I-35 and marking out Hispanic, African American and low income residents as, in effect, dragging down the index by the perception of their unwillingness to adopt healthy lifestyles.

Interviews frequently revealed the sentiment that certain people in certain parts of the city were, to all intents and purposes, getting in the way of the city's aspirations by their poor nutritional intake and sedentarism. Adolfo Valadez, Medical Director of the TDH, suggests that the greatest disparities in the city exist in activity levels, while "on the nutrition side, we all do horribly" [70]. Universally inadequate fruit and vegetable consumption seems ironic given that Austin is the home of the nation's largest organic supermarket chain, Whole Foods, numerous independent organic retailers and the upscale Central Market format of Texas chain HEB (figure 49). Yet it would seem that uncovering the murky anthropological world of food consumption patterns holds less appeal than adopting what Valadez terms the "technical fix" of interventions to encourage and promote physical activity. He suggests that "fitness is chosen because it's

easy... it's easier to say than we're going to make the nation the healthiest by eradicating poverty and racial injustice" [70].

Promoting urban fitness unfortunately may do little to address the far deeper institutional causes of obesity in East Austin that result from factors including the paucity of supermarkets in which to buy fresh produce and poverty that leads many residents to take on more than one job leaving little time or inclination for leisure time activity. Moreover, with personal safety an issue for many East Side residents and pavements a passing dream, walking for purposes other than getting to the bus stop does not hold the same appeal as in the quiet, leafy streets of neighborhoods such as Hyde Park. Yet, the East Side does enjoy significant provision of parks and public pools (Austin Parks and Recreation Department, 2007), yet because there is little data on usage rates or the demographic profile of consumers, under-use is often taken as read with Ginny Barr from the PRD asking "Why aren't these people coming? Is it education? Is it the hours? I don't know yet" [76]. Austin may not yet be fit enough for the Mayor, but in this heavily divided city, the question of who stands to benefit from his drive seems, ironically, absent.

8.7 Conclusion

Improving public health in Texas, as Adolfo Valadez asserts, is problematic as "we're not going to change anything as we've done nothing to change the system. Then on top of that you lay obesity and lack of insurance...and you just have this perfect storm of bad demographics and bad policy resulting in a really unhealthy society" [70]. Despite this Texan maelstrom of demographic, economic and political risk factors, there is a common feeling that Austin is unique in Texas. As Holly Riley states, "what works in Austin will not work in El Paso" and "as a result it's easier to invest" in the city [71]. Heidi McConnell corroborates this belief with her statement that, with regards to obesity prevention, "Austin is in a better place" as it has "lots of green space where people can

be active, and we have a culture in terms of plenty of running activities” [80]. Even Kim Bandalier at the TDH sees Austin as “very unique”, the suggestion being that because Austin is better placed to tackle obesity than other Texan cities, it should receive fewer state resources given the magnitude of the threat obesity poses to the state [57]. However counter-intuitive, it is precisely as a result of its advantageous position that the city has received *Steps* funding and is home to far many more community-scale ventures to address obesity than “fatter” cities such as Houston. In what Donna Nicholas from the TDH calls the “game of obesity” [56], Austin repeatedly comes out top, despite the fact that individual health indicators are poor, a fact corroborated by the BRFSS data. It is therefore its quality and quantity of open space and the proactive attitude of many of the city’s public figures that mark it out as an exception. Yet, in spite of all its positive attributes, perceptions of cultural and racial difference, inscribed on residential segregation, are inextricable from discourses of causality, blame and personal responsibility in Austin.

This chapter has explored President Bush’s idea of encouraging “a culture of personal responsibility” so that citizens make the “right” healthy choices. In sharp contrast to the UK where individuals do not bear the financial burden of the healthcare costs associated with obesity due to the universal and free provision of the NHS, the US healthcare system permits other people’s health behaviours to have a direct and quantifiable individual cost. However, as these last two chapters have demonstrated, there can be no universal appeal to rational (informed or responsible) behaviour, given that the governmental structures framing and constructing obesity as a public health problem differ markedly at a number of geographic scales. In the UK, being personally responsible is desirable, but appealing to economic arguments of the cost of obesity to the state does nothing to catalyse behaviour change. Across the Atlantic, however, as Adolfo Valadez asserts “if you can put this into the language of the US which is money,

well economy, then perhaps people will start to make changes” [70]. The three examples of obesity prevention in Austin demonstrate the degree to which preventing obesity is as much a process of presenting the condition as a threat to the wider economy as it is marking out certain groups and places as contributing disproportionately to this threat and thereby justifying interventions upon their lifestyle decisions.

Austin is a wealthy city and its reputation for a high quality of life has led to rapid population growth. The booming economy and rapid gentrification of previously poor parts of the city may mask the ongoing health disparities by income, race and place of residence as revealed by *Steps*’ BRFSS data. This statistical evidence paints a picture of high risk and unhealthy spaces within a city otherwise seeking to become the nation’s fittest, allowing East Austin and its majority Hispanic population to be repeatedly marked out as a site of intervention to catalyse behaviour change. Interviewees often mused over the idea that since Latinos (and more specifically women) have a higher propensity to be obese than Anglos and suffer higher rates of diabetes, it must be some facet of Latino culture that produces such outcomes. Added to this, low physical activity uptake rates again seem to mark out Hispanic culture as not valuing exercise. *Steps* has then concentrated on asking how this culture can, in effect, be *overcome* given the fiscal and political challenges inherent in making environmental changes to the East Side. Moreover, in order to elicit the kind of behavioural changes envisaged by *Steps*, personal responsibility is transformed from abstract appeal to a concrete tool of the neo-liberal state and a moral discourse legitimising government intervention within the sphere of personal autonomy.

Obesity as a ‘problem’ in Austin is a product of the socioeconomic, cultural, linguistic and educational divide in the city, both real and imagined. Austin to the west of the I-35 is perceived as a space of wealth and privilege where people know that they should be active and eat healthily and provision is made for this. The East Side is perpetually

marked out as a space of difference where the informed consumer is rendered impossible both by structural barriers such as a lack of supermarkets and cultural barriers to prioritising healthy behaviours perpetuated by poverty. The population scale frame of reference of public health means that health statistics often draw upon race as a variable controlling for risk, by demonstrating racial differences in prevalence rates. However, with the US undergoing a profound shift in the demographic composition of its population and changes in Texas pre-empting the rest of the nation (Murdock *et al*, 2002) calls are now being made for fundamental changes to be made to the practice and theory of epidemiology and public health with respect to race. Since genetic factors dictate many racial differences in health outcomes (e.g. Hispanics have higher rates of diabetes and African Americans higher rates of sickle cell anaemia) and reactions to medication, attention should be paid to the differences *within* and *between* diverse ethnic groupings. As a result, discourses of personal responsibility with regards to obesity are often an expression of a pervasive sense of social dis-ease felt by Anglos towards the changing face of the US and the ramifications of this on the effective functioning of the established tools of government.

Both the US and UK are undergoing profound demographic and cultural transitions which threaten to destabilise the structures that have enabled the functioning of their neo-liberal economies. The UK response has been to reassure citizens that the government will help make “healthy choices the easy choices” (DH, 2004a). In the US, the government has argued that citizens should be responsible for their own health and they will only help those with, in effect, “the capacity to thrive”. In both cases, it is clear that obesity cuts into social anxieties and political critiques of the state of the nation (see Gard and Wright, 2005). This is not a new phenomenon, as health has long been used as a medium of political critique with certain risk groups identified as sources of anxiety. However, when virtually all aspects of personal physiology are protected from

discrimination by law, obesity prevention in Austin would seem to tread a fine line between objective appraisal of risk and a conflation of risk and culture that retains an air of legitimacy while simultaneously passing judgment on difference. As a consequence, the discussion chapter which follows will bring together the examples of London and Austin within the three conceptual spheres outlined in chapter three. This should provide a means by which some of the wider tensions inherent within neo-liberal governance in both countries can be explored and some thoughts on the plausibility of obesity prevention policy formulated.

Chapter Nine: Theory, practice and the plausibility of prevention

9.1 Introduction

The previous two chapters set out findings from fieldwork in Austin and central London and demonstrate obesity's emergence as, in the first place, a biomedical risk worthy of intervention in its own right. In addition, through the discursive practices documenting, rationalising and justifying its problematisation, the conflation of biomedical risk and the (frequently moralised) narratives that have emerged to explain it, have then legitimised attempts from a broad range of stakeholders to encourage the adoption of healthier lifestyles. This thesis has focussed on techniques and rationales of intervention, their framing and modes in which they are undertaken so as to draw out distinctions between the American and British experience and to mark out this work from others in the fields of health geography and obesity studies. Consequently, in the light of the empirical findings, this chapter will revisit the three conceptual spheres and, in the process, inject a novel comparative dimension into the analysis of Austin and central London to explore the fourth research theme: what do obesity prevention measures reveal about the tensions inherent within neo-liberal governance in the two countries?

In order to respond to this challenging question in an analytical and logical manner, the discussion will be structured around the three theoretical frameworks set out in chapter three. As argued and as shown by this work, obesity has been framed as a problem in a number of senses: public health, economic and reflecting anxieties over cultural change. In turn, these framings align with three more general "dysfunctional effects" of neo-liberal economies (Brenner and Theodore, 2002: 352): regulation, supply and demand. These can be explored through the three theoretical frameworks of governmentality, the political economy of food and cultural anthropologies of consumption. Given that one of the most explicit limitations to developing truly effective obesity prevention - and thus one of the chief critiques of public health's attempts to do so thus far in either country -

is the lack of “overall coherence and integration in the government’s activity in this field” (Lang and Raynor, 2003: 73), revisiting the issues of regulation, supply and demand through the three frameworks and in the context of the two case studies should not only help reintegrate issues that are too frequently compartmentalised, but also illuminate some of the tensions within governance that are used to sanction inaction or explain failure. Despite the fact that obesity is primarily defined as a public health challenge in terms of its present and future cost to the state, in reality, the prevention efforts studied demonstrate that obesity cross-cuts the domains of numerous government departments in both countries. To some extent obesity has forced health more generally up government agendas in both countries, but, as a result of more systematic differences in governance, this has, the case studies demonstrate, occurred in quite distinctive ways. As a result, these similarities and differences between *how* obesity is understood and acted upon provide grounds to question *why* this occurs with respect to the broader tensions inherent within neo-liberal governance.

Geographical analyses of health are particularly instructive in the case of obesity for they permit the question of why certain places are more conducive to higher prevalence rates than others. High prevalence rates and the perceived or actual characteristics of ‘risk groups’ are then read back onto places themselves, a process that has profound political and social consequences, especially when linked to questions of racial and cultural difference. As such, considering obesity as an epidemic of signification is to acknowledge that meanings have a strong and clear constitutive role in health, despite the alluring objectivity of biomedical models (such as the ‘Energy Balance Equation’ discussed in chapter four) in public health. It must also be stated that such meanings have distinct geographical origins and effects. America’s high obesity rates mean that the country and its built form are often considered uniquely obesogenic (Revill, 2003; Spurlock, 2005a), suggesting that, by extension, Americans are uniquely susceptible to

obesogenesis. As one *Newsweek* journalist aptly stated, “these mixed messages [about healthy lifestyles] can be confusing to everybody, but they have a special effect on Americans, who seem uniquely willing to change their lifestyles according to the latest health study” (Deyo, 2006: 53). Ironically, even in the UK, where obesity rates are approaching those of the US and messages, as this work has shown, are just as mixed, there is still the residual assumption that obesity is something uniquely American and that Britons must therefore be enduring a rapid Americanisation of diet and activity levels. Clearly, this geographical insinuation also has political ramifications for, as documentary maker Morgan Spurlock questions, “the UK is turning into Kansas. It looks like America in every way... The question we all need to ask ourselves is, do we really want the world to look, feel and taste just like America?” (2005b).

This chapter will explore the contribution of the empirical research undertaken in London and Austin to the governmentality, political economy and cultural anthropologies of consumption theoretical frameworks. Moreover, it will explore how the practices of obesity prevention might illuminate some of the deeper tensions within neo-liberal governance. This chapter will consequently turn first to governmentality and respond to Nikolas Rose’s most recent contention that governmentality studies are often critiqued for failing to consider how the techniques and tools of governance are actually used in the “messy process” of implementation and thus remain open to accusations of being overly abstract and theoretical (Rose *et al*, 2006). Governmentality studies explicate how regulation is practised and its targets identified, classified and rendered governable to mitigate the effects of a system in which networks of supply and demand reinforce vulnerability to facets of the built environment. Second, the political economy of food will be reconsidered to see if obesity might represent evidence of a system working too efficiently. Political economic readings of obesity suggest a supply-side problem wherein the surplus production of energy-dense foods means a lower relative

cost of unhealthy goods in relation to healthier options further reinforced through “super sizing” tactics to increase profit margins (Guthman and DuPuis, 2006). As a consequence, a new political economy of premium healthy foods (Hickman, 2006), diet products and services has emerged suggesting that “this double fix of eating and dieting is not epiphenomenal, it has become a central piece of the US economy” (*Ibid*, pp.441).

Third, obesity constructed as a problem reflective of wider anxieties concerning the negative externalities of neo-liberalism (such as rising inequalities) requires the adoption of demand-side explanations. Cultural anthropologies of consumption frameworks draw together the issues of personal responsibility and informed choice discussed in chapters five and six and, furthermore, demonstrate how both are attracting growing consumer disquiet as consumption, its meanings and cultural contexts now uneasily occupy both domains of freedom and spheres of discipline. Reconciling individual rights with a more communitarian duty to the general population in matters of health is a tension that follows obesity prevention efforts across the Atlantic and therefore demands attention. These discussions will finally be drawn together through a reflective exploration of the potential contributions of this work to the burgeoning field of obesity prevention policy and the ultimate limits to that policy revealed by the conceptual and empirical strands of this research.

9.2 Governmentality

To understand how we governed in the past, individually and collectively, in our homes, workplaces, schools and hospitals, in our towns, regions and nations, and by national and transnational governing bodies requires us to turn away from grand theory, the state, globalization, reflexive individualization, and the like. Instead, we need to investigate the role of the gray sciences, the minor professions, the accountants and insurers, the managers and psychologists in the mundane business of governing everyday economic and social life, in the shaping of governable domains and governable persons, in the new forms of power, authority and subjectivity being framed within these mundane practices.

(Rose *et al*, 2006: 101)

Nikolas Rose's recent return to governmentality adopts a more overtly critical stance than his previous work. Indeed, the authors acknowledge that the governmentality framework may "concentrate too much on the mind of the programmer and ignore the messy world of implementation and non-implementation – a world far from the serene world pictured in texts and studied by the governmentality" (Rose *et al*, 2006: 99). This tendency to concentrate on the mind of the programmer means that studies of the "techniques and procedures for directing human behaviour" (Foucault, 1997: 82) often ignore the interrelated places and people upon whom implementation occurs and therefore the locations where this "serene world" is destabilised. If "governmentality has rendered neo-liberalism visible in new ways and helped to understand its problematics and how they were linked to its innovative reshaping of liberal technologies" (Rose *et al*, 2006: 97), then this has only been possible by the propensity for neo-liberal projects to create the kind of governable subjects (i.e. personally responsible or informed) that aid in their completion. Indeed, as Rose *et al* state, to understand how citizens are governed, requires attention to the "mundane business of governing everyday social and economic life" (*op cit*). Moreover, the case studies demonstrate, it is not sufficient to talk only of "the shaping of governable domains and governable people", but attention must be paid to the shaping of the kind of governable places which materialise the interrelationship between domains and people that make neo-liberal goals attainable. Since the domains of obesity prevention implementation and non-implementation rest as much on the governance of places as on trying to induce compliance among people, some consideration must be given to this in the context of both London and Austin.

Chapter three set out the need to interrogate how a governmentality framework might illuminate the linkages between the multitudinous structures governing the risk of obesity, the idea of citizen-consumers disciplined to be responsible for their own health and an increasingly fragmented and deregulated public health system - all questions that

are explored by the empirical findings of this work. The case studies demonstrate that, despite the devolution of power to local healthcare providers, especially in the UK, state action to address obesity is less marked than that of other stakeholders such as non-profits, food companies and the media. There seems to be a disjuncture between citizens' expectation of the state and the capacity of state agencies such as Departments of Health to intervene without being accused of "nanny statism". Citizen and corporate resistance to overbearing governmental styles has, to some extent, become a hallmark of the obesity debate, especially given that eating itself sits at the nexus of a range of governmental domains. As a result, obesity prevention is an enterprise that sits as easily outside as within the state realm and, as this work has shown, now involves a complex - and often fragmentary - mosaic of overlapping efforts that reflect, as much as anything else, the attributes of the places as much as the people being governed. This thus concurs well with Rose *et al's* assertion that we need to investigate the role of the "minor professions" and "mundane practices" while remaining mindful of "the striking efficacy of place and not just the disciplinary regulation of space" (Kearns, 2007: 215)

One such "minor profession" that has clear resonance with obesity prevention - and its creation of new subjectivities and governable domains - is insurance. For Texans ineligible for Medicaid, contact with the TDH in matters of health promotion is very limited. Instead, insurance-based healthcare means that premiums are more likely to affect the adoption of healthy lifestyles given that they are based on direct costs, rather than rhetorical appeals to responsibility to mitigate future state costs. Indeed, as insurers are free to decide their own BMI risk thresholds, many have lowered the minimum level of risk from a BMI of 30.0 to 27.0, thereby rendering many more people "high risk" with matching elevated premiums. As Ericson *et al* contend, "private insurance increasingly fragments populations into selective risk-rated communities with a price-tag" (2000: 550), with the effects of this worsened by the suggestion of a link between high risk

status and poor decision making. In the UK, where the private health insurance industry is growing in tandem with dissatisfaction with the NHS, companies have also started to develop their own incentives for risk-reducing behaviour by offering lower premiums to those taking up promotional gym membership offers. Ironically, even though obesity has been cast as a public health problem requiring a public health-led solution, interviews highlighted that US citizens do not come into contact with public health bodies in their daily lives and are thus more likely to seek information from outside sources such as the internet, newspapers, health food retailers or advertisements. Alternative “expert” sources also garner substantial consumer interest and trust in the UK, but the NHS and its reworked online services and databases of local facilities and events remains an elemental part of the state fabric allowing British citizens to access more state services and information sources than ever before.

The language and techniques of public health cast obesity as an *individual* problem of behaviours that, paradoxically, requires a *population*-scale cultural and structural shift to make healthy lifestyles the norm. However, obesity is not just an individual and population problem, but one manifest at the more nuanced (and perhaps politically delicate) scales of community, neighbourhood and family. Given that, as Rose (1996a: 331) points out, community is a “new territory for the administration of individual and collective existence” and the US Surgeon General’s report explicitly noted that community was the “foundation of the solution” (2001: 10), its obvious absence from governmentality studies explicitly concerned with health would seem to mark one of its short-comings. This omission is especially marked given the theoretical and pragmatic focus on community as a category in the practice of public health (an idea made clear by the repeated use of the term by interviewees to describe their targets of or “settings” for intervention) and the focus on health in governmentality. As this work has discussed, high obesity prevalence has been used to mark out certain ethnic communities (e.g.

residentially segregated Bangladeshis in South Camden or Hispanics in East Austin) as high risk places disproportionately contributing to national healthcare costs by virtue of, for example, facets of the built environment (e.g. no pavements in Texas or a lack of open space or accessible food retail in both places) that lead to low rates of fruit and vegetable consumption or high rates of sedentarism. Despite the paucity of analyses of community in governmentality, the tendency to utilise community as a category of governance in the practice of public health merits closer scrutiny, especially given the wider negative social ramifications of using community to delineate risk groups. The deeply judgmental attitudes towards Hispanics and the perception of their culpability encountered in Austin is a clear example of the more punitive outcomes of problematizing health through the explanatory category of community.

“Neo-liberal governmentality...creates divisions between active citizens, those who can manage their own risks, and ‘targeted populations’, those who require interventions in the management of risks” (Dean, 1999: 167). Furthermore, these interventions are “really about warning, even disciplining the ‘normal’ by using the at-risk as examples” (Guthman and DuPuis, 2006: 444). These formulations seem to display an over-reliance on the singular active citizen, perhaps to avoid the accusations of discrimination that have accompanied past attempts at marking out risk groups in counter-distinction to the “normal” (with the experiences of AIDS, TB and Polio all suggesting caution is needed – see Treichler, 1988; Gandy and Zumla, 2003; Olshinsky, 2005). Yet, it should be remembered that community as a term holds geographically distinct connotations and therefore conceptual utility. In the US, for example, community is used far more frequently in spatial terms to delineate place of residence and, therefore, implicitly, its residents and the degree of social capital or collective identity generated by the strength of the relations between the two (Putnam, 2000; Delanty, 2003). Repeated assertions among interviewees in Austin that communities needed to “take ownership” of obesity as

a problem [49, 54] invites the contention that further attention needs to be paid to the techniques by which communities are invested with the imperative of responsibility and the possible social and political outcomes of this.

There are very few accounts of governmentality, even within geography, that explore how places are created as spaces of intervention under the banner of health improvement and how such interventions are problematised by the very nature of neo-liberal government itself. This is perhaps because the entwining of healthy lifestyles and urban regeneration is a relatively recent incarnation of the 'Old' public health's concern with the relationship between certain facets of the built form such as sewerage and overcrowding and health. As Larner asserts, "the emergence of new political projects is never a complete rupture with what has gone before, but rather part of an ongoing process involving the recomposition of political rationalities, programmes and identities" (2000: 14). The "recomposition" explored in this work draws on past projects, while acknowledging that public expectations of government and its capacity to meet these have demonstrably altered. Enticing people to exercise more and eat healthily represent different challenges than the rebuilding of tenement housing and the introduction of public works to reduce the threat of certain infectious diseases, not least as the former requires a willingness to bend to behaviour change techniques at a time when choice and freedom are central constituents of the neo-liberal economy. Engineering the capacity for healthy lifestyles into the environment to reassure citizens that the government is performing its role as "enabler" is however, more complicated, not least as behavioural proscriptions sit uneasily alongside calls for personal responsibility or informed choice, given that the former involves limiting individual freedom while the latter is legitimated by the existence of freedom.

Obesity has long been linked to lifestyle changes induced by an increased reliance on cars, labour-saving devices, sedentary office-bound jobs and the disruption of family life

by working mothers. Lifestyles have been irrecoverably altered by technological advances, but also changes in the built form. Numerous studies have explored the links between urban form (e.g. land-use zoning's creation of single-use neighbourhoods) and health outcomes, through an increased reliance on cars, a concomitant reduction in opportunities to walk or cycle, as well as social capital explanations linking community fragmentation and falling rates of civic engagement to poorer health (Frumkin, 2002; Leyden, 2003; Greiner *et al*, 2004; Thigpen, 2004). London remains far ahead of Austin in terms of political will and the recognition that in order to meet obesity targets, existing modes of urbanisation and urban planning will have to undergo changes that enable people to make "healthy choices the easy choices" by facilitating basic decisions to walk or cycle.

In Austin, by contrast, residential segregation by race and income mean that while the neighbourhoods to the west of the I-35 are safe, mixed-use, densely populated and well-served by cycle routes and parks, those to the east are often characterised by low density suburban sprawl, single-use zoning, major road systems, poor pedestrian infrastructure and public transport provision. As a result of this particular type of urban planning, recreational walking usually attracts only the wealthy in areas, such as hike and bike trails or attractive neighbourhoods, where it has been normalised. Outside these zones, walkers are viewed with a mixture of disdain and disbelief and cars frequently slow to ask pedestrians if they need a ride, further perpetuating the belief that walking is both abnormal and a facet of poverty-induced carlessness. Despite this, seeing Hispanic workers walking alongside the deserted and dangerous verges of freeways in the poor far east of the city is commonplace given that bus routes do not extend to these neighbourhoods. In addition, since property taxes reflect house values, the areas in most need of infrastructural change are often neglected in favour of continual reinvestment in the richer west side or the already packed Town Lake trail. The continued assertions

among interviewees that East Austin is somehow different [47, 55, 57, 59] as its residents seem unwilling or unable to be healthy, is one that entwines people and places in a punitive synthesis and justifies inaction on the built environment by causal explanations of obesity that set individual behaviour apart from an undeniably unhealthy environment. The fact that those making such judgments may rarely venture into east Austin means that prejudice and fact may be confounded rendering this area of the city a space of public health intervention rather than holistic municipal urban improvement.

London does not suffer from the same morphological limitations to achieve public health calls for increasing incidental exercise rates. Indeed, the city's high density dictates that almost everyone has to walk in the process of taking public transport, with only drivers or those staying at home achieving pure sedentarism. Local authorities and the Mayor are aware that better quality, cleaner and safer parks, well-lit streets, wide pavements and clear signage for walkers are essential if individuals are to be the kind of entrepreneurial subjects, engaged in the project of the optimisation of their own health that Larner contends is the assumption of governmentality literature (2000:11). Indeed, governmentality studies would be undeniably strengthened by acknowledging that projects of self-hood are inextricable from the locales and collective identities enabling or limiting them. It is therefore notable that Austin's identity as a city is based as much on the quality of its open spaces as its more individualistic culture of sport and physical activity. Since governmentality refers to the "patterned way of thinking" that is embodied in a host of institutions, practices, procedures and calculations that "govern the actions and thoughts of the populace" (Kearns, 2005: 3), it should be recognised that bodies or communities of bodies become problems or objects of governance largely by virtue of environmentally-induced vulnerability. Therefore, shifting the focus of governmentality in the context of health to the domain of the recursive relations between people and place would offer a far more profitable way of exploring how individuals are

engaged in the project of their own corporeal optimisation. Not only might this inspire a change of focus from individuals to communities, but also invite less moralistic and more pragmatic obesity prevention efforts.

9.3 Political economy of food

A governmentality approach to obesity highlights the tools and techniques that create a governable population compliant with the means and ends of neo-liberalism and, in the process, the reasons why the compliance envisaged by regulating bodies may or may not be possible for certain people in the context of where they live. While instructive, this is only one element in the complex matrix guiding obesity prevention efforts. One of the resounding themes of journalistic and popular accounts of obesity has been a concern with the changing nature of the food system, its methods and scale of production as well as the marketing and sale of its products. As Tim Lang writes, “at every policy level – local, regional, global – a pattern of eating and producing, distributing, processing, retailing, cooking and consuming food is now on trial” (2004: 21). Every facet of the food economy seems to have come under close scrutiny and repeatedly emerged as a topic among interviewees from a variety of policy and non-policy standpoints. However, there seemed to be a marked difference between the manners in which the casual role of the political economy of food in obesity was invoked by interviewees. This section sets out, therefore, to highlight and explore some of these differences.

One of the central contentions in discussions of the role of the political economy of food in obesogenesis is whether it is poverty, lack of information about healthy diets, the persuasive power of marketing, product choice or cultural food preferences that play the more significant role. In Austin, unlike London, there is a definitive case to be made for the influence of poverty, food availability and supermarket locations. For example, figure 51, collated from corporate information about store locations in Austin clearly demonstrates a dearth of retailing on the east side, with no stores at all in rapidly

growing neighbourhoods such as Del Valle on the city's expanding periphery. For this reason, interviewees in Austin were more likely than in London to cite lack of access as one of the chief causes of obesity, especially among Hispanic residents. There was a collective feeling that traditional Mexican diets were unhealthy *sui generis* with interviewees repeatedly highlighting their high fat, sugar, salt and carbohydrate content. Yet, the research explored in the previous chapter demonstrating that central obesity rates among Mexicans is positively correlated to the degree of US acculturation (measured by first language and country of birth), suggests that traditional Mexican diets themselves might not be the problem given that new immigrants have far lower rates of obesity than US-born Mexicans (Sundquist and Winkleby, 2000). Rather, processes of Americanisation combined with bodies genetically programmed to a markedly different food environment, poverty, a lack of retailing choice and psychosocial stress likely play the most significant causal role. Jeanette Chardon from the Austin Community Health Clinic also suggested that portion size and short termism - springing from the ability to satisfy only immediate needs when poor - were also significant [62]. Unexpectedly, even Hispanic interviewees suggested that lack of education should not be underplayed as the basis for poor food choices, an assertion reflecting class judgements internal to the Hispanic community that seem largely unrecognised by white public health interviewees.

Austin is an interesting case study in discussions of the political economy of food due to the marked class-based variations in food retail and the differential attitudes this inspires. Austin is the birthplace of the nation's leading organic supermarket chain Whole Foods (Arlidge, 2006), and its presence and legacy have spurred a unique food culture. While the company has already been touched upon in this work, it should be mentioned that Whole Foods opened 15 new stores and achieved sales growth of 22% in 2005, bringing the total stores to 175 and sales to \$4.7 billion. The flagship store in Austin is the nation's largest at 80,000 square feet and epitomises the promise of choice with 1800

different wines, 400 beer lines, 600 varieties of cheese and 50 types of bread baked daily (Whole Foods, 2005: 5). What is also notable about the Austin store – apart from the sheer abundance – is that weekly sales rank third behind those of the company's two busiest Manhattan stores, despite the city's population standing at less than one million.

The Austin site sits on its own block, houses a culinary institute and dominates a heavily gentrified area of the downtown Second Street Warehouse District. The store's pre-prepared gourmet meals and wine tasting stations provide a visible reminder of the city's income and racial bifurcation and stand in stark contrast to the piles of jalapeno peppers on promotion at Fiesta Foods in East Austin. Austin's long association with premium organic (and therefore expensive) retailing means that many interviewees consider high rates of obesity to be an affront to the opportunities for the good life afforded by the city's food retailing environment [64, 75]. But, the high cost of Whole Foods and HEB's upscale Central Market stores mean that they are financially as well as geographically out of reach for many residents. With the company's latest and largest store in London, Whole Foods has, according to Vice President of Development, Betsy Foster [75], come to face some essential differences between the two cities in the public understanding of the relationship between health and food, and retailing trends more broadly.

While Whole Foods acts as a community and education forum for the ways and means of healthy lifestyles, this role is far less overt in British supermarkets. Indeed, London presents a different face of the political economy of food permitting interviewees involved in the *London Food Strategy*, such as Martin Caraher and Clare Pritchard, to cast obesity as a logical reaction to food retailing, rather than an affront to it as in Austin [33, 37]. This difference is evidenced in the tactics used to promote healthy diets in Texas, with programmes such as *Steps* and the American Heart Association's *De Corazon a Corazon* taking its low income participants on supermarket tours to teach the skills needed for responsibly navigating choice within budget. In the UK, the response to

obesity has been a more general attack on supermarkets themselves with the National Consumer Council (NCC) attracting substantial media attention for their 2006 *Healthy Competition* report grading the UK's major supermarkets along a "Health Responsibility Index" and books such as *Shopped: The Shocking Power of British Supermarkets* (Blythman, 2004) demonstrating the growing disquiet against so-called 'Big Food'.

A 2005 *Which?* consumer report on UK food retailing further suggested that dietary ill-health "raises difficult issues about the extent to which we should be able to eat what we want, the extent to which we are able to make truly informed food choices, and the impact of our food choices on society in general" (Which, 2005: 38). It is worth noting that in a *Which?* Opinion poll, 70% of respondents cited the government as responsible for consumers' healthy diets, 65% cited retailers and 75% the food industry. This corroborates the opinion held by interviewees such as Sue Dibb from the NCC who contends that informed choice is a misnomer until there is control over the products sold and marketed by the food industry [18]. Food retailing has become a political as well as economic question in the UK, as Tesco's profits and expansion into Asia and Eastern Europe has recently courted the attention of the Monopolies and Mergers Commission (Freidburg, 2003b; Tesco, 2007). Just as Wal-Mart has come to symbolise popular objections to the ways and means of the food industry in the US, the same sentiments mobilised around health and obesity in the UK have been targeted at Tesco.

In contrast to Austin where healthy foods were seen as freely available but either not chosen due to lack of knowledge or through economic constraints, interviewees in Camden and Islington did not cite lack of access or availability of healthy food choices as a casual influence upon obesity [6, 8, 13, 19]. Even activists such as Charlie Powell from the non-profit group Sustain [15], who are overtly critical of retailers' power to control consumers' consumption habits agreed that the proliferation of metro supermarket formats in central London mean that most people can access a limited

selection of fresh foods at low prices (see figure 58). In addition, as Maggie Barker points out, the *LFS*'s promise to support street markets for their role in providing cheap, accessible fruit and vegetables, also bodes well for Londoners [26]. Yet, Martin Caraher still raises the concern that more food retail does not necessarily ensure its cultural relevance as supermarket expansion may also mark the loss of popular local shops stocking more specialist goods [33]. These contrasts demonstrate that even though the food industry is increasingly global, risk factors for obesity are inherently localised, rendering general statements about a “global obesity epidemic” (WHO, 2005) with the food industry as an equally universal culprit, difficult to justify in the light of the findings of this comparative study.

Figure 62 - Sainsbury's local format, Camden (photo, author's own)



Discussions of the role of the political economy of food in relation to obesity tend to neglect the fact that health is a significant consumer trend presenting manufacturers and retailers with significant growth prospects at a time when their activities are being otherwise negatively judged. Given that, as chapter three and four suggest, certain foods

are being vilified as a chief cause of obesity, it seems ironic that health concerns are also driving purchasing decisions and new product developments. Indeed, the food industry's concern with supplying healthy products, investing in biomedical research to uncover the mechanisms linking consumption and body weight and creating informed consumers has meant significant restatements of corporate strategies.

As Lang and Heasman (2004) contend, obesity presents the government with a new call for a health-focussed intervention upon food supply, unlike previous public health efforts that have focussed on improving health through the built environment. However, this raises inevitable tensions due to the fact that the food supply, while regulated by the government, is largely dictated by large corporations. Furthermore, the question that the authors then raise is whether the structures and rationale of public health, with its population-scale focus, have the capacity to act upon a corporatised food system predicated upon appealing to individual wants and desires. If public health institutions cannot sway the food industry, this explains appeals to informed choice to create demand for certain products. As an example, government dietary guidance (through the USDA's *Dietary Guidelines* and the British Nutrition Foundation's *Guidelines for a Healthy Diet*) is used, within policy, as the basis of informed choice and is also being actively used by food companies to market their own products as healthier and thus positively re-work their corporate image. As a result, the use of the USDA advice to "eat more wholegrains", has been taken up by Kraft and Nestle to push new products reformulated with added wholegrains as healthy and helping people meet government dietary advice (see Herrick, forthcoming). While such moves are almost always interpreted cynically, they must also be seen as a positive step towards a food economy that might help reduce the risk of obesity among consumers.

Studies of the political economy of food in the context of obesity have tended to highlight the might of corporate power over that of relatively powerless consumers.

Where the power of consumers has been acknowledged, it has more frequently been for their poor decisions when faced with an abundance of food choices than for their potential to exercise this choice to alter the system itself. Consumers may assume that the state has a duty to protect them from some of the negative externalities of the neo-liberal free market, but its capacity to do this is especially limited in the case of food due to the coexistence of rhetorical appeals to individual freedom and choice at the same time as admonitions to act “armed with the facts”.

In reality, regulation of the food industry in both countries is based on loose, voluntary codes of conduct for marketing, advertising and nutritional labelling. However, the lobbying power of the industry in the US is so strong that statutory change is unlikely even with rising obesity rates. The criticism that the food industry does not allow for individual self-control means that possible policy responses range from a complete ban on all unhealthy foods to leaving supply to the hand of the market, consequently placing responsibility on consumers to “imbue eating with a greater kind of power” (Guthman and DuPuis, 2006: 436). It is notable, and somewhat ironic, that the global food system does not have health written into the rationales of either the General Agreement on Tariffs and Trade (GATT) or Codex (Lang and Heasman, 2004), but at a national scale ‘health’ is a driving force behind new food product developments. Furthermore, regional and local food retailing in both countries is often highly responsive to residents’ preferences and demands – something that is frequently forgotten in the overtly critical political economy literature. Food supply and demand are inextricable from each other and yet the literature frequently portrays consumers as bifurcated between powerlessness and not exercising power responsibly. Obesity has problematised almost all aspects of the food economy, but it has also identified that a more synergistic relationship between consumers and the food industry could offer a potential solution, without the need for unpopular state imposition. To explore some of these ideas, the cultural anthropologies

of consumption framework will be revisited before briefly trying to reconcile these supply and demand-side explanations in both case study sites before transposing these theoretical discussions onto a statement concerning the policy implications of this work.

9.4 Cultural anthropologies of consumption

One of the most frequent ways in which obesity is problematised is as a manifestation of anxieties over cultural and social change, both as a result of structural shifts and behavioural responses to these. This is most commonly expressed through concerns over the decline of social cohesion, rising crime compromising street safety, loss of the family meal and changing consumption patterns reflecting the demands of time scarcity. If the risk of obesity has been exacerbated by these changes, then, it is argued, this risk can be mitigated by consuming health – an ideology that has underlain many of the obesity prevention measures discussed in this work. Viewing obesity as a demand-side problem, in contrast to supply-side explanations, focuses attention on those demanding certain products and services, their decision-making processes and resultant behavioural patterns. Individuals or certain groups of consumers (most frequently defined by their level of risk) are thus rendered problematic, and their behaviour must be understood, rationalised and intervened upon to create more desirable consumption practices. Although obesity, health and lifestyle are often conflated, rarely is health explicitly theorised as lifestyle. Understood as a holistic fusion of diet and exercise habits and the relative value accorded to these, this would seem to be a notable omission given that lifestyle and the self and social identities it inspires inform the consumption practices that have become so scrutinised within the obesity literature. This section will seek to explore these ideas further in the context of London and Austin.

In recent years, evidence of rising obesity rates has brought the nature of and motivations for consumption into question thereby legitimately foregrounding behavioural over structural causal explanations. Demand-side explanations have rendered behaviour

change the means and ends of a host of obesity prevention measures, informing for example, social marketing theory and practice, community food groups or efforts to encourage sports participation. Behaviour change has proved to be an enticing solution to obesity largely because it renders individuals problematic, justifying calls for personal responsibility and casting any failure to meet health improvement targets the result of individual unwillingness to change. Theories concerning behaviour change, such as the *Health Belief Model*, the *Theory of Reasoned Action* and *Social Learning Theory* (see Janz and Becker, 1984; Fishbein, 1980; Bandura, 1977; Rosenstock *et al*, 1988) have been a component of health promotion, addiction and psychotherapy since the 1970s. Yet it was not until the development of Prochaska and DiClemente's (1986) *Stages of Change* model that stage-matched interventions could be planned along a course from pre-contemplation, to contemplation, preparation, action, maintenance and (potentially) relapse (Bunton *et al*, 2000). Underpinning the model, used for both *small change*, *big difference* and *i thrive* [1, 3, 5, 7 and 46], is the appealing rationale that those best targeted are those "most likely to change". However, this work has shown that its motivational account of individual behaviour allows for potentially positive measures to increase motivation while essentially sanctioning programme failures by claiming the fault of individual character flaws.

The *Stages of Change* model is now inescapable in public health and its strict adherence by a range of actors in both cities – including marketers, advertisers and public health - has meant a glaring neglect of the ethical implications of the model's conceptualisation of individuals and their suitability for intervention. As Bunton *et al* (2000) contend, the model reduces the complexity of human behaviour into simple stages and abstracts this from its social, economic and political contexts, so that intervention and behaviour appear linear. Most importantly for obesity, the model's wishful logic underplays the complex and interrelated cultural and environmental determinants of behaviour, ironic

given their centrality to health promotion policy such as the *Lalonde Report* and *The Ottawa Charter*. The effect of this, particularly in Austin, has been not just to discourage potentially effective infrastructural investment, but also to reinforce the tendency to narrate obesity rates through the lens of personal responsibility. This tendency has been further exacerbated, Yancey *et al* (2004) contend, as a result of the paucity of health promotion campaign evaluations segmented by ethnicity or with statistically significant ethnic minority sample sizes, despite the elevated risk status of many of these communities. The outcome of this poor evidence base is, as this work has shown, often to “shift responsibility onto individuals” (Bunton *et al*, 2000: 66) by using behaviour and culture as explanatory categories instead of acknowledging the wider range of cultural anxieties, structural inequalities and psycho-social stress factors that can condition health outcomes (Ungar, 2001).

In chapter three, anthropologies of consumption were explored for what they might reveal about the meaning and significance of consumption choices and how they might identify and classify certain individuals and groups as problematic. Obesity brings consumption and public health into close contact and, in the process, reveals the difficulties in addressing a population-scale health problem through the lens of individual behavioural modification. In practice, interviews repeatedly showed how efforts to directly modify consumption practices often neglect the wider meanings of consumption and their relationship to wider lifestyle choices touched upon in chapter three. This tendency is exacerbated by virtue of the fact that their complexity does not match the reductionist logic implied by public health models and stakeholders can thus sidestep context as it may present possible barriers to success. In reality, consumption marks out identity, class, difference and can also be used to promote places (demonstrated aptly by the *LFS*). However, obesity prevention measures, such as social marketing campaigns, heavily based on the *Stages of Change* model neglect the

meanings, significance and social capital (through group inclusion) that can be afforded through consumption practices in favour of more generic messaging based on informed choice and appeals to responsibility.

Social marketing raises some interesting questions about obesity, consumption and the creation of demand – most notably how it is possible to sell the public a good (i.e. healthy lifestyles) that they either do not want or know they need. Behaviour change is a voluntary process and will only work with the correct exchange relationship. For example, social marketing will work only if the benefits of behaviour change are greater than the costs of making such changes. Therefore to induce change, communication of these benefits must acknowledge that some may adopt healthy lifestyles for personal health benefit and others for aesthetic reasons such as weight loss (irrespective of health benefit), an idea often cast as anathema to the basic tenets of public health by interviewees. As an interesting counterpoint, the French lobbying group the *National Collective of Associations for the Obese* (CNAO) launched a poster campaign under the simple banner “l’obésité tue” [obesity kills] in 2006. The stark message that “obesity is a serious illness that kills 55,000 people in France per year” and that it “is not a moral failing, nor is it destiny and much less something to laugh about” (figure 59) presents a very different approach to behaviour change than in the UK or US. Within the *Stages of Change* model, this campaign is a clear example of the shock tactics that are used to catalyse ‘action’ from ‘contemplation’ for other health risks (e.g. smoking or sexual health). However, such an approach was rejected by interviewees across all domains in both cities to avoid marking out obesity as a disease therefore reinforcing existing discriminations explored in this work.

Figure 63 - "L'obésité tue" - a campaign poster from the French Group the National Collective of Associations for the Obese (CNAO) from www.cnao.fr. The wording on the poster demonstrates the kind of shock tactics often used to get individuals to rapidly progress



Past experience and the current prevalence of obesity suggests that “the adoption of commercial advertising and marketing strategies to achieve health promotion goals is largely doomed to failure, both because they have wildly ambitious aims (to persuade large numbers of people to abandon pastimes they find pleasurable or to take up activities they have hitherto avoided) and because their conceptualisation of audience

response is naïve” (Lupton, 1995: 120). Moreover, adding to the propensity to failure is the fact that not only is audience response naively conceptualised as linear and logical, but also the problematic status of consumers themselves within social marketing. The ability of consumers to choose sits in extreme contrast to the framing of target audiences as lacking the knowledge to make good choices (*ibid.*). Attempting to control and meld consumer demand inevitably raises questions among those subject to this control of the state’s right and ability to intervene, especially where difference may be misread as deviance (Williams and Kumanyika, 2002). It is clear that “citizens continually move between resentment at the authoritative nature of the state and its incursion into their private lives, and the expectation that state will take responsibility for ensuring and protecting their health” through “the control of consumption activities” (Lupton, 2000: 134). This tension is perhaps more marked in the UK than in the US, especially given the ongoing expectation of free healthcare. By contrast, interviews in Austin had little expectation that the TDH would do anything to address obesity, with responsibility seen as lying with the Federal government (in terms of priority setting and funding allocation) and individuals themselves.

Obesity therefore renders matters of consumption problematic and, in so doing highlights the cultural differences between individual or group lifestyles and the relative value assigned to health by these. This is seen most strikingly in the disparity between Austin and East Austin, with the latter marked out as a place where consumption practices are risky, uninformed and assign a low value to health [72]. Viewing obesity as a consumption problem reflects anxieties over cultural *change*, but it also reflects anxieties over cultural *difference*, a nuance underplayed in obesity studies. This plays out as disdain for Americanisation in the UK and an unsettling mix of unease and excitement over the colonisation of Austin by “unhealthy” Mexican fast food. These anxieties are also manifest in fears of the corrupting influence of structurally poor, non-white areas on

white lifestyle habits. For example, interviewees in Austin frequently suggested that the East Side was *de facto* unhealthier, by virtue of the poor quality of its built environment [48, 55 and 73]. Such fatalistic accounts are often mixed with curiosity among interviewees as to the ongoing disjuncture between such people and places and the consumption practices advocated by health messages [76, 79].

As Martin Caraher pointed out when interviewed, obesity is, as much as anything, a “social disease” [33]. This notion that a biomedical condition might be perpetuated by societal prescriptions of normality is also made clear by the broad socio-economic and racial divisions between those intervening and those subject to intervention [33]. While there has always been a gulf in expertise and power between doctor and patient, obesity is making this divide more porous by the media mainstreaming and accessibility of health advice. This has occurred alongside the continual divesting of responsibility onto a broad array of stakeholders and investing these figures with the capacity to identify, monitor, survey and classify consumption practices. Yet, these practices tend to individualise obesity and thus mask the importance of the non-governmental domain of group support as an important context for cultivating behaviour change. Group therapy for addictive behaviours (e.g. Alcoholics Anonymous, Narcotics Anonymous and Overeaters Anonymous) has a proven track record, and this model has been transferred successfully to the global phenomena of Weight Watchers and Slimmers’ World. In Camden as Katie Williams points out, the budget setting rights of PCTs has enabled them to send obese patients to Slimmers’ World on prescription [8], an idea incomprehensible to interviewees in Austin. Therefore, behaviour change will not succeed without attention to the context of decision making and purchasing behaviours in addition to their outcomes.

Food studies tend to be bifurcated between those addressing the political economy of supply and those exploring the cultural creation of demand. However this neglects the

fact that obesity does not result from the isolated influence of one or the other, but rather the dialectical interplay of the two. While the food industry responds to consumer demand, marketing also moulds demand. Indeed, social histories of consumption demonstrate that many new household products succeeded by responding to a newly-created need. For example, the entanglement of “social fears and medical concerns” in 1950s America meant that new products such as Listerine transformed halitosis from annoyance to treatable ailment, while Glad Wrap played into fears of contagion and germ transmission in the home (Oshinsky, 2005: 30). The present situation is simply an accelerated version of what has come before, with product advertising often interlacing social fears and medical concerns to persuade consumers that they need products to, for example, reduce their risk of cancer or hypertension thereby fostering awareness of health issues more generally.

As a result, consumption has been irrecoverably altered as “the social construction of illness is being replaced by the corporate construction of disease” (Moynihan *et al*, 2002: 886), with the same corporations owning treatments to such diseases. Now, health education campaigns are inextricable from marketing as direct-to-consumer advertising makes consumers aware of their conditions in advance of diagnosis and, in the process, may negate the awareness-building goals of health promotion (Wilkes *et al*, 2000; Wolfe, 2002). These “new entanglements between health, truth and profit” (Rabinow and Rose, 2003: 24) are clearly understood by industry, but often overlooked or incompletely theorised in policy. The resultant gulf between the market for health and how it is conceptualised and rationalised within obesity prevention efforts means that advances are likely to remain slow. Interview findings in both London and Austin demonstrate that some limits to freedom might be needed to reduce obesity and that any curtailment is likely to result in consumption being transformed into an act of resistance. Clare Pritchard’s accounts of Greenwich parents’ determination to circumvent fears of children

going hungry due to Jamie Oliver's new healthy (and thus unpopular) school meals (see Hill, 2005; Hinsliff, 2005; Hinsliff and Hill, 2005; Revill and Hill, 2005) by smuggling snacks through the playground railings is a clear example of the acts of resistance that result from any perceived imposition upon freedom [37]. Consuming healthy lifestyles concerns the ability to buy ourselves out of social and cultural anxieties – such as crime or poor infrastructure - and thus requires more than information. Ironically, those with the greatest capacity to avoid sources of anxiety are those least likely to have any direct contact with them, but may instead use this capacity to set them apart from those without it. On this note, and having explored some of the tensions inherent within neo-liberal governance and their manifestations, the question of the policy implications of this research will be addressed in order to fulfil the aims set out at the start of this thesis.

9.5 Preventing obesity – practically possible or conceptually unobtainable?

The UK government's PSA target, set in 2004, is to halt the year-on-year rise in obesity rates among under-11s in the context of tackling obesity in the population as a whole by 2010. In the US, while *Healthy People 2010* set the target of reducing adult obesity rates to 15% by 2010 from 23% in 2000 (DHHS, 2004), the *Texas Strategic Plan* aimed only to "increase awareness of healthy lifestyles" and to "mobilise people to choose those lifestyles that contribute to a healthy weight" (TDH, 2005: 1). Despite the UK's target being shared between the DH, DCMS and DfES, with PCTs charged with delivery and evaluation in an increasingly performance-managed NHS, this cross-governmental working has not stopped pessimistic reports that targets will not be met by 2010 (Cole, 2006). Indeed, the UK government was criticised in a 2006 joint report from the Audit Commission, the Healthcare Commission and NAO, on a number of fronts: lacking action on the ground, having too many initiatives that may work in opposition rather than complement each other, a lack of central control and ongoing difficulty in identifying and targeting those most at risk. Furthermore, implementing the new DH guidelines for

measuring children's height and weight in schools also came under fire as results were skewed by parents of the most obese children opting their offspring out of the programme (Hawkes, 2007). It is evident that a failure to demonstrate any statistical movement towards meeting targets cannot be sanctioned through any means such is the degree of internal and external accountability now faced by governments. However, the expectation of government to safeguard the public's health plays out differently on both sides of the Atlantic, meaning that policy makers should widen their disciplinary and geographic domains of best practice.

Obesity prevention is based on the essentially aspatial concept of "evidence of best practice", yet this research shows striking differences in perceptions of the most appropriate locations of best practice. While interviewees in Austin were fascinated to learn that the UK has obesity rates fast approaching their own, many in London were unwilling to believe that anything positive could be gleaned from the US experience. Bruce McVean at CABI actively stated that their research on the built environment and physical activity avoided American case studies, asserting that the American built form could only be an example of worst practice [39]. In reality, despite the assumption by some London interviewees that American cities create sedentarism *tout court*, Austin demonstrates that a culture of physical activity can still emerge *in spite of* otherwise adverse aspects of urban planning. Furthermore, given that civic pride and engagement are chief mayoral concerns in both cities, there would seem to be great scope for dialogue concerning how best to integrate measures to increase physical activity participation with measures to increase the quality and fundamental walkability of the urban environment. Central to this is likely to be coherent branding strategies to promote and raise awareness of actual infrastructural investment intended to help meet public health goals.

This research has shown that despite acknowledging the importance of mobilising communities to achieving long-term health improvements, structural change always takes second place to measures directed at individual behaviour, raising the question of whether people can actually choose to be responsible and the support they might need to achieve this. However, the question of the most appropriate source of support remains a significant conceptual and practical challenge to policy. For example, in Texas the USDA's Women Infants and Children (WIC) vouchers helped 867,000 eligible families in 2004 buy subsidised food, but only recently included fruit and vegetables among the specific items available [41, 43]. In this case, state support will not necessarily improve dietary health unless it is recognised that, as Hawkes (2007: 771) asserts, "public health is, or ought to be, much less voluntary and more prescriptive". The fact that race, poverty and place of residence intersect so starkly in the US means that targeted obesity prevention measures are not only directed at a specific place but, often, a specific demographic. Yet because of this, enacting prescriptive, targeted policy (rather than making generalised and abstracted statements about cultural tendencies) is rendered unattractive through fears of political incorrectness.

In Austin, these fears are particularly marked and the TDH has invested time and effort in trying to understand the cultural risk factors for obesity among Hispanics at the expense of accepting that obesity emerges not from Hispanic culture *per se*, but rather the intersection of poverty, the US welfare system and the kind of inactivity favoured by poor urban environments. Even in a compact city like Austin, poor, car-less residents of East Austin are being forced further and further away from downtown due to the gentrification of the East side and are left without access to affordable supermarkets or open spaces. In such conditions, there is little wonder that government messages to get 30 minutes of "moderate physical activity on most days of the week" are seen as out of touch with the reality of daily life and the constraints imposed by the actual built form of

neighbourhoods. By contrast, in London boroughs, public transport and high density mixed-use planning mean that in the case study area of Camden and Islington, very few groups may be truly unable to access food stores or open spaces. In Austin therefore, planning reform to improve access to the facets of a healthy lifestyle is far more pressing than in London, but ironically absent from the state public health discourse on obesity.

Such ideas beg the question of whether preventing obesity is fundamentally possible, or a task condemned to failure as those at highest risk (for example, Hispanics in Austin or “hard to reach” low income or minority groups in London) have more immediate concerns than their long-term health. This may be a fatalistic opinion and it is easy to be critical of existing measures. However, the potential for population-scale behaviour change may be limited at best, especially as the dialectic of supply and demand is unlikely to produce beneficial outcomes without restrictive legislation. Lifestyle choices are continually increasing, in contrast to the relatively narrow domain prescribed by healthy lifestyle advice. This research also uncovered a feeling among many stakeholders that the mania over obesity is a passing phase and they must therefore capitalise while they can. Interviews in 2005 and 2006 demonstrated a feeling in Texas that momentum to address obesity was waning as a series of relevant legislative bills had failed to be passed and media attention had turned to the Governor’s unwillingness to invest the state’s budget surplus in public schools. Furthermore, as Kim Bandalier and Donna Nichols at the TDH noted, 2005 was also marked by hurricanes Katrina and Rita, events that directed federal resources away from obesity and towards the more immediate concerns of housing and schooling refugees from New Orleans and Galveston [56, 57]. As Kevin Tuerff asserted, “the media spotlight has waned... the attention, the obsession has gone onto other things” [60]. Interviewees in the UK however contended that this “fat fatigue” [70] was not yet a problem and momentum to address obesity was still strong. It is consequently notable that the most recent DH report forecasting obesity

to 2010 (Zaninotto *et al*, 2006) still raised questions concerning the feasibility and justifiability of prevention.

Questioning the feasibility of prevention also means questioning the consequences of inaction. Rising rates of obesity might represent a transitory phase and, in time, some degree of equilibrium might occur between the forces of the economy, the built environment and lifestyles to stabilise the situation. However, inaction may also result in the normalisation of the obese body – documented and applauded by blog sites such as www.bigfatblog.com and materialised through modifications such as increasing restaurant, bus and airline seat sizes in some parts of the US (Younge, 2005). Yet, public opinion dictates that governments must be seen to act, especially given that both countries have continually legitimised intervention on the grounds of the future economic costs to the state and individual health costs - negative externalities that are unlikely to just disappear. Despite its critics (see Campos, 2004; Campos *et al*, 2006), epidemiological trends unfortunately show little sign of passing and discrimination against the obese is growing as an increasingly bifurcated society emerges between those that can and do lead healthy lifestyles and those that cannot or will not. This bifurcation along income and education lines is clear in Austin and London with a class of “worried well” [13] eschewing the state and effectively buying their healthy lifestyles on the private market and undertaking a continual process of reflexive self-improvement. To those people, obesity is a problem that happens to other people, judged for not engaging in projects of the self and therefore reinforcing the inequalities that continue to widen (Shaw *et al*, 2005).

This research has shown that action is needed in advance of evidence of its effects. It also, somewhat ironically, suggests that the current surfeit of action among the huge range of newly-crowned experts in the field may be as ineffective as complete inaction. Anecdotally, the most effective ways of getting adults to adopt healthy lifestyles is

undoubtedly through dedicated and long-term engagement with risk-groups, personalised advice, practical skills and support for those making dietary and activity changes – something actively being undertaken in both cities. However, there is little quantitative evidence of the efficacy of such measures, mainly due to the short-term nature of funding, which often does not include provision for evaluation. Addressing obesity ultimately requires thinking in two directions: adopting small, incremental community-based initiatives and implementing the kind of total legislative and planning changes that would fundamentally alter markets and augment the urban form so as to normalise cycling and walking. There is thus little doubt that achieving the kind of population-scale changes needed to meet PSA or *Healthy People* targets will require attention to the second set of changes, underpinned by individual or community support for those in greatest need.

If obesity is an inevitable outcome of the social and economic inequalities created and perpetuated by neo-liberal economies, then making healthy lifestyles the norm will mean making health incidental to lifestyle. In reality, behaviour change may only be possible by suppressing choices and decisions. Indeed, “best practice” now revolves around making certain actions inevitable and examples include “point-of-decision prompts” highlighting the health benefits of taking the stairs rather than the lift (Boutelle *et al*, 2001), designing offices without lifts, siting car parks further away from buildings, planning regulations ensuring 10% of a building’s employees in London must have cycle stands by 2010 and mixed-use developments encouraging walking for local purchases [12]. The most plausible long-term ways of reversing obesity trends thus include the ideas of mixed-use, high density and open space provision distilled within current planning guidelines in London forcing housing developments to include some retail, pay attention to open space provision and offer low cost housing. Investment in the built environment alone will not entice behaviour change, however masking coercion through

urban design should not only lead help invest places with the kind of “vitality” envisaged by Kearns (1993), but it should also help promote the vitality of the population in a far more sustainable way than tackling the food industry or individual consumption practices alone.

9.6 Conclusion

This chapter has set out to deepen and systematise the analysis of the empirical research by placing it within the three theoretical frameworks of governmentality, the political economy of food and cultural anthropologies of consumption. Among current public health crises, obesity is unusual and compelling as cause and effect cross-cut innumerable domains and spheres of governance. As a result, and as this work has repeatedly shown, designing prevention measures is intensely problematic and raises seemingly intractable questions of who holds the duty to act and whether such action should be focussed on individual behaviours or on far wider structural determinants of health. Further complicating this, the examples chosen have shown that the issues raised within these theoretical frameworks play out differently by locale and, furthermore, demonstrate the marked disparities between the theoretical scenarios of policy and the practice of enacting these. The disjuncture between the short-termism of consumption and the long-term vision needed to effectively communicate the risks of obesity and to sanction investment beyond any single political term, means that preventing further rises in obesity at national and global scales may seem to be an improbable goal. Instead, this work has shown that the most productive “pressure points” (Cottam, 2004: 1203) are at the local scale, meaning community efforts must be combined with modifications to and promotion of the built environment in order to facilitate behavioural change.

Returning to the research themes, the three theoretical frameworks have reiterated how obesity, by virtue of the processes of its translation into the public and policy realm, has become a legitimate site of public health intervention. Governmentality approaches

highlight that this epidemic has become included within the rationale of government by virtue of its status as a “problem” and, in the process, those classified as “at risk” have become legitimate targets of governance from an ever-widening array of stakeholders. This discussion of governmentality demonstrates that the state’s position is not monolithic, but rather tenuous and contested. In the UK, universal healthcare means that the government is expected to address rising rates and has pledged significant extra resources through *Choosing Health* to doing this. At the same time, in both countries, there has been a strong discursive devolution of responsibility to the individual. The differences between the two individualising tendencies hinge on the promise in the UK that the government will act as an “enabler” to facilitate informed choice. This does not appear within US public health policy discourse and perhaps explains the overwhelming number of non-profits engaged in the same healthy lifestyle promotion that occupies the state in the UK. It may also explain the constant assertion by interviewees that the government is unlikely to act, the DH lacks the visibility to be effective and it must therefore fall to other stakeholders to “take ownership of” what is universally deemed to be a very serious health problem [49, 54].

Governmentality offers an interesting perspective for the study of obesity as it demonstrates that the governance of obese bodies is far more diffuse and porous than for many other biomedical “epidemics”, principally due to the overlaying of behavioural and structural risk factors - manifest at a variety of scales - upon existing genetic predisposition. The porosity of stakeholder roles, the tools chosen and rationale behind intervention means that, despite ardent criticism, government may still find itself best placed to legitimately act upon the food supply, in the same way as it has on tobacco, through restrictive legislation that would force consumers to reconsider the goods and services that they demand and, thereby, denormalise unhealthy practices.

The discussions of both the political economy of food and cultural anthropologies of consumption shed light on the fourth research theme: what the panoply of obesity prevention measures currently in place and under development reveal about the tensions inherent within neo-liberal governance in the UK and US. Supply and demand within the broad category of lifestyle are in immediate tension, especially given that both sides can reinforce vulnerability to obesity. This has been a vulnerability perpetuated by the built environment, and thus one that plays out differently in the UK and US, destabilising the WHO's assertion that obesity can be tackled on a global scale as a global epidemic (WHO, 2004, 2005). Indeed, the consumption practices of neo-liberal economies are so inherently localised, bound by the food and leisure industries' adeptness at manipulating individual desire, combined with the far less transient influences of ethnicity and income, that preventing further widespread rises in obesity is unlikely without the most intense local efforts. Austin and its east side residents therefore clearly demonstrate the highly divisive tendencies of late capitalist urbanisation and the deleterious health outcomes and discursive practices that result from racial and income segregation, polarised retail provision, housing quality, open space provision, street lighting, pavements, cycle lanes and public transport.

Demand-side explanations of obesity focus attention on individual unwillingness to change or adopt new behaviours due to the use of conceptual frameworks such as the *Stages of Change* model. With obesity framed primarily as a public health problem, conceptual models form the basis of regularised and standardised prevention efforts to provide the esteemed evidence of best practice that seems remarkably elusive. However, while some models (e.g. socio-ecological frameworks) acknowledge the role of the built environment on health outcomes, and the UK government explicitly included this in its work on inequalities, obesity prevention efforts among stakeholders in London and Austin have been remarkably slow to incorporate this reasoning in practice. The outcome

of this failure has consequently been to reinforce the propensity to blame individuals for their health outcomes rather than accept that in certain environments “making the healthy choices the easy choices” may be functionally impossible (DH, 2005: xx).

An appreciation that obesity is a different phenomenon in the UK and US also means accepting that the tensions inherent within neo-liberalism unfold differently depending on their socio-spatial contexts (Brenner and Theodore, 2002: 356). Not only do cities, the authors rightly contend, act as “incubators” showcasing the ways in which neo-liberalism fails to live up to its own ideology of a free market isolated from state interference, but that the differential contractual relationship between the state and individuals in different countries means that the form of this failure unfolds in unique ways and, in the process, attributes new meanings and significance to places (*Ibid* pp.375). As Herod and Aguiar assert, neo-liberalism “is a spatial project that is spatially projected because...the sway of place still shapes how political praxis is imagined and articulated” (2006: 435). As such, techniques that reduce obesity prevalence in London will not necessarily have the same effect in Austin, not least for fundamental reasons such as disparities in urban morphology or the structure of the healthcare system. This should not, however, mean that policy-makers avoid looking elsewhere for inspiration, but that importing measures that have had success in other places may require modifications to account for the needs and demands of local communities and their specific cultural, political and historical contexts. Obesity evades solutions, a fact made clear when interviewees often had as many questions as they could offer answers. Preventive public health is an archetypal work in progress and it must be appreciated that any change in cultural attitudes to healthy lifestyles will be gradual, incremental and long term. As a result, it is fair to assert that “neo-liberalism both produces obesity and produces it as a problem” (Guthman and DuPois, 2006: 429), but the ability of this doctrine to create a problem is not yet matched by its propensity to proffer a solution. Obesity is a visible manifestation

of a system that is sustained by its own negative externalities. The question of whether addressing these externalities is the duty of the state or a matter of individual responsibility is one whose urgency will, as a consequence, continue to reflect the nature of contemporary cultural anxieties.

Chapter Ten: Conclusion

10.1 Introduction

Obesity has great metonymical significance. Through its emergence and construction as a problem across a broad range of domains, this biomedical condition has attained a degree of explanatory power that makes its study particularly engaging within social science. This work has shown that the explanatory power of obesity extends to, among many others, local politics, interactions with the urban environment, economic change, as well as moral and policy issues surrounding rights, autonomy and responsibility. Such metonymical currency, while holding considerable value, does not, however, come without a cost. Indeed, just as this work has acknowledged the complex realms of meaning that envelop obesity, these same layers present not only potentially illuminating avenues of further research, but their complexity and congruence with certain disciplinary perspectives also mark possible angles of critique. Therefore, before offering some final concluding thoughts drawing this work together, this chapter will first explore some of its limitations and set out some potential directions in which future research might proceed and new research themes that might emerge from these.

10.2 Limitations to the research

While there is a very detailed critique and explanation of the methodologies chosen in the appendix, there are three fundamental and key limitations to this research that will be addressed here. The first relates to the spatial and access restrictions posed by the quantitative data itself. Health Survey for England, Behavioral Risk Factor Surveillance System and Census data is open access, but only at large geographic scales (e.g. SHA, county and tract respectively). By contrast, detailed geocoded HSE data is available but outside the public realm and successful applications to the National Centre for Social Research (NatCen) can take months (nine in this case). Furthermore, the sample size of the geographic boost data for Camden and Islington is so small that for specific racial

groups or certain wards, the data is not statistically significant for either explanatory or policy planning purposes. The BRFSS data boost commissioned by the *Steps to a Healthier Austin* programme also has a very small sample size, making it meaningful when aggregated, but impossible to analyse by zip code. This is frustrating and incongruous, especially since the *Steps* intervention area is delineated by aggregated zip code. Furthermore, this data is only available in its aggregated form and not by zip code alone. The next smallest scale of BRFSS data available open access is at the city scale, making any meaningful analysis of risk groups or high risk areas for obesity fraught with conceptual difficulties. Market research data would also be incredibly insightful for this study, enabling some analysis of how consumption habits or retail trends vary between places, neighbourhoods and people. However, this data can only be accessed for large fees (often as much as €3,000 per report), making it outside the financial capabilities of doctoral research, but easily within the grasp of the food and leisure industries. It seems a lost resource that such knowledge cannot be put to use in strengthening public health approaches to obesity, and without it, the discipline will always be one step behind the market.

The second limitation arises from the interview sample and is examined in more depth in the methodological appendix, but also merits briefer mention here. The fourth research theme explores the tensions inherent within neo-liberal governance in the UK and US through empirical examples of obesity prevention ideologies and practices and demands therefore that that their rationale and tools are the central object of investigation. However, this has undeniably been at the expense of the voices of those subject to such interventions. Interviewees were chosen from a very broad stakeholder base to reflect the fact that obesity prevention is not just the domain of public health, but of a panoply of complimentary and competing interests. But, neglecting the locales of prevention may risk underplaying the acts of resistance that this work only begins to touch upon. These

ideas are further elaborated in the methodological appendix. Governmentality approaches stress the importance of not over-valuing the state, which this work is careful to avoid through identifying the broad range of existing and emergent “experts” in the field of obesity prevention. To delve into the voices of compliance and resistance is simply outside the scope of this project. Furthermore, to do so would fundamentally alter the nature of the research, given that to interrogate how obesity prevention policies are accepted or rejected would perhaps best be suited to research methods such as participant observation, focus groups, and ethnographic study. In addition, straying away from the public health framework would risk undermining a critical approach to the tension between obesity’s construction as both individual and societal health concern. This work has sought to highlight that public health interventions are often based on the idea that consumers lack the knowledge or capacity to be healthy, yet resistance may not be a rejection of knowledge, but rather a conscious decision in the light of it. Thus, such conscious acts of resistance are as vital a part of obesity’s aetiology as knowledge deficits and should not be ignored.

The third limitation derives from the inescapable bias generated by the topic of obesity and the conflicts over disciplinary territory so frequently inspired by social science approaches to biomedical topics. Body weight and bias are tightly entwined and only recently have rights against discrimination based on appearance been legally protected. However, the cultural associations of obesity, obese bodies and the attendant assumptions of personal (deviant) behaviour mean that, to some extent, obesity is still seen by many as one of the few (technically) politically correct ways of expressing anxieties over difference (Cooke, 2006). This work has chosen to focus on obesity prevention from an “expert” perspective, but given that obesity, deprivation and ethnicity are closely correlated, the marked differences between those designing policy and those subject to them may undeniably limit this work, as well as the ultimate efficacy of the

policy “solutions” themselves. It should also be mentioned that bias also emerges from the different disciplinary approaches to obesity, with intense territoriality common, especially among those in public health. As a geographer, entering the public health domain was greeted with curiosity and disbelief that health could be studied geographically to any significant end. Again, these issues are elaborated in greater detail in relation to methodological choices in the appendix. It is interesting that, during the course of this research obesity has risen quickly up geographical research agendas and collaboration with public health departments is now more common. These collaborations offer great potential for more systematic and holistic approaches to the topic.

10.3 Avenues of further research

The limitations to this thesis highlight some instructive new research directions that might respond to these and, in the process, aid in the development of novel future research themes. These new research avenues are intended to build upon the findings of this work to add new dimensions to the study of obesity both within geography and across a number of other related disciplines. Furthermore, while comparative empirical studies have been largely absent from social science studies of the biomedical, future work might build on the approaches adopted here in order to examine new locales, actors and realms of problematisation. There are thus some profitable directions that this work could take to further develop some of the ideas that have been touched upon here but that length and time restrictions have cut frustratingly short. These will be discussed under three interrelated thematic headings: Cities, healthcare systems and government; ethnicity and social justice; and broadening the field of critical health geography.

10.3 i Cities, healthcare systems and government

One of the clearest ways to extend this research would be to change the locale and scale of study. It would instructive to undertake the same mix of quantitative and qualitative

approaches for different cities in the UK and US. If “fatter” cities such as Bradford or Houston, for example, had been chosen, with their different racial compositions, morphology, urban infrastructure and public services; the same theoretical frameworks and quantitative data sources might have resulted in markedly different responses to the same research questions. It is also likely that the differences between the British and American governance of obesity might be less marked than in the somewhat “exceptional” cities of London and Austin, especially given that social and health inequalities are more marked in both cities than elsewhere. The UK and US present interesting points of contrast because of variations between the reciprocal relations between citizens and healthcare systems, meaning that the rhetorical framing and legitimisation of preventative public health interventions also gain meaning at this scale. Consequently, extending the study to other countries, their healthcare systems and types of government would be instructive.

Since the UK and US are both examples of advanced liberal democracies, it would be interesting to explore the governance of obesity in a country with a completely different political system, to not only add to policy debates, but also as a new perspective from which to re-approach the governmentality literature. In Singapore, for example, state-led obesity prevention measures have been in force for a number of years. The Singaporean political system is composed of a *de facto* one party-state that includes some aspects of collective social provision (especially in housing and education), leading many to assume that this democratic city state is closer to authoritarianism (Ham, 2001). This proximity is especially marked through its socially conservative policies restricting, for example, freedom of speech and large-scale public gatherings. The good national state of health, reinforced by a healthcare system that is internationally revered for its efficiency and quality has not, however, prevented high rates of obesity among children and the city state’s Malay population. Singapore thus makes an interesting counterpoint

to the US and UK in first place for the way that discourses of state versus individual responsibility and duty for health play out differently within a system of governance in which the state traditionally and legitimately assumes a deep reach into the private realm. In addition, as a result of Singapore's massive post-independence programmes of urban reconstruction and social engineering, public transport investment and infrastructural capacity-building under the leadership of Lee Kwan Yew, the island undermines some of the assumptions of the obesogenic nature of built environments developed within an Anglo context. It might therefore be instructive to take this research into a new geographical domain by using the case of obesity in Singapore to explore the relationships between authoritarian governmentality and capitalist modes of urbanisation.

Rising childhood obesity rates are now a mounting concern for the governments of populous and rapidly developing nations including China and India (WHO, 2004:1). This concern derives in part from the future health and economic costs of obesity and its potential to exacerbate existing inequalities. The WHO concludes that "governments have a central role, in cooperation with other stakeholders, to create an environment that empowers and encourages behaviour changes by individuals, families and communities, to make positive, life-enhancing decisions on healthy diets and patterns of physical activity" (2004: 42). It would thus be instructive to critically interrogate this statement, to examine how empowerment and encouragement can sit alongside the more fundamental public health goals of reducing the risk of infectious disease through immunisation programs and health education in rapidly developing countries. In countries such as China, the will to empower is complicated by the country's single party socialist politics, while in India, democratic government may also impede the ability of the state to legitimately intervene upon individual lifestyles to any meaningful degree. Rising obesity rates in India and China are inextricable from its broader cultural and social change resulting from and as a result of swelling numbers of middle class citizens.

As a result, the metonymical salience of the topic may be put to good use as a lens through which to document and critically examine these processes of change, while, at the same time, opening up space for a more reflective stance towards the situation in the US and UK.

10.3 ii Health, ethnicity and social justice

The importance of interrogating the outcomes of neo-liberal market relations (of which the socially and economically-graded risk of obesity is a clear example) with a view to changing existing situations of inequality has emerged from this work. The literature reviews undertaken for this thesis revealed a notable lack of engagement with the issues surrounding race and racism especially in relation to obesity and in public health more generally. Health has, however, been an interesting component of race studies, both in historical and contemporary contexts and particularly through accounts of the US environmental justice movement (see Haas *et al*, 2003; Epstein, 2004; Lerner, 2005). However, there needs to be more detailed theoretical and empirical analyses of how race has been used as a proxy for risk in public health, the effects of racial categorisation in epidemiology or the continued applicability of public health models to changing demographic compositions in many countries (Epstein, 2006; 2007). These gaps may also contribute to existing assumptions about cultural differences that, in part, elide race and risk within the rhetoric and rationale of public health. These ideas have been prevalent through the examples chosen in this work, but the comparative analysis of Bangladeshis in London and Hispanics in Austin could be fruitfully deepened and supplemented by more detailed qualitative work with these communities to explore the tensions between how experts believe health promotion messages to be understood, acted upon or resisted and the reality of these processes.

The Hispanic Paradox has been discussed in some detail in chapter eight, but it would be interesting to extend this work to critically examine the literature on “Hispanic Health” in the US. As touched upon in chapter eight, the demographic composition of the United States is rapidly changing, and although this is a phenomenon most marked in the south western states, it now seems that almost all major cities are becoming “Latinized” (Davis, 2000). With health status closely correlated to socio-economic status, there could be scope for using qualitative methods to explore whether poverty or race are more significant risk factors for obesity. Often such studies are undertaken within epidemiology, using correlation coefficients without corroborating these statistical assertions through interviews or focus groups. The interviews undertaken for this work demonstrate the huge gulf between perception and reality in matters of health behaviours. In Austin, there seemed to be a lack of empathy and understanding of the reasons behind higher rates of obesity among Hispanics, the perception often being that some facet of culture led this community to undervalue healthy lifestyles. In reality, interviews undertaken at the Austin Community Health Center revealed that factors such as stress, lack of insurance, uneven gender relations within the home, the sanctity of family and financial pressures were among the many important risk factors for obesity, with the idea of some cultural predisposition dismissed. These findings raise important policy, theoretical and methodological questions for public health, especially as the Latino city increasingly becomes the US norm and courts dedicated academic and political attention.

ii.iii Broadening the scope of health geography

The cultural turn within medical geography and the attendant adoption of qualitative methodologies has opened the discipline to an unprecedented volume of critical research on a wide range of health topics (Rosenburg, 1998), of which obesity is amongst the newest. However, as suggested in chapter two, while there is a mounting volume of

work within what can now plausibly be called ‘critical obesity studies’ (Campos, 2004; Campos *et al*, 2006; Monaghan, 2005), the same politicised, deconstructive tendencies have yet to reach geographical approaches. Such overtly critical stances would suit a number of future research avenues well and, in particular, may shed renewed light on the politics of public health funding and the incorporation of new research methodologies and techniques.

The legitimisation and rationale for obesity’s classification as a public health crisis derives from its status as a biomedically-defined health risk. This classification is not under question. However, as a state institution, public health has to justify the allocation of funds to certain prioritised health risks. The significance for mortality and morbidity data for such priority setting is not to be underestimated in either the US or UK, a fact brought home by a number of interviews. The 2005 controversy over US obesity-related mortality rates, for example, saw obesity rise to the status of “number one killer” in the US, only to fall down the top ten within the space of a few months (see Flegal *et al*, 2002; 2005; Flegal, personal communication, 2007; Mokdad *et al*, 2004, Herrick, 2007) forced many state departments of health to justify their obesity prevention funding against those lobbying for more funds for smoking cessation or Republican-backed abstinence teaching. There is some useful and illuminating research potential in interrogating the politics and socio-spatial logics of public health funding allocation and lobbying at a variety of governmental scales. These processes are rendered even more important objects of study by the fact that despite the apparent malleability of epidemiological, public health must still justify and fulfil its promise to tackle the “chronic non-communicable disease” that it has repeatedly branded in such inflationary terms as “epidemic” and “time bomb”.

The second critical avenue of research is related to the increasing use of GIS to map both health outcomes from epidemiological data and socio-demographic variables in order to

shed light on situations of risk and vulnerability. Outside the academy, London boroughs such as Camden are now employing these techniques to efficiently direct local services to at-risk groups by using postcode level data of consumer typologies. While the aims and methods of this particular research were not designed with a view to develop GIS maps, the empirical research did highlight the scope for GIS-related further analysis within a critical framework, something that would also seek to build upon existing critical GIS studies. This has already been touched upon in chapter seven with the discussion of the disconnect between the ongoing GIS mapping of risk factors in Camden PCT and the lack of any awareness among Obesity Task Force members of its existence or possible utility. Such divides between the call for more quantitative research on obesity by those in public health and the reality that much on-going work that meets these demands is rendered invisible by a dearth of intergovernmental communication is an aspect of obesity prevention rationale and methods that merit further consideration for both their policy and political ramifications.

10.4 Conclusion

Three years ago, at the start of this research, studying obesity within health geography felt like a gamble. However, in time, the irksome need to justify and, where necessary, defend this choice of topic, has abated, just as interest in the topic has soared. This work has responded to the three aims set out in chapter one: to answer calls for attention to obesity within health geography; to augment the existing obesity studies literature by bringing a spatial perspective to bear on studies of the social, political and economic relations surrounding obesity; and to interrogate the changing practices and rationale of public health in the light of changing burdens of disease and shifts within healthcare provision. Given that this thesis has situated discussions of obesity squarely within a qualitatively-orientated health geography, while at the same time highlighting and seeking to mitigate some notable gaps in the literature, the first aim has been satisfied in

both conceptual and empirical terms. The second aim has also been met through a detailed and critical engagement with the inescapably spatial nature of the manifold relations both producing a heightened risk of and vulnerability to obesity and, just as essentially, producing it as a problem. Finally, not only have the changing practices and rationale of public health been addressed, but these have been examined in comparative perspective to add a novel contribution to the health geography and obesity studies literature, both of which have seemed averse to adopting such a methodological stance.

The original contribution of this work to a variety of sub-disciplinary perspectives on health, urban governance, regulatory practices, changing political economic food systems and consumer responses to these is made even more so by the fact that such discussions are reinforced by more explicit references to their unfolding in two cities and the plurality of spaces within these. This work has been structured by four over-riding research themes and, in order to tease out some final concluding thoughts, these will be revisited, paying special attention to the significance of London and Austin to these. The exploration of the nature of obesity's twin identity as a biomedical epidemic and one of "signification" or meanings within policy responded, in turn, to the second research theme, or how the interplay of these two epidemics has created and legitimised sites of intervention for public health. Moreover, in addressing the third theme of the form and rationale of such obesity prevention interventions in London and Austin, the fourth theme's concern with uncovering the wider tensions inherent within neo-liberal governance in the UK and US has been taken up.

The assertion that obesity is a dual epidemic has avoided the trap of overvaluing either biomedical or social constructivist framings of the condition - an unfortunate and ironic characteristic of a bifurcated obesity studies cannon. But, more than this, when discussed with reference to specific examples from London and Austin, the clear interlocking of the lexicon of epidemics with the meanings, attributes and value accorded to urban space

demonstrates that obesity, in contrast to the aura of universalism proffered by some epidemiological accounts, is a condition that in reality is defined by its contingency, particularity and localism. As a result, obesity should not be examined in abstract, overtly conceptual terms, but always with an acknowledgement of its relational constitution.

Addressing health through the lens of governance, expounded in the fourth research theme, demonstrates the ways in which obesity is often called upon as evidence of the pathogenic nature of certain types of social, or indeed, spatial organisation and then used to justify the application of governmental techniques intended to rationalise them. Yet, the processes of rationalisation often only serve, as the case studies demonstrate, to uncover the stark tensions that exist between governmental and individual responsibility, the short-term means and long-term goals of health improvement and local and national policy and budget priorities. The negotiation of these tensions therefore shows that there seems to be a particular affinity between neo-liberal policies and structures, local-scale health inequalities and the risk of obesity.

Statistics may cast obesity as universally prevalent, and especially marked in the neo-liberal economies of the US, UK, Canada, Australia and New Zealand, but the differences between the logic, rationale and tools of government deployed in London and Austin demonstrate that not only do these tensions play out differently, but also that, as a result, policy solutions do not travel well. The perennial optimism underpinning calls for evidence of best practice in both countries masks a residual unwillingness among stakeholders to acknowledge the deep contextualisms of obesity's problematisation. It is thus perhaps through a more reflexive engagement with the reasons why obesity is rendered a problematic phenomenon in relation to certain socio-spatial contexts that the armoury of meanings attached to this biomedical condition can perhaps begin to be put to more positive and creative use in making such contexts "healthier" in every sense.

Appendix

1. Bibliography

- Adam, D., 2003. The fat controller. *The Guardian*, 6 November
- Agamben, G., 1995. *Homo Sacer: Sovereign Power and Bare Life*. Stanford: Stanford University Press
- Ahuja, A., 2005. Obesity: don't swallow everything you're told. *The Times*, 13 June
- Allison, D., Fontaine, K., Manson, J., Stevens, J., and Vantallie, T., 1999. Annual deaths attributable to obesity in the United States. *Journal of the American Medical Association*, **282**(16), pp. 1530-1538
- Allum, N. and Boy, D., 2002. European regions and the knowledge deficit model. In Bauer, M. and Gaskell, G. eds. *Biotechnology: The Making of a Global Controversy*. Cambridge: Cambridge University Press, pp. 224-244
- Alonzo, N. and Reynolds, A., 1995. Stigma, HIV and AIDS: an explanation and elaboration of the stigma trajectory. *Social Science and Medicine*, **41**(3), pp.303-315
- Amiel, S., 2004. Fat chance for freedom with the obesity lobby in full cry. *The Telegraph*, 19 January
- Appleby, J., 2006. Health insurance costs rise 7.7%, twice the rate of inflation. *USA Today*, September 27
- Andalo, D., 2005. Childhood obesity fears: "exaggerated". *The Guardian*, 16 February
- Andrews, G., 2004. (Re)thinking the dynamics between healthcare and place: therapeutic geographies in treatment and care practices. *Area*, **36**(3), pp. 307-318
- Aphramer, I., 2005. Is a weight centred health framework salutogenic? Some thoughts on certain dietary ideologies. *Social Theory and Health*, **3**, pp. 315-340
- Arlidge, J., 2006. Peace, love and profit: meet the world's richest organic grocer. *The Observer Food Monthly*, 29 January
- Armstrong, D., 1995. The rise of surveillance medicine. *Sociology of Health and Illness*, **17**(3), pp. 393-404
- Asthana, A., 2005. School meals get healthy – without Jamie. *The Observer* 21 March
- Asthana, S., Curtis, S., Duncan, C. and Gould, M., 2002. Themes in British health geography at the end of the century: a review of published research 1998-2000. *Social Science and Medicine*, **55** pp. 167-173
- Astrup, A., Meinert Larsen, T., and Harper, A., 2004. Atkins and other low-carbohydrate diets: hoax or an effective tool for weight loss. *The Lancet*, **364**, pp.897-899
- Atkins, L., 2005. The fill pill. *The Guardian*, 19 April
- Atkins, P. and Bowler, I., 2001. *Food In Society: Economy, Culture, Geography*. London: Arnold
- Austin/ Travis County Health and Human Services Department. 2005. *Steps to a Healthier Austin: Behavioral Risk Factor Surveillance System 2005 Report*. Austin: DHHS
- Baggott, R., 2000. *Public Health: Policy and Politics*. New York: Macmillan
- Balko, R., Brownall, K. and Nestle, M., 2004. Are you responsible for your own weight? *Time Magazine*, 7 June

- Ball, K., Timperio, A., Salmon, J., Giles-Corti, B., Roberts, R and Crawford, D., 2007. Personal, social and environmental determinants of educational inequalities in walking: a multilevel study. *Journal of Epidemiology and Community Health*, **61**, pp. 108-114
- Bandura, A., 1977. *A Social Learning Theory*. New York: Pearson Professional
- Barnett, E., 2005. Taking stock : grocery stores are few and far between in East Austin. [online] *Austin Chronicle*. Available from : <http://www.austinchronicle.com/issues/vol17/issue42/pols.grocery.html> [cited 11 July, 2005]
- Barry, A., Osborne, T. and Rose, N. eds., 1996. *Foucault and Political Reason*. London: UCL Press
- Basdevant, A., 2003. *Obésité : Une Véritable Épidémie ?* Paris: Platyus Press
- Bassett, M. and Perl, S., 2004. Obesity: the public health challenge of our time. *American Journal of Public Health*, **94**(9), p.1474
- Bates, C., 2004. Fat Britain: tackling the obesity epidemic. *Daily Mail*, 10 April
- Batty, D., 2005. Drink and cigarette firms "should fund public health campaigns". *Guardian*, 2 June
- Bauman, A., Sallis, J., Dzewaltowski, D and Owen, N., 2002. Toward a better understanding of the influences on physical activity. *American Journal of Preventative Medicine*, **23**, pp. 5-14
- BBC News Online. 2006. North-South health divide remains. *BBC Online* [online]. 10 October Available from: <http://news.bbc.co.uk/1/hi/health/6033023.stm> [cited 1 December 2006]
- BBC Radio Four., 2005. Obesity and Life Insurance. *You and Yours*. 4 August
- BBC Radio Four., 2005. Health Promotion. *You and Yours*. 8 August
- Beaglehole, R. and Yach, D., 2003. Globalisation and the prevalence and control of non-communicable diseases: the neglected chronic diseases of adults. *Lancet*, **362**, pp.903-908
- Belasco, W. and Scranton, P., 2002. *Food Nations: Selling Taste in Consumer Societies*. London: Routledge
- Bell, D. and Valentine, G., 1997. eds., *Consuming Geographies: We Are Where We Eat*. London: Routledge
- Berkman, L. and Kawachi, I., 2000. *Social Epidemiology*. Oxford: Oxford University Press.
- Berndt, E., 2005. To inform or to persuade? Direct-to-consumer advertising of prescription drugs. *New England Journal of Medicine*, **352**(4), pp.325-328
- Blaikie, P., 1994. *At Risk: Natural Hazards, People's Vulnerability and Disasters*. London: Routledge
- Blair, T., 2006. *Our Nation's Future: Healthy Living* speech delivered on July 26, 2006. Available at: <http://www.number-10.gov.uk/output/Page9921.asp> [cited 2 December 2006]
- Blakely, T. A., Lochner, K., and Kawachi, I., 2002. Metropolitan area income inequality and self-rated health - a multi-level study. *Social Science and Medicine*, **54**, pp. 65-77.

- Blanchard, C., McGannon, K., Spence, J., Rhodes, R., Nehl, E., Baker, F. and Bostwick, J., 2005. Social ecological correlates of physical activity in normal weight, overweight and obese individuals. *International Journal of Obesity*, **29**, pp. 720-726
- Blomley, N., 2006. An uncritical critical geography? *Progress in Human Geography*, **30**(1), pp.87-94
- Blythman, J., 2004. *Shopped: The Shocking Power of British Supermarkets*. London: Fourth Estate
- Booth, K., Pinkson, M., Walker, S. and Poston, C., 2005. Obesity and the built environment. *Journal of the American Dietetic Association*, **105**, pp.S110-S117
- Bourdieu, P., 1984. *Distinction*. Cambridge: Harvard University Press
- Boutelle, K., Jeffery, R., Murray, D. and Schmitz, K., 2001. Using signs, artwork, and music to promote stair use in a public building. *American Journal of Public Health*, **91**(12), pp. 2004-2006
- Bordo, S., 1993. *Unbearable Weight: Feminism, Western Culture and the Body*. Berkeley: University of California Press
- Borger, J., 2005. Little exercise, little fresh food. Now the US government is forced to act on obesity. *The Guardian*, 4 June
- Brazier, J. and LeBesco, K., 2001. *Bodies Out of Bounds: Fatness and Transgression*. Berkeley: University of California Press
- Brenner, N. and Theodore, N., 2002. Cities and the geographies of actually existing Neoliberalism. *Antipode*, **34**(3), pp.356-386
- Bristow, J., 1997. *Sexuality*. London: Routledge
- British Hospitality Association., 2006. *British Hospitality: Trends and Statistics 2006*. London: BHA
- British Nutrition Foundation., 2004. *A Critical Review of the Psychosocial Basis of Food Choice and Identification of Tools to Effect Positive Food Choice: A Summary*. London: BNF
- Brook, S., 2005. McDonalds: "We may not win obesity debate". *The Guardian*, 11 February
- Brookes, R., 1999. Newspapers and national identity; the BSE/CJD crisis and the British Press. *Media, Culture and Society*, **21**, pp. 247-263
- Brown, M., 1998. *Replacing Citizenship: AIDS, Activism and Radical Democracy*. New York: Guildford Press
- Brown, T. and Duncan, C., 2002. Placing geographies of public health. *Area*, **33**(4), pp.361-369
- Brownall, K. 2005, The chronicling of obesity: growing awareness of its social, economic and political contexts. *Journal of Health Politics, Policy and Law*, **30**(5), pp.955-964
- Brownall, K. and Battel Horgen, K., 2003. *Food Fight*. Boston: McGraw Hill
- Brownall, K. and Nestle, M., 2004. The sweet and low down on sugar. *New York Times*, 24 January00
- Brownall, K., Puhl, R., Schwartz, M. and Rudd, L., 2005. *Weight Bias: Nature, Consequences and Remedies*. London: The Guildford Press

- Bunton, R., Baldwin, S., Flynn, D. and Whitelaw, S., 2000. The “stages of change” model in health promotion: Science and Ideology. *Critical Public Health*, **10**(1), pp.55-70
- Bunton, R. and Burrows, R., 1995. Consumption and health in the ‘epidemiological clinic’ of late modern medicine. In Bunton, R., Nettleton, S. and Burrows, R. eds., *The Sociology of Health promotion: Critical Analyses of Consumption, Lifestyle and Risk*. London: Routledge, pp. 206-223
- Bunton, R. and Macdonald, G. eds., 1992. *Health Promotion: Disciplines, Diversity and Developments*. London: Routledge
- Burrows, R., Nettleton, J. and Bunton, R., 1995. Sociology and health promotion. Health, risk and consumption under late modernism. In Bunton, R., Nettleton, S. and Burrows, R. eds., *The Sociology of Health promotion: Critical Analyses of Consumption, Lifestyle and Risk*. London: Routledge, pp. 1-13
- Buse, K. and Walt, G., 2000. Global public-private partnerships: Part 1 – a new development in health? *Bulletin of the World Health Organisation*, **78**(4), pp. 549-561
- Butler, R. and Parr, H. eds., 1999. *Mind and Body Spaces: Geographies of Illness, Impairment and Disability*. London: Routledge
- Caldwell, J. and Santow, G., 1989. *Selected Readings in the Cultural, Social and Behavioural Determinants of Health*. Canberra: Bibliotech
- Camden Primary Care Trust, 2000. *Heart Disease in Camden and Islington*. London: Public Health Department
- Camden Primary Care Trust, 2002. *Physical Activity Review and Strategy 2003-2006: Camden*. London: Candid Consultants
- Camden Primary Care Trust, 2003a. *Action On Obesity: A Strategic Review and Action Plan for Camden and Islington 2003-2006*. London: Camden and Islington PCT
- Camden Primary Care Trust, 2003b. *Eating for Health in Camden 2003-2006*. London: Camden PCT
- Camden Primary Care Trust, 2004. *Improving Health in Camden*. London: Camden PCT
- Campos, P., 2004. *The Obesity Myth. Why America's Obsession with Weight is Hazardous to your Health*. New York: Gotham Books
- Campos, P., Saguy, A., Ernsberger, P., Oliver, E. and Gaesser, G., 2006. The epidemiology of overweight and obesity: public health crisis or moral panic? *International Journal of Epidemiology*, **35**, pp. 55-60
- Carmona, R., 2003a. The Obesity Crisis in America: Testimony before the Committee on Education Reform, Committee on Education in the Workforce and the United States House of Representatives. 16 July 2003. Available from: <http://www.surgeongeneral.gov/news/testimony/obesity07162003.htm> [cited 9 September 2006]
- Carmona, R., 2003b. Speech prepared for the American Enterprise Institute's Obesity Conference, Washington DC. 10 June 2003. Available from: <http://www.surgeongeneral.gov/news/speeches/obesity061003.htm> [cited 14 September 2006]
- Carroll, R., 2004. South African obesity hits US levels. *The Guardian*, 3 November, p.16

Cassady, D., Culp, J. and Watnik, M., 2002. Using social marketing to promote a healthy diet and physical activity: the need for training public health professionals. *Social Marketing Quarterly*, **8**(4), pp.53-63

CBS 11. 2006. New Urbanism could help Americans fight obesity. [online]. Available from: http://cbs11tv.com/topstories/local_story_167233636.html [cited 10 June 2006]

Centers for Disease Control. 2005. *Social Marketing*. [online]. Available from: <http://www.cdc.gov/communication/practice/socialmarketing.htm> [cited 1 May 2006]

Centers for Disease Control. 2006a. *Behavioural Risk Factor Surveillance System*, database available from: <http://www.cdc.gov/brfss/>

Centers for Disease Control. 2006b. *National Health and Nutrition Examination Survey*, database available from: <http://www.cdc.gov/nchs/nhanes.htm>

Center for Science in the Public Interest. 2005. *Lost in Translation: Regulatory Cooperation by the US and EU Needed to Address the Transatlantic Epidemic of Obesity and Diet-related Disease*. Washington DC: CSPI

Chadwick, P. and Crocker, H., 2005. Obesity management – worth the effort? *The Psychologist*, **18**(4), pp.220-224

Chang, V and Christakis, N., 2002. Medical modelling of obesity: a transition from action to experience in a 20c American medical textbook. *Sociology of Health and Illness*, **24**(2), pp.151-177

Charles, D., 2001. *Lords of the Harvest: Biotech, Big Money and the Future of Food*. London: Perseus

Choo, V., 2002. WHO reassesses appropriate body-mass index for Asian populations. *The Lancet*, **360**(9328), pp.235.

Chopra, M. and Darnton-Hill, I., 2004. The tobacco and obesity epidemics: not so different after all. *British Medical Journal*, **328**, pp. 1558-1560

Chowdhury, T. and Grace, C., 2003. Preventing diabetes in South Asians. *British Medical Journal*, **327**, pp.1059-1060

City of Austin. 2006. Press release: make Austin the nation's fittest. [online]. Available from: http://www.ci.austin.tx.us/council/mw_fittest_drive.htm [cited 1 May 2006]

Clarke, J., 2005. New Labour's citizens: activated, empowered, responsabilized, abandoned? *Critical Social Policy*, **25**(4), pp.447-463

Clarke, J., Smith, N. and Vidler, E., 2006. The indeterminacy of Choice: Political, Policy and Organisational Implications. *Social Policy and Society*, **5**(3), pp.327-336

Cliff, A. and Haggett, P., 1986. *Spatial Aspects of Influenza Epidemics*. London: Pion

Cliff, A. and Haggett, P., 1988. *Atlas of Disease Distribution: Analytical Approaches to Epidemiological Data*. London: Blackwell

Cliff, A. and Haggett, P., 1993. Statistical modelling of measles and influenza outbreaks. *Statistical methods in Medical Research*, **2**(1), pp.43-73

Coburn, D., 2004. Beyond the income inequality hypothesis: class, neo-liberalism, and health inequalities. *Social Science and Medicine*, **58**, pp. 41-56

Cohen, N., 2005. Olympic ideals flouted. *The Guardian*, 13 November

Coleman, J., 1988. Social capital in the creation of human capital. *American Journal of Sociology*, **94**, pp.S95-S120

- Colgrove, J., 2002. The McKeown Thesis: a historical controversy and its enduring influence. *American Journal of Public Health*, **92**(5), pp.725-729
- Cooke, R., 2006. Is weight the new race? *The Observer Woman*, 9 July
- Corburn, J., 2004. Confronting the challenges of reconnecting urban planning and public health. *American Journal of Public Health*, **94**(4), pp. 541-547
- Cottam, D., 2004. Obesity and culture. *The Lancet*, **364**, pp.1202-1203
- Counihan, C., 1999. *The Anthropology of Food and Body: Gender, Meaning and Power*. London: Routledge
- Counihan, C., 2002. *Food in the USA: A Reader*. London: Routledge
- Counihan, C. and Van Esterik, P. eds., 1997. *Food and Culture: A Reader*. New York: Routledge
- Couzin, J., 2005. A heavy weight battle over CDC's obesity forecasts. *Science*, **308** pp. 770-771
- Craddock, S., 1995. Sewers and scapegoats: spatial metaphors of smallpox in nineteenth century San Francisco. *Social Science of Medicine*, **41**(7), pp.957-968
- Craddock, S. 2000. Disease, social identity and risk: rethinking the geography of AIDS. *Transactions of the Institute of British Geographers*, **25**(2), pp. 153-174
- Crang, P., 2002. Qualitative methods: the new orthodoxy? *Progress in Human Geography*, **26**(5), pp. 647-655
- Crang, P., 2003. Qualitative methods: touchy, feely, look-see? *Progress in Human Geography*, **27**(4), pp.494-504
- Crettaz Von Rotten, F., 2006. Do we need a public understanding of statistics? *Public Understanding of Science*, **15**, pp. 243-249
- Crimp, D., ed. 1988. *AIDS: Cultural Analysis, Cultural Activism*. Boston: MIT Press
- Crinson, I., 2005. The direction of health policy in New Labour's third term. *Critical Social Policy*, **25**(4), pp.507-516
- Critser, G., 2004. *Fat Land: How Americans Became the Fattest People in the World*. Mifflin, Colorado: Houghton
- Cummins, S. and Macintyre, S., 2002. 'Food deserts': evidence and assumptions in health policy making. *British Medical Journal*, **325**, pp.436-438
- Cummins, S. and Macintyre, S., 2006. Food environments and obesity: neighbourhood or nation? *International Journal of Epidemiology*, **35**(11), pp.11-14
- Cummins, S., Findlay, A., Higgins, C., Petticrew, M. and Sparks, L., 2005 Do large-scale food retail interventions improve diet and health? *British Medical Journal*, **330**, pp. 683-684
- Curry, T., 2005. Governor warns of 600,000 obesity deaths. *MSNBC* [online]. Available from: <http://msnbc.msn.com/id/9480347/> [cited 10 April 2006]
- Curtis, J., 2004. Should private sector 'sell' health? *Marketing*, 24 November
- Curtis, S., Cave, B. and Coutts, A., 2002. Is urban regeneration good for health? Perceptions and theories of the health impacts of urban change. *Environment and Planning C*, **20**(4), pp. 517-534

- Curtis, S., Gesler, W., Smith, G. and Washburn, S., 2000. Approaches to case selection and sampling in qualitative research: examples in the geography of health. *Social Science and Medicine*, **50**, pp.1001-1014
- Curtis, S. and Taket, A., 1996. *Health and Societies: Changing Perspectives*. London: Arnold
- Cutchin, M., 1999. Virtual medical geographies: conceptualizing telemedicine and regionalization. *Progress in Human Geography*, **26**(1), pp.19-39
- Cutchin, M., 2004. A Deweyen case for the study of uncertainty in health geography. *Health and Place*, **10**, pp.203-213
- Datamonitor. 2006. *Capitalising on New Breakfast, Lunch and Dinner Consumption Patterns*. London: Datamonitor
- Davidson, R., Hunt, K. and Kitzinger, J., 2003. Radical blueprint for social change? Media representations of New Labour's policies on public health. *Sociology of Health and Illness*, **25**(6), pp.532-552
- Daviglus, M., Lui, K., Yan, L., Pirzada, A., Manheim, L., Manning, W., Garside, D., Wang, R., Dyer, A., Greenland, P. and Stamler, J., 2004. Relation of body mass index in young adulthood and middle age to Medicare expenditures in older age. *Journal of the American Medical Association*, **292**(22), pp.2743-2749
- Davin, S., 2003. Healthy viewing: the reception of medical narratives. *Sociology of Health and Illness*, **25**(6), pp.662-679
- Davis, M., 2000. *Magical Urbanism: Latinos Reinvent the US City*. London: Verso
- Day, P. and Klein, R., 1989. The politics of modernization: Britain's National Health Service in the 1980s. *The Milbank Quarterly*, **67**(1), pp.1-34
- De Garine, I. and Pollack, N. eds., 1995. *Social Aspects of Obesity*. London: Gordon and Breach
- Dean, M., 1999. Liberal government and authoritarianism. *Economy and Society*, **31**(1), pp. 37-61
- Dean, M., 2003. Michel Foucault: 'A man in danger'. In Ritzer, G. and Smart, B., eds. *Handbook of Social Theory* London: Sage, pp. 324-338
- Deans, J., 2005. 5m line up for last serving of Jamie's Dinners. *The Guardian*, 17 March
- Dear, M., 1984. Health services planning: searching for solutions in well defined places. In Clark, M. ed., *London Papers in Regional Science*. London: Pion, pp. 7-21
- Delanty, G., 2003. *Community*. London: Routledge
- Denavas-Walt, C., Proctor, B. and Hill Lee, C., 2005. *Income, Poverty and Health Insurance Coverage in the United States: 2004*. Washington DC: United States Census Bureau
- Department of Health. 1996. *Low Income, Food, Nutrition and Health: Strategies for Improvement.. A Report from the Low Income Project Team to the Nutrition Task Force*. London: Department of Health
- Department of Health. 1998. *Our Healthier Nation: A Contract for Health*. London: DH
- Department of Health. 2000. *Coronary heart disease: national service framework for coronary heart disease - modern standards and service models*. London: DH
- Department of Health. 2001. *Wanless Report: Securing Our Future Health: Taking a Long-term View*. London: DH

- Department of Health. 2002. Obesity: the biggest unrecognised public health problem? *NW Health Bulletin*, 2(4), pp.1-7
- Department of Health. 2003a. *Food and Health Action Plan*. London: DH
- Department of Health. 2003b. *On the State of the Public Health: Annual Report of the Chief Medical Officer 2002*. London: DH
- Department of Health. 2004a. *Choosing Health: Making Healthier Choices Easier*. London: DH
- Department of Health. 2004b. *On the State of the Public Health: Annual Report of the Chief Medical Officer 2003*. London: DH
- Department of Health. 2005a. *Choosing a Better Diet: A Food and Health Action Plan*. London: DH
- Department of Health. 2005b. *Choosing Activity: A Physical Activity Action Plan*. London: DH
- Department of Health. 2005c. *Delivering Choosing Health: Making Healthy Choices Easier*. London: DH
- Department of Health. 2006a. *Measuring Childhood Obesity – guidance to Primary Care Trusts*. London: DH
- Department of Health. 2006b. *Our Health, Our Care, Our Say: A New Direction for Community Services*. London: DH
- Department of Health. 2006c. *Health Challenge England – Next Steps for Choosing Health*. London: DH
- Department of Health. 2006d. *Informing Healthier Choices- Information and Intelligence for Healthy Populations*. London: DH
- Deyo, R., 2006. Unhealthy obsessions. *Newsweek*, 13 March
- Di Loreto, C., Fanelli, C., Lucidi, P., Murdolo, G., De Cicco, A., Parlanti, N., Ranchelli, A., Fatone, C., Taglioni, C., Santeusano, F. and De Feo, P., 2005. Make Your diabetic patients walk - long-term impact of different amounts of physical activity on type 2 diabetes. *Diabetes Care*, 28, pp. 1295-1302
- Diez Roux, A., 2001. Investigating neighbourhood and area effects on health. *American Journal of Public Health*, 91(11), pp.1783-1789
- Doel, M. and Seagrott, J., 2003. Self, health and gender: complementary and alternative medicine in the British mass media. *Gender, Place and Culture*, 10(2), pp.131-144
- Donaldson, L., 2002. Health Services and the Public Health. *Journal of Epidemiology and Community Health*, 56, pp.835-840
- Dorling, D. and Shaw, M., 2002. Geographies of the agenda: public policy, the discipline and its (re)turns. *Progress in Human Geography*, 26(5), pp.629-641
- Dorn, M. and Laws, G., 1994. Social theory, body politics and medical geography: extending Kearns' invitation. *The Professional Geographer*, 46(1), pp.106-110
- Douglas, M., 1994. *Risk and Blame: Essays in Cultural Theory*. London: Routledge
- Douglas, M., 2002. *Purity and Danger: An Analysis of the Concepts of Pollution and Taboo*. London: Routledge
- Dr Foster. 2005. *Primary Care Management of Adult Obesity* [online]. Available from: <http://www.drfooster.co.uk/cms/files/obesity.pdf> [cited 2 February 2005]

- Drake, A., Smith, A., Betts, P., Crane, E. and Shield, J., 2002. First cases of type 2 diabetes in white UK teenagers. *Archives of Diseases in Childhood*, **86**, pp. 207-208
- Drewnowski, A., Atustam Henderson, S., Shore, A., Fischler, C., Preziosi, P. and Herzberg, S., 1996. Diet quality and dietary diversity in France: Implications. *Journal of the American Dietetic Association*, **96**(7), pp.663-669
- Drèze, J., Sen, A. and Hussain, A., 1995. *Political Economy of Hunger*. Oxford: Clarendon Press
- Driscoll, M., 2003. Fit or fat: the new class war. *The Times*, 2 June
- Duany, A., Plater-Zyberk, E. and Speck, J., 2001. *Suburban Nation: The Rise of Sprawl and the Decline of the American Dream*. New York: North Point Press
- Duff, O., 2004. NHS goes nuts to promote men's health. *The Independent*, 22 November
- Dutta-Bergman, M., 2005. Psychographic profiling of fruit and vegetable consumption: the role of health orientation. *Social Marketing Quarterly*, **9**(1), pp.19-35
- Dwyer, O., 2002. First cases of type 2 diabetes found in white UK teenagers. *British Medical Journal*, **324**, pp. 506
- Dyck, I., 1995. Hidden Geographies: the changing life-worlds of women with disabilities. *Social Science and Medicine*, **40**(3), pp.307-320.
- Dyck, I., 1999. Using qualitative methods in medical geography – deconstructive moments in a sub-discipline. *Professional Geographer*, **51**(2), pp.243-253
- Dyck, I., 2003. Feminism and health geography: twin tracks or divergent agendas? *Gender, Place and Culture*, **10**(4), pp.361-368
- Ebbeling, C., Pawlak, D. and Ludwig, D., 2002. Childhood obesity: public health crisis, common sense cure. *The Lancet*, **360**, pp.473-482
- Economic and Social Research Council. 2004. *Talking Obesity: Changing Behaviour*. London: ESRC Seminar Series
- Economist, The. 2004a. No smoking, foxhunting, sugar, salt, fat... 20 November, p.13
- Economist, The. 2004b. Public health: for richer, for poorer. 20 November, pp.31-32
- Edwards, R., 2003. Nemesis, Sisyphus and a contribution from the medical humanities to health research. *Journal of Epidemiology and Community Health*, **57**, pp. 926-927
- Eggar, G. and Swinburn, B., 1997. An "ecological approach to the obesity epidemic". *British Medical Journal*, **315**, pp. 477-480
- Eid, J., Obverman, H., Puga, D. and Turner, M. 2006. Fat city: the relationship between urban sprawl and obesity. *London School of Economics CEP Discussion Paper*, **758**, pp. 1-27
- Elder, J., 2002. Social marketing and environment-behaviour relationships: alternative models for explaining and changing physical activity and nutrition. *Social Marketing Quarterly*, **13**(4), pp.67-68
- Ellis, C., 2002. The New Urbanism: critiques and rebuttals. *Journal of Urban Design*, **7**(3), pp.261-291
- Epstein, S., 1995. *Altered Conditions: Disease, Medicine and Storytelling*. London: Routledge
- Epstein, S., 1998. *Impure Science: AIDS, Activism and the Politics of Knowledge*. London: Taylor and Francis Press

- Epstein, S., 2004. Bodily differences and collective identities: the politics of gender and race in biomedical research in the United States. *Body and Society*, **10**(2-3), pp.183-203
- Epstein, S., 2007. *Inclusion: The Politics of Difference in Medical Research*. Chicago: University of Chicago Press
- Ericson, R., Barry, D. and Doyle, A., 2000. The moral hazards of Neoliberalism: lessons from the private insurance industry. *Economy and Society*, **29**(4), pp.532-558
- Escarce, J., Morales, L. and Rumbaut, R., 2006. The health status and health behaviours of Hispanics. In Tienda, M. and Mitchell, F. eds., *Hispanics and the Future of America*. Washington DC: National Research Council of the National Academy, pp.362-409
- Euromonitor Plc. 2006. *Global Health and Wellness Report*. London: Euromonitor Plc.
- Evans, B., 2006. 'Gluttony or Sloth': Critical geographies of bodies and morality in (anti)obesity policy. *Area*, **38**(3), pp. 259-267
- Evans, D., 2003. Taking public health out of the ghetto: the policy and practice of multidisciplinary public health in the United Kingdom. *Social Science and Medicine*, **57**(6), pp. 959-967
- Falit, B., 2003. Fast food fighter fall flat: plaintiffs fail to establish that McDonalds should be liable for obesity-related illness. *Journal of Law, Medicine and Ethics*, **31**(4), pp. 725-729
- Farmer, P., 1993. *AIDS and Accusation: Haiti and the Geography of Blame*. Berkeley: University of California Press
- Farmer, P., 1997. Social scientists and the new tuberculosis. *Social Science and Medicine*, **44**(3), pp.347-358
- Farmer, P., 1999. *Infections and Inequalities: The Modern Plagues*. Berkeley: University of California Press
- Farmer, P., 2002. Commentary. In Suarez-Orozco, M. and Paez, M. eds. *Latinos: Remaking America*. Berkeley: University of California Press, pp. 254-258
- Feachem, R., 2001. Globalisation is good for your health, mostly. *British Medical Journal*, **323**, pp.504-506
- Fearnley-Whittingstall, H., 2006. I'm lovin' it. *The Guardian*, 4 March
- Fernandez-Armesto, F., 2001. *Food: A History*. London: Macmillan
- Fine, B., 1998. *The Political Economy of Diet, Health and Food Policy*. London: Routledge
- Fine, B., Heasman, M. and Wright, J., 1995. *Consumption in the Age of Affluence: The World of Food*. London: Routledge
- Fine, J., Colditz, G., Coakley, E., Moseley, G., Manson, J., Willett, W. and Kawachi, I., 2002. A prospective study of weight change and health-related quality of life. *Journal of the American Medical Association*, **282**, pp.2136-2142.
- Finklestein, E., Fiebelkorn, F. and Wang, G., 2003. National medical spending attributable to overweight and obesity: how much and who's paying? *Health Affairs*, 14 May, pp.1-8
- Finklestein, E., Fiebelkorn, F. and Wang, G. 2004. State-level estimates of annual medical expenditures attributable to obesity. *Obesity Research*, **12**(1), pp.18-24
- Finklestein, E., Ruhn, C. and Kosa, K., 2005. Economic causes and consequences of obesity. *Annual Review of Public Health*, **26**, pp. 239-257

- Fishbein, M., 1980. A theory of reasoned action: some applications and limitations. *Nebraska Symposium on Motivation*, **27**, pp. 65-116
- Fisher, L., 2004. Obesity. The new black death. *Daily Mirror*, 12 February
- Fitzpatrick, F., 2001. *The Tyranny of Health: Doctors and the Regulation of Lifestyle*. Davis: University of California Press
- Flegal, K., Carroll, M., Ogden, C. and Johnson, C., 2002. Prevalence and trends in obesity among US adults, 1999-2000. *Journal of the American Medical Association*, **288**(14), pp.1723-1727
- Flegal, K., Graubard, B., Williamson, D. and Gail, M., 2005. Excess death associated with underweight, overweight and obesity. *Journal of the American Medical Association*, **293**, pp. 1861-1867
- Fontaine, K., Redden, D., Wang, C., Westfall, A. and Allison, D., 2003. Years of life lost due to obesity. *Journal American Medical Association*, **289**(2), pp.187-193
- Food Ethics Council. 2005. *Getting personal: shifting responsibilities for dietary health*. London: Food Ethics Council
- Food Standards Agency. 2004. *National Diet and Nutrition Survey Volume 5*. Available from: <http://www.food.gov.uk/multimedia/pdfs/ndns5full.pdf> [cited 5 May 2005]
- Food Standards Agency. 2007. *Low Income Diet and Nutrition Survey*. London: FSA
- Forth, C. and Carden Coyne, A., 2005. *Cultures of the Abdomen: Diet, Digestion and Fat in the Modern World*. New York: Macmillan
- Foucault, M., 1978 *The History of Sexuality: An Introduction*. London: Penguin
- Foucault, M., 1991. The ethic of care for the self as a practice of freedom: An interview with Michel Foucault on January 20, 1984. In Bernauer, J. and Rasmussen, D., Eds., *The Final Foucault*. Cambridge, MA: The MIT Press, pp. 1-20
- Fox, R., 2004. *Food and Eating: An Anthropological Perspective*. London: The Social Issues Research Council
- Fox, K. and Hillsdon, M., 2007. Physical activity and obesity. *Obesity Reviews*, **8**(1), pp.115-121
- Frank, L., Andresen, M. and Schmid, T., 2004. Obesity relationships with community design, physical activity and time spent in cars. *American Journal of Preventative Medicine*, **27**(2), pp.87-96
- Freidberg, S., 2003a. Editorial: Not all sweetness and light: new cultural geographies of food. *Social and Cultural Geography*, **4**(1), pp.3-6
- Freidburg, S., 2003b. Cleaning up down South: supermarkets, ethical trade and African horticulture. *Social and Cultural Geography*, **4**(1), pp. 27-43
- French, S., 2000. Re-scaling the economic geography of knowledge and information: constructing life assurance markets. *Geoforum*, **31**, pp. 101-119
- Freund, P. and McGuire, M., 1995. *Health, Illness and the Social Body*. Englewood Cliffs, NJ: Prentice Hall
- Frumkin, H., 2002. Urban Sprawl and Public Health. *Public Health Reports*, **117**(3), pp.201-218
- Furedi, F., 2002. *Culture of Fear: Risk-Taking and the Morality of Low Expectation*. London: Continuum International Publishing Group

- Furedi, F., 2004. *Therapy Culture: Cultivating Vulnerability in an Uncertain Age*. London: Routledge
- Fusco, C., 2006. Inscribing healthification: governance, risk, surveillance and the subjects and spaces of fitness and health. *Health and Place*, **12**(1), pp.65-78
- Gabriel, Y. and Lang, T., 1995. *The Unmanageable Consumer: Contemporary Consumption and its Fragmentations*. London: Sage
- Gandy, M., 2005. Cyborg Urbanization: Complexity and Monstrosity in the Contemporary City. *International Journal of Urban and Regional Research*, **29**(1), pp.26-41
- Gandy, M., 2006. Zones of indistinction: bio-political contestations in the urban arena. *Cultural Geography*, **4**, pp.497-516
- Gandy, M. and Zumla, A., 2002. Resurgence of disease: social and historical perspectives on the 'new' tuberculosis. *Social Science and Medicine*, **55**(3), pp.397-401
- Gandy, M. and Zumla, A. eds. 2003. *The Return of the White Plague*. London: Verso
- Gard, M. and Wright, J., 2005. *The Obesity Epidemic: Science, Morality and Ideology*. London: Routledge
- Garcia, J., 2003. *Latino Politics in America*. New York: Rowman and Littlefield
- Garrett, L., 2000. *Betrayal of Trust: The Collapse of Global Public Health*. New York: Hyperion
- Garrety, K., 2000. Social worlds, actor networks and controversy: the case of cholesterol, dietary fat and heart disease. *Social Studies of Science*, **27**(5), pp.727-773
- Garvin, T., 1995. 'We're strong women'. Building a strong community-university partnership. *Geoforum*, **26**, 273-286
- Gatrell, A., 1997. Structures of geographical and social space and their consequences for human health. *Geografisker Annaler B*, **79**(3), pp.141-154
- Gatrell, A., 2002. *Geographies of Health*. London: Blackwell
- Gesler, W., 1991. *The Cultural Geography of Healthcare*. Pittsburgh: University of Pittsburgh Press
- Gesler, W., 1992. Therapeutic landscapes: medical issues in the light of the new cultural geography. *Social Science and Medicine*, **34**(7), pp. 735-746
- Gesler, W. and Kearns, R., 2002. *Culture/ Place/ Health*. London: Routledge
- Giles-Corti, B. and Donovan, R., 2002. The relative influence of individual, social and physical environment determinants of physical activity. *Social Science and Medicine*, **54**, pp. 1793-1812
- Giles-Corti, B. and Donovan, R., 2003. Relative influences of individual, social environmental and physical environmental correlates of walking. *American Journal of Public Health*, **93**(9), pp. 1583-1589
- Giles-Corti, B., Broomhall, M., Knuiam, M., Collins, C., Dougals, K., Ng, K., Lange, A. and Donovan, R., 2005. How important is distance to, attractiveness, and size of public open space? *American Journal of Preventative Medicine*, **28**, pp. 169-176
- Gillett, J., 2003. Media activism and internet use by people with HIV/AIDS. *Sociology of Health and Illness*, **25**(6), pp.608-624
- Gilman, S., 2004. *Fat Boys: A Slim Book*. Lincoln: University of Nebraska Press

- Glanz, K., Sallis, J., Saelens, B and Frank, L., 2005. Healthy nutrition environments: concepts and measures. *American Journal of Health Promotion*, **19**(5), pp. 330-333
- Glassner, B., 1989. Fitness and the post-modern self. *Journal of Health and Social Behaviour*, **30**(2), pp.180-191
- Glassner, B., 1995. In the name of health. In Bunton, R., Nettleton, S. and Burrows, R. eds., *The Sociology of Health promotion: Critical Analyses of Consumption, Lifestyle and Risk*. London: Routledge, pp. 159-175
- Glassner, B., 1999. *The Culture of Fear: The Assault on Optimism in America*. New York: Basic Books
- Goldburg, R., Rissler, J., Shand, H. and Hassebrook, C., 1990. *Biotechnology's Bitter Harvest: Herbicide Tolerant Crops and the Threat to Sustainable Agriculture*. Boston: Report of the Biotechnology Working Group.
- Goraya, A. and Scrambler, S., 1998. From old to new public health: role tensions and contradictions. *Critical Public Health*, **8**(2), pp.141-153
- Gould, P., 1993. *The Slow Plague: A Geography of the AIDS Pandemic*. London: Blackwell
- Gould, P. and Wallace., R. 1994. Spatial structures and scientific paradoxes in the AIDS pandemic. *Geografiska Annaler B*, **76**(2), pp.105-116.
- Gray, R., 2004. In the hands of advertisers. *Marketing*, 24 November
- Greater London Authority. 2004. *Health In London*. London: Health Commission
- Greco, M., 1993. Psychosomatic subjects and the 'duty to be well': personal agency within medical rationality. *Economy and Society*, **22**, pp.357-372
- Greenhouse, S. and Barbaro, M., 2005. Wal-mart memo suggest ways to cut employee benefit costs. *New York Times*, 26 October
- Greiner, K., Li, C., Kawachi, I., Hunt, C. and Ahluwalia, J., 2004. The relationship of social participation and community ratings to health and health behaviors in areas with high and low population density. *Social Science and Medicine*, **59**, pp.2303-2312
- Grosz, E., 1995. *Space, Time and Perversion: Essays on the Politics of Bodies*. New York: Routledge
- Gruffudd, P., 2001. Science and the stuff of life: modernist health centres in 1930s London. *Journal of Historical Geography*, **27**(3), pp.395-416
- Grzywacz, J. and Marks, N., 2001. Social Inequalities and exercise during adulthood: towards an ecological perspective. *Journal of Health and Social Behaviour*, **42**(2), pp.202-220
- Guibert, H., 1991. *A l'ami qui ne m'a pas sauvé la vie*. Paris : Gallimard
- Guibert, H., 1993. *Le Protocole Compassionel*. Paris: Gallimard
- Guthman, J., 2003. Fast food/organic food: reflexive tastes and the making of 'yuppie chow'. *Social and Cultural Geography*, **4**(1), pp.45-58
- Guthman, J. and DuPuis, M., 2006. Embodying neo-liberalism: economy, culture and the politics of fat. *Environment and Planning D*, **24**, pp. 427-448
- Guttman, N. and Ressler, W., 2001. On being responsible: ethical issues in appeals to personal responsibility in health campaigns. *Journal of Health Communication* **6**, pp. 117-136

- Haas, J., Lee, L., Kaplan, C., Sonneborn, D., Phillips, K. and Liang, L., 2003. The association of race, socioeconomic status and health insurance status with the prevalence of overweight among children and adults. *American Journal of Public Health*, **93**(2), pp.2105-2110
- Haggett, P. 1965. *Locational analysis in human geography*. London: Arnold
- Hart, K., 2000. *Eating in the Dark: America's Experiment With Genetically Modified Food*. London: Pantheon
- Hawkes, N., 2007. Body Politic: Fat Chance of Hitting Obesity Targets. *British Medical Journal*, **334**(7584), p.771
- Heasman, M. and Mellentin, J., 2001. *The Functional Foods Revolution: Healthy People, Healthy Profits*. London: Earthscan
- Herrick, C., 2005. Cultures of GM: Discourses of risk and labelling in the US and UK. *Area*, **37**(3), pp. 286-294
- Herrick, C., 2007. Risky Bodies: Public health, social marketing and the governance of obesity. *Geoforum*, **38** (1), pp. 90–102
- Herrick, C., Forthcoming a. To the West and East of Interstate-35: Obesity, philanthropic entrepreneurialism and the delineation of risk in Austin, Texas *Environment and Planning A*
- Herrick, C., Forthcoming b. Shifting blame/selling health: Corporate Social Responsibility in the age of obesity. *Antipode*
- Hall, E., 2000. Blood, brain and bones: taking the body seriously in the geography of health and impairment. *Area*, **32**(1), pp.21-329
- Ham, C., 1996. *Public, Private or Community: What Next for the NHS?* London: Demos
- Ham, C., 1999. Improving NHS performance: human behaviour and health policy. *British Medical Journal*, **319**, pp.1490-1492
- Ham, C., 2001. Commentary: values and health policy: the case of Singapore. *Journal of Health Politics, Policy and Law*, **6**(4), pp.740-747
- Ham, C. and Alberti, K., 2002. The medical profession, the public and the government. *British Medical Journal*, **324**, pp.838-842
- Hastings, G., 2002. Marketing diet and exercise: lessons from Mammon. *Social Marketing Quarterly*, **VIII**(4), pp.31-39
- Hawkes, C., 2007. Promoting healthy diets and tackling obesity and diet-related chronic diseases: what are the agricultural policy levers? *Food Nutrition Bulletin*, **27**(3), pp. S312-322
- Hayes, M., 1999. Man, disease and environmental associations: from medical geography to health inequalities. *Progress in Human Geography*, **23**(2), pp.289-296
- Hayes-Bautista, D., 2002. The Latino health research agenda for the 21st century. In Suarez-Orozco, M. and Paez, M. eds., *Latinos Remaking America*. Berkeley: University of California Press, pp. 215-235
- Hayward, S., 2003. Ban on children's junk food ads. *Sunday Mirror*, 9 November
- Hazuda, H., Haffner, S., Stern, M. and Eifler, C., 1988. Effects of acculturation and socio-economic status on obesity and diabetes in Mexican Americans. The San Antonio Heart Study. *American Journal of Epidemiology*, **128**(6), pp. 1289-1301

- Health Survey for England. 2004. Database available from:
<http://www.dh.gov.uk/PublicationsAndStatistics/PublishedSurvey/HealthSurveyForEngland/fs/en> London: Department of Health [cited 1 November 2005]
- Health Development Agency. 2004. *The Effectiveness of Public Health Campaigns*. [online] Available from:
http://www.hda.nhs.uk/downloads/pdfs/choosing_health/CHB7-campaigns-14-7.pdf
 [cited 31 October 2005]
- Health Insurance Institute. 1961. *Source Book of Health Insurance Data 1960*. New York: Health Insurance Institute
- Heller, E., 2002. Fat suit weighs in. *National Law Journal*. [online]. Available from:
<http://www.law.com/servlet/ContentServer?pagename=OpenMarket/Xcelerate/View&c=LawArticle&cid=1039054412904&live=true&cst=1&pc=0&pa=0> [cited 20 January 2005]
- Henwood, F., Wyatt, S., Hart, A. and Smith, J., 2003. 'Ignorance is bliss sometimes': constraints on the emergence of the 'informed patient' in the changing landscapes of health information. *Sociology of Health and Illness*, **25**(6), pp.589-607
- Herod, A. and Aguiar, L., 2006. Geographies of Neoliberalism. *Antipode*, **38**(3), pp.435-439
- Heynen, N. and Robbins, P., 2005. The neoliberalization of nature: governance, privatization, valuation and enclosure. *Capitalism Nature Socialism*, **16**(1), pp. 5-8
- Hickman, M., 2005. Sales of organic food and drink to reach £2bn by 2010. *The Independent*, 22 December
- Hickman, M., 2006. Sales of fizzy drinks and fatty foods slump. *The Independent*, 3 March
- Hill, A., 2005. Only Jamie can do dinners at 37p. *The Guardian*, 20 February
- Hill, J. and Peters, J., 1998. Environmental contributions to the obesity epidemic. *Science*, **280**, pp. 1371-1390
- Hinsliff, G., 2005. Parent's will fork out for Jamie's food. *The Guardian*, 27 March
- Hinsliff, G. and Hill, A., 2005. Blair acts on Jamie's plan for schools. *The Guardian*, 20 March
- Hoelscher, D., Day, R. and Lee, E., 2004. Measuring the prevalence of overweight in Texas schoolchildren. *American Journal of Public Health*, **94**, pp. 1002-1008
- Hobbs, D., Lister, S., Hadfield, P., Winslow, S. and Hall, S., 2000. Receiving shadows: governance and liminality in the night-time economy. *British Journal of Sociology*, **51**(4), pp.701-717
- Hoffman, J. and Wilkes, M., 1999. Direct-to-consumer advertising of prescription drugs – an idea whose time should never come. *British Medical Journal*, **318**, pp. 1301-1302
- Hooper, E., 1998. *The River: A Journey Back to the Source of HIV and AIDS*. London: Penguin
- Hostman, K., 2001. *Public Bodies, Private Lives: The Historical Construction of Life Insurance, Health Risks and Citizenship*. Rotterdam: Erasmus
- House of Commons Health Committee. 2004. *Obesity: Third Report of Session 2003-2004 Volume I*. London: House of Commons Health Committee.

- Howe, G., 1986. Does it matter where I live? *Transactions of the Institute of British Geographers*, **11**(4), pp.387-414
- Hubbard, V., 2000. Defining overweight and obesity. What are the issues? *American Journal of Clinical Nutrition*, **72**, pp.1067-1068
- Huckabee, M., 2005. *Quit Digging Your Grave With a Knife and Fork*. New York: Center Street.
- Hunter, D., 2005. Choosing or losing health? *Journal of Epidemiology and Community Health*, **59**, pp. 1010-1013
- Hussein-Gambles, M., Atkin, K. and Leese, B. 2004. Why ethnic minority groups are under-represented in clinical trials – a review of the literature. *Health and Social Care in the Community*, **12**(5), pp. 382-388
- Huxley, M., 2007. Geographies of governmentality. In Crampton, M and Elden, S. eds. *Space, Knowledge and Power: Foucault and Geography*. London: Ashgate, pp. 185-205
- Illich, I., 1974. Medical nemesis. *Lancet*, **1**, pp. 919-921
- International Obesity Task Force. 2005. *Global obesity prevalence statistics*. Available from: <http://www.iotf.org/> [cited 1 August 2005]
- Jackson, R., 2005. Commentary on Active Living research. *American Journal Preventative Medicine*, **28**, pp. 218-219
- Jacobs, J., 1961. *The Death and Life of Great American Cities*. Vintage: New York
- Jacobson, M. and Brownall, K., 2000. Small taxes on soft drinks and snack foods to promote health. *American Journal of Public Health*, **90**, pp.854-857
- Janz, N. and Becker, M., 1984. The Health Belief Model: A Decade Later. *Health, Education and Behaviour*, **11**(1), pp. 1-47
- Jebb, S., 1999. Obesity: from molecules to man. *Proceedings of the Nutrition Society*, **58**, pp.1-14
- Jones, A., Bentham, G., Foster, C., Hillsdon, M. and Panter, J., 2007. *Obesogenic Environments: Evidence Review*. London: Foresight Programme of the Office of Science and Innovation, Department of Trade and Industry
- Jordan, B., 2005. New Labour: choice and values. *Critical Social Policy*, **25**(4), pp.427-446
- Joyce, P., 2001. Governmentality and risk: setting priorities in the new NHS. *Sociology of Health and Illness*, **23**(5), pp.594-614
- Joyce, P., 2003. *The Rule of Freedom: Liberalism and the Modern City*. London: Verso
- JP Morgan. 2006. *Obesity: Re-shaping the food industry*. London: JP Morgan Global Equity Investment
- Kantrowitz, B. and Kalb, L., 2006. Food news blues. *Newsweek*, 13 March
- Kawachi, I. and Kennedy, B., 2001. How income inequality affects health: Evidence from research in the United States. In Auerbach, J. and Krimgold, B. eds., *Income, Socioeconomic Status, and Health: Exploring the Relationships*. Washington, D. C.: National Policy Association, pp.12-34
- Kearns, G., 2007. The history of medical geography after Foucault. In Crampton, J and Elden, S. eds. *Space, Knowledge and Power: Foucault and Geography*. London: Ashgate, pp. 205-222

- Kearns, R., 1991. The place of health in the health of place: the case of the Hokianga special medical area. *Social Science and Medicine*, **33**(4), pp.519-530
- Kearns, R., 1993. Place and health: towards a reformed medical geography. *Professional Geographer*, **45**(2), pp. 139-147
- Kearns, R., 1997. Narrative and metaphor in health geographies. *Progress in Human Geography*, **21**(2), pp.269-277
- Kearns, R. and Gesler, W., 1998. *Putting Health into Place*. Syracuse: Syracuse University Press
- Kearns, R. and Moon, G., 2002. From medical geography to health geography: novelty, place and theory after a decade of change. *Progress in Human Geography*, **26**(5), pp.605-625
- Keil, R., 2005. Progress report – urban political ecology. *Urban Geography*, **26**(7), pp. 540-551
- Kersh, R. and Morone, J., 2002a. How the personal becomes political: prohibition, public health and obesity. *Studies in American Political Development*, **16**, pp. 162-175
- Kersh, R. and Morone, J., 2002b. The politics of obesity: seven steps to government action. *Health Affairs*, **21**(6), pp.142-154
- Kersh, R. and Morone, J., 2005. Obesity, courts and the politics of public health. *Journal of Health Politics, Policy and Law*, **30**(5), pp.839-868
- Klein, E., 2006. Socialised medicine rocks. *Today*, 23 March [online]. Available from: http://ezraklein.typepad.com/blog/2006/01/socialized_medi.html [cited 1 August 2006]
- Klein, N., 2002. *No Logo*. London: Flamingo
- Klein, R., 1997. *Eat Fat*. London: Picador
- Kneen, J., 2005. A Big Issue. *The Guardian*, 12 July
- Kopelman, P., 2000. Obesity as a medical problem. *Nature*, **404**, pp. 635-644
- Kradlec, D., 2004. Chain Reaction. *Time Magazine*, 7 June
- Kroll-Smith, S., 2003. Popular media and 'excessive daytime sleepiness': a study of rhetorical authority in medical sociology. *Sociology of Health and Illness*, **25**(6), pp.625-643
- Krugman, P. and Wells, R., 2006. The health care crisis and what to do about it. *The New York Review of Books*, 23 March, pp. 38-43
- Kumanyika, S., 2001. Mini-symposium on obesity: overview and some strategic considerations. *Annual Review of Public Health*, **22**, pp.293-308
- Kunstler, J., 1994. *The Geography of Nowhere: The Rise and Decline of America's Manmade Landscape*. New York: Free Press
- Kunstler, J., 1998. *Home from Nowhere: Remaking our Everyday World for the 21st Century*. New York: Free Press
- Lalonde, M., 1974. *A New Perspective on the health of Canadians*. Ottawa: Health Canada
- Lambrech, B., 2001. *Dinner at the New Gene Café: How Genetic Engineering is Changing What We Eat, How We Live and the Global Politics of Food*. London: Griffin
- Land Registry., 2006. *House Price Index*. [Online]. Available from: <http://www.landreg.gov.uk/houseprices/> (cited 2 November 2006)

- Lang, T., 1999. The complexities of globalization: the UK as a case study of tensions within the food system and the challenge to food policy. *Agriculture and Human Values*, **16**, pp. 169-185
- Lang, T., 2003. Food Industrialisation and Food Power: Implications for Food Governance. *Development Policy Review*, **21**(5-6), pp.555-568
- Lang, T. and Arami, D., 2004. *Discussion Group: Public Health Legislation and Obesity*. Available from: http://www.fph.org.uk/policy_communication/downloads/Events/Past_events/2004/Health_people_jan04/obesity_lang.pdf [cited 10 November 2004]
- Lang, T. and Heasman, M., 2004. *Food Wars*. London: Earthscan
- Lang, T. and Raynor, G., 2003. Food and health strategy in the UK – a policy impact analysis. *Political Quarterly*, **74**(1), pp. 66-75
- Lang, T. and Raynor, G., 2005. Obesity: a growing issue for European policy. *Journal of European Social Policy*, **15**(4), pp.301-327
- Larner, W., 2000. Neo-liberalism: policy, ideology, governmentality. *Studies in Political Economy*, **63**, pp. 5-25
- Latour, B., 2004. How to talk about the body? The normative dimension of science studies. *Body and Society*, **10** (2-3), pp.205-229
- Latour, B. and Woolgar, S., 1985. *Laboratory Life*. Princeton: Princeton University Press
- Lawlor, D., Ness, A., Cope, A., Davis, A., Insall, P. and Riddoch, C., 2003. The challenges of evaluating environmental interventions to increase population levels of physical activity: the case of the UK cycle network. *Journal of Epidemiology and Community Health*, **57**, pp.96-101
- Lawrence, F., 2004. *Not On the Label: What Really Goes into the Food on your Plate*. London: Penguin
- Lawrence, F., 2005. Private deals block Jamie's school dinners. *The Guardian*, 25 April
- LeBesco, K., 2004. *Revolt Bodies? The Struggle to Redefine Fat Identity*. Amherst: University of Massachusetts Press
- LeBesco, K. and Braziel, J., 2001. *Bodies out of Bounds: Fatness and Transgression*. Berkeley: University of California Press
- LeBlanc, P., 2006. Austin unfit? Mayor's Fitness Council comes up with a new way to define and challenge city's fitness status. *Austin American Statesman*, 23 January
- Lee, I., Sesso, O., Oguma, Y. and Paffenbarger, R., 2004. The 'Weekend Warrior' and the risk of mortality. *American Journal of Epidemiology*, **160**, pp.636-641
- Lefebvre, R., 1992. Social marketing and health promotion. In Bunton, R. and Macdonald, G. eds., *Health Promotion: Disciplines, Diversity and Developments*, London: Routledge, pp. 219-246
- Legg, S., 2005. Foucault's population geographies: classifications, biopolitics and governmental scales. *Population, Space and Place*, **11**, pp. 137-156
- Lemke, T., 2001. The birth of bio-politics: Michel Foucault's lecture at the College de France on neo-liberal governmentality. *Economy and Society*, **30**(2), pp.190-207
- Lemke, T., 2002. Foucault, governmentality and critique. *Rethinking Marxism*, **14**(3), pp. 49-65

- Lemke, T., 2004. Disposition and determinism – genetic diagnostics in risk society. *The Sociological Review*, **52** (4), pp. 550-566
- Lemonick, M., 2004a. How we grew so big. *Time Magazine*, 7 June
- Lemonick, M., 2004b. The year of obesity. *Time Magazine*, 27 December
- Lerner, S., 2005. *Diamond: A Struggle for Environmental Justice in Louisiana's Chemical Corridor*. Cambridge: The MIT Press
- Leslie, S. and Reimer, D., 1999. Spatialising commodity chains. *Progress in Human Geography*, **23**(3), pp.401-420
- Levenstein, H., 1988. *Revolution at the Table: The Transformation of the American Diet*. Oxford: Oxford University Press
- Levenstein, H., 1993. *Paradox of Plenty: A Social History of Eating in Modern America*. Oxford: Oxford University Press
- Leyden, K., 2003. Social Capital and the built environment: the importance of walkable neighbourhoods. *American Journal of Public Health*, **93**, pp.1546-1551
- Lincoln, P., 2004. *Developing sustainable long-term comprehensive national strategies to prevent obesity in children*. Presentation to the Nordic Public Health Conference, Bergen, 12 October
- Locayo, R., 2004. The walking cure. *Time Magazine*, June 7
- Lochner, K., Kawachi, I., Brennan, R. and Buka, S., 2003. Social capital and neighborhood mortality rates in Chicago. *Social Science & Medicine*, **56**, pp.1797-1805.
- Logue, A., 2004. *The Psychology of Eating and Drinking*. New York: Routledge
- London Development Agency. 2005. *Better Food for London: The Mayor's Draft Food Strategy*. London: London Development Agency and Mayor of London.
- London Health Commission. 2004. *London's Health*. London: London Health Commission
- London Health Observatory. 2005. *Choosing Health: A Briefing on Nutrition, Physical Activity and Obesity in London*. Available from: http://www.lho.org.uk/Download/4mkk5d55puevgieajcrnmcjz/live/9044/LHO_Down_Obesity_Briefing_4.pdf [cited 5 May 2006]
- Longhurst, R., 1997. (Dis)embodied geographies. *Progress in Human Geography*, **21**(4), pp.486-501
- Longhurst, R., 2005. Fat bodies: developing geographical research agendas. *Progress in Human Geography*, **29**(3), pp.247-259
- Lupton, D., 1995. *The Imperative of Health: Public Health and the Regulated Body*. London: Sage
- MacDonald, T., ed., 2003. *The Social Significance of Health Promotion*. London: Routledge
- MacKian, S., Elliot, H., Busby, H. and Popay, J., 2003. Everywhere and nowhere: locating and understanding the 'new' public health. *Health and Place*, **9**, pp.219-229
- Macintyre, J., Ellway, A. and Cummins, S., 2002. Place effects on health: how can we conceptualise, operationalise and measure them? *Social Science and Medicine*, **12**(3), pp.125-139
- Maibach, E. 2002. Explicating social marketing: what is it and what isn't it? *Social Marketing Quarterly*, **13**(4), pp. 7-13

- Mark, D., 2005. Editorial: deaths attributable to obesity. *Journal of the American Medical Association*, **293**, pp. 1918-1919
- Marsden, T. and Harrison, M., 2000. *Consuming Interests: The Social Provision of Foods*. London: UCL Press
- Marton, M., 2005. Obesity Scandal. *Health Care News*, 1 May
- Marvin, S. and Medd, W., 2006. Metabolisms of Obecity: fat across bodies, cities and sewers. *Environment and Planning A*, **38**(2), 313-324
- Matless, D., 2001. Bodies made of grass, made of earth, made of bodies: organicism, diet and national health in mid-twentieth-century England. *Journal of Historical Geography*, **27**(3), pp.355-376
- Matlock, T., 2003. What's this? The French love McDonalds? *Business Week*, 13 January
- Mayer, J. and Meade, M., 1994. A reformed medical geography considered. *The Professional Geographer*, **46**(1), pp.103-106
- Mayor of London. 2004. *The London Plan*. London: Greater London Authority
- Mayor of London. 2006. *The London Plan: Sub-regional Development Framework Central London*. London: Greater London Authority
- McKeown, T., 1973. *The Role of Medicine: Dream, Mirage or Nemesis*.
- McKeown, T., 1976. *The Modern Rise of Population*. London: Edward Arnold
- McRobbie, A. and Thornton, S., 1995. Rethinking moral panic for multi-mediated social worlds. *British Journal of Sociology*, **46**(4), pp. 559-574
- Meade, M., Florin, J. and Gesler, W., 1988. *Medical Geography*. New York: Guildford
- Meades, T., 2003. The fat of their land. America's lardy dystopia is knocking at our door – and now is the time to act. *Evening Standard*, 9 June
- Meek, J., 2003. The Trillion Dollar Disease. *London Review of Books* **25**(15)
- Meikle, J., 2004. Obesity: rising fears of cancer time bomb. *The Guardian*, 8 January
- Meikle, J., 2005. Labour heartland heads obesity league. *The Guardian*, 26 February
- Mello, M., Rimm, E. and Studdert, D., 2003. The McLawsuit: The fast food industry and legal accountability for obesity. *Health Affairs*, **22**(6), pp.207-216
- Mennell, S., Murcott, A. and Van Otterloo, A., 1992. *The Sociology of Food: Eating, Diet and Culture*. London: Sage
- Men's Fitness. 2005. *US fat and fit city rankings*. [online]. Available from: <http://www.mensfitness.com/rankings/304> [cited 24 March 2005]
- Merchant, C., 2003. *Reinventing Eden. Western Culture as Recovery Narrative*. London: Routledge
- Miles, A., Rapaport, L., Wardle, J., Afuape, T. and Duman, M., 2001. Using the mass media to target obesity: an analysis of the characteristics and reported behaviour change of participants of the BBC's "Fighting Fat, Fighting Fit" campaign. *Health Education Research*, **16**(3), pp.357-372
- Miller, P. and Rose, N., 1997. Mobilising the consumer: assembling the subject of consumption. *Theory, Culture and Society*, **14**(1), pp.1-36
- Millman, M., 1980. *Such a Pretty Face: Being Fat in America*. London: Norton and Co.

- Ministry of Agriculture, Fisheries and Food., 2002. *Strategy for Sustainable Farming and Food: Facing the Future*. London: MAFF
- Minkler, M., 1999. Personal responsibility for health? A review of the arguments and the evidence at century's end. *Health Education and Behaviour*, **26**(1), pp.121-144
- Minz, S., 1985. *Sweetness and Power*. London: Penguin
- Mohan, J., 1998. Explaining geographies of health care: a critique. *Health and Place*, **4**(2), pp.113-124
- Mohan, G. and Mohan, J., 2002. Placing social capital. *Progress in Human Geography*, **26**(2), pp.101-110
- Mokdad, A., Serdula, M., Dietz, W., Bowman, B., Marks, J. and Koplan, J., 1999. The spread of the obesity epidemic in the United States, 1991-1998. *Journal of the American Medical Association*, **282**(16), pp.1519- 1522
- Mokdad, A., Bowman, B., Ford, E., Vinicor, F., Marks, J. and Koplan, J., 2001. The continuing epidemics of obesity and diabetes in the United States. *Journal of the American Medical Association*, **286**(10), pp.1195-1200
- Mokdad, A., Marks, J., Stroup, D. and Gerberding, J., 2004. Actual causes of death in the United States, 2000. *Journal of the American Medical Association*, **291**, pp.1238-1245
- Moloney, E., 2006. The diet that died. *Sunday Times Magazine*, 19 February, pp. 28-36
- Monbiot, G., 2000. *Captive State*. London: Macmillan
- Monette, P., 1988. *Borrowed Time: An AIDS Memoir*. San Diego: Harcourt Brace Jovanovich
- Monaghan, L., 2005. Discussion piece: a critical take on the obesity debate. *Social Theory and Health*, **3**, pp. 302-314
- Moon, G. and Brown, T., 2000 Governmentality and the spatialised discourse of policy. The consolidation of post-1989 NHS reform. *Transactions of the Institute of British Geographers*, **25**(1), pp.65-76
- Moynihan, R., Heath, I. and Henry, D., 2002. Selling sickness: the pharmaceutical industry and disease mongering. *British Medical Journal*, **324**, pp. 886-891
- Mulvihill, C. and Quigley, R., 2003. *The Management of Obesity and Overweight. An Analysis of Reviews of Diet, Physical Activity and Behavioural Approaches . Evidence Briefing*. London: National Health Service Health Development Agency
- Murcott, A. ed., 1998. *The Nation's Diet: The Social Science of Food Choice*. London: Longman
- Murdock, S., White, S., Hoyue, M., Pecotte, B., Yon, X. and Balhan, J., 2002. *Texas Challenge Report*. Austin: Office of the State Demographer
- Must, A., Spadano, J., Coakley, E., Field, A., Colditz, G. and Dietz, W., 1999. The disease burden associated With overweight and obesity. *Journal of the American Medical Association*, **282**(16), pp. 1523-1529
- National Audit Office. 2001. *Tackling Obesity in England*. [online]. Available from: http://www.nao.org.uk/publications/nao_reports/00-01/0001220.pdf [cited 3 March 2005]
- National Cancer Institute and National Institutes of Health. 1997. *Theory at a Glance: A Guide for Health Promotion Practice*. [online]. Available from: <http://www.nci.nih.gov/aboutnci/oc/theory-at-a-glance/allpages> [cited 4 April 2005]

- National Consumer Council. 2005a. *National Social Marketing Strategy for Health: Realising the Potential of Effective Social Marketing*. [online]. Available from: <http://www.ncc.org.uk/health/NSMS%20LEAFLET%20-%20Realising%20the%20potential%20of%20effective%20social%20marketing.pdf> [cited 9 March 2006]
- National Consumer Council. 2006. *Healthy Competition: How Supermarkets Can Affect Your Chances of a Healthy Diet*. [online]. Available from: <http://www.ncc.org.uk/food/healthycompetition.pdf> [cited 2 December 2005]
- National Governors' Association. 2003. *The Obesity Epidemic: How States Can Trim the Fat*. Washington DC: National Governor's Association Healthy Policy Studies Division
- National Health Service., 2006. *Community Health Profiles*. [online] Available from: <http://www.communityhealthprofiles.info/> [cited 4 February 2007]
- National Institute for Health and Clinical Excellence. 2006. *Physical Activity Guidance*. London: National Health Service
- Navarro, V. ed., 2004. *The Political and Social Contexts of Health*. Amityville: Baywood
- Nestle, M., 2002. *Food Politics: How the Food Industry Influences Nutrition and Health*. Berkeley: University of California Press
- Nestle, M., 2003. *Safe Food: Bacteria, Biotechnology and Bioterrorism*. Berkeley: University of California Press
- Nestle, M. and Dixon, L., 2004. *Taking Sides: Clashing Views on Controversial Issues in Food and Nutrition*. Guilford: McGraw-Hill/ Dushkin
- Nestle, M. and Jacobson, M., 2000. Halting the obesity epidemic: a public health policy approach. *Public Health Reports*, **115**, pp.12-24
- Newman, J. and Vidler, E., 2006. Discriminating customers, responsible patients, empowered users: consumerism and the modernisation of healthcare. *Journal of Social Policy*, **35**(2), pp.193-209
- Nord, M., Andrews, M. and Carlson, S., 2005. *Household Food Security in the United States*. Washington DC: United States Department of Agriculture, Economic Research Series.
- Northrop, M., 2005. The social amplification of risk in relation to obesity. [online]. Available from: <http://www.kent.ac.uk/scarr/events/finalpapers/Northrop.pdf> [cited 45 November 2005]
- Novas, C. and Rose, N., 2000. Genetic risk and the birth of the somatic individual. *Economy and Society*, **29**(4), pp.485-513
- Obernauer, M., 2006. No sweets in schools? Fat chance. *Austin American Statesman*, 19 February
- Offer, A., 2001. Body weight and self-control in the United States and Britain since the 1950s. *The Society for the Social History of Medicine*, **14**(1), pp.79-106
- Office of the Deputy Prime Minister. 2004. *Indices of Deprivation 2004*. [online]. Available from: <http://www.communities.gov.uk/index.asp?id=1128445#TopOfPage> [cited 21 September 2006]
- Office of the Deputy Prime Minister. 2005. *Creating healthier communities: a resource pack for local partnerships*. London: ODPM

- Office of National Statistics. 2001. *United Kingdom Census*. [online] Available from: <http://www.statistics.gov.uk/census2001/op12.asp> [cited 16 January 2006]
- Ogborn, M., 1995. Discipline, government and law: separate confinement in the prisons of England and Wales 1830-1877. *Transactions of the Institute of British Geographers*, **20**(3), pp. 295-311
- Ogden, C., Flegal, K., Carroll, M. and Johnson, C., 2002. Prevalence and trends in overweight among US children and adolescents, 1999-2000. *Journal of the American Medical Association*, **288**(14), pp.1728-1732
- Ogden, C., Carroll, M., Curtin, L., McDowell, M., Tabak, C. and Flegal, K., 2006. Prevalence of overweight and obesity in the United States: 1999-2004. *Journal of the American Medical Association*, **295**(13), pp.1549-1555
- Ogden, J., 2005. Obesity management – the paradox of control. *The Psychologist*, **18**(4), pp.224-226
- Oliver, J., 2006. *Fat Politics: The Real Story Behind America's Obesity Epidemic*. Oxford: Oxford University Press
- Oliver, J. and Lee, T., 2005. Public opinion and the politics of obesity in America. *Journal of Health Policy, Politics and Law*, **30**(5), pp.923-954
- Olshansky, S., Passaro, D., Hershaw, R., Layden, J., Carnes, B., Brody J., Hayflick, L., Butler, R., Allison, D. and Ludwig, D., 2005. A potential decline in life expectancy in the United States in the 21st Century. *New England Journal of Medicine*, **352**, pp.1138-1146
- Orbach, S., 1978. *Fat is a Feminist Issue*. New York: Arrow
- Organisation for Economic Co-operation and Development. 2006. *OECD Health Data 2006*. [online]. Available from: <http://lysander.sourceoecd.org/vl=16154252/cl=15/nw=1/rpsv/factbook/> [cited 5 March 2007]
- Osborne, T. and Rose, N., 1999. Do the social sciences create phenomena? The case of public opinion research. *British Journal of Sociology*, **50**(3), pp.367-396
- Oshinsky, D., 2005. *Polio: An American Story*. Oxford: Oxford University Press
- Packard, R., 1989. *White Plague, Black Labour: Tuberculosis and the Political Economy of Health and Disease in South Africa*. Berkeley: University of California Press
- Painter, J., 2000. Pierre Bourdieu. In Crang, M. and Thrift, N. eds., *Thinking Space*. London: Routledge, pp.239-259
- Palloni, A. and Arias, E., 2004. Paradox lost: explaining the Hispanic adult mortality advantage. *Demography*, **41**(3), pp.385-415
- Palloni, A. and Morenoff, J., 2001. Interpreting the paradoxical in the Hispanic Paradox: demographic and epidemiological approaches. *Annals of the New York Academy of Sciences*, **954**, pp.140-174
- Papas, M., Alberg, A., Ewing, R., Helzlsouer, K., Gary, T and Klassan, A., 2007. The built environment and obesity. *Epidemiologic Reviews*, **29**, pp. 129-143
- Parish, R., 1995. Health promotion, rhetoric and reality. In Bunton, R., Nettleton, S. and Burrows, R. eds., *The Sociology of Health Promotion: Critical Analyses of Consumption, Lifestyle and Risk*. London: Routledge, pp. 13-23
- Parr, H., 2002a. Medical geography: diagnosing the body in medical and health geography 1999-2000. *Progress in Human Geography*, **26**(2), pp.240-251

- Parr, H., 2002b. New body-geographies: the embodied spaces of health and medical information on the internet. *Environment and Planning D*, **20**(1), pp.73-95
- Parr, H., 2003. Medical geography: care and caring. *Progress in Human Geography*, **27**(2), pp.212-221
- Parr, H., 2004. Medical geography: critical medical and health geography? *Progress in Human Geography*, **28**(2), pp.246-257
- Parry, V., 2005. Fat versus fiction. *The Guardian*, 16 June
- Pearse, I. and Crocker, L., 1943. *The Peckham Experiment: A Study of the Living Structure of Society*. Edinburgh: Scottish Academic Press
- Peck, J., 1999. Editorial: Grey Geography. *Transactions of the Institute of British Geographers*, **24**(2), pp. 131-135
- Peck, J. and Tickell, A., 2002. Neoliberalizing Space. *Antipode*, **34**(3), pp. 380-403
- Peeters, A., Bonneux, L., Barendregt, J. and Nusselder, W., 2003. Methods of estimating years of life lost due to obesity. *Journal of the American Medical Association*, **298**(22), pp. 2941
- Pepin, V., McMahan, S. and Swan, P., 2004. A Social Ecological Approach to the Obesity Epidemic. *American Journal of Health Studies*, **19**(2), pp.122-126
- Peterson, A., 2003. Governmentality, critical scholarship and the medical humanities. *Journal of Medical Humanities*, **24**(3/4), pp.187-201
- Peterson, A. and Bunton, R. eds., 1997. *Foucault, Health and Medicine*. London: Routledge
- Philo, C., 2000. Foucault's Geography. In Crang, M. and Thrift, N. eds., *Thinking Space*. London: Routledge, pp.205-238
- Philo, C., 2001. Accumulating populations: bodies, institutions and space. *International Journal of Population Geography*, **7**, pp.473-490
- Philo, C., 2005. Sex, life, death, geography: fragmentary remarks inspired by 'Foucault's population geographies'. *Population, Space and Place*, **11**, pp.325-333
- Philo, C. and Parr, H., 2003. Introducing psychoanalytic geographies. *Social and Cultural Geography*, **4**(3), pp. 283-295
- Pickett, K., Kelly, S., Brunner, E., Lobstein, T. and Wilkinson, R., 2005. Wider income gaps, wider waistbands? An ecological study of obesity and income inequality. *Journal of Epidemiology and Community Health*, **59**, pp.670-674
- Pikora, T., Giles-Corti, B., Bull, F., Jamrozik, K. and Donovan, R., 2003. Developing a framework for assessment of environmental determinants of
- Pinder, L. and Rootman, I., 1998. A prelude to health for all. *World Health Forum*, **19**(3), pp.235-238
- Pomerleau, J., McKee, M., Lobstein, T. and Knai, C., 2002. The burden of disease attributable to nutrition in Europe. *Public Health Nutrition*, **6**(5), pp. 453-461
- Pool, R., 2001. *Fat: Fighting the Obesity Epidemic*. Oxford: Oxford University Press
- Powell, K., 2005. Land use, the built environment and physical activity. A public health mixture; a public health solution. *American Journal of Preventative Medicine*, **28**, pp. 216-217
- Prentice, A., 2001a. Overeating: the health risks. *Obesity Research*, **9**, pp.234S-238S

- Prentice, A., 2001b. Obesity and its potential mechanistic basis. *British Medical Bulletin*, **60**, pp.51-67
- Prentice, A. and Jebb, S., 1995. Obesity in Britain: gluttony or sloth? *British Medical Journal*, **311**, pp.437-439
- Prentice, A. and Jebb, S., 2003. Fast foods, energy density and obesity: a possible mechanistic link. *Obesity Reviews*, **4**, pp.187-194
- President of the United States. 2002. *Healthier US: The President's Health and Fitness Initiative*. [online]. Available from: <http://www.whitehouse.gov/infocus/fitness/fitness-policy-book.pdf> [cited 5 May 2006]
- Press Association. 2005a. Children's manifesto outlines school meal plans. *The Guardian*, 21 March
- Press Association. 2005b. Jamie Oliver's campaign makes adults eat more healthily. *The Guardian*, 11 April
- Price, R., 2000. No pain, no gain: bordering the hungry new world order. *Environment and Planning D*, **18**(1), pp. 91-110
- Prince, R., Kearns, R. and Craig, D., 2005. Governmentality, discourse and space in the NZ health care system 1991-2003. *Health and Place*, **12**(3), pp.253-266
- Prochaska, J. and DiClemente, C., 1986. Toward a comprehensive model of change. In Miller, W. and Heather, N. (eds) *Treating Addictive Behaviors: Processes of Change*. New York: Plenum Press, pp. 3-27
- Pulido, L., 2000. Rethinking environmental racism: white privilege and urban development in Southern California. *Annals of the Association of American Geographers*, **90**(1), pp.12-40
- Putnam, R., 2000. *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon and Schuster
- Rabinow, P., 1984. *The Foucault Reader*. London: Penguin
- Rabinow, P. and Rose, N., 2003. Thoughts on the concept of biopower today. Unpublished paper, London School of Economics. Available from: http://www.molsci.org/files/Rose_Rabinow_Biopower_Today.pdf [cited 1 October 2005]
- Rankin, D., Truman, J., Backett-Milburn, K., Platt, S. and Petticrew, M., 2005. The contextual development of Healthy Living Centres: an examination of food-related initiatives. *Health and Place*, **12**(4), pp.644-655
- Rauch, J., 2002. The fat tax: a modest proposal. *The Atlantic Monthly*, **290**(5). [online]. Available from: <http://www.theatlantic.com/doc/200212/rauch> [cited 3 December 2004]
- Reid, J., 2004. We can be consumers and citizens. *The Guardian*, 13 November
- Reidpath, D., Burns, C., Gerrard, J., Mahoney, M. and Townsend, M., 2002. An ecological study of the relationship between social and environmental determinants of obesity. *Health and Place*, **8**, pp.141-145
- Revill, J., 2003. A deadly slice of American pie. *The Observer*, 21 September
- Revill, J., 2005. Desperate slimmers flock to clinics. *The Observer*, 24 October
- Revill, J. and Hinsliff, G., 2004. Her health, her cash, her life: is it anyone else's business? *The Observer*, 14 November, pp. 18-19
- Revill, J. and Hill, A., 2005. Victory for Jamie in school meal war. *The Guardian*, 6 March

- Rich, E. and Evans, J., 2005. Fat ethics – the obesity discourse and body politics. *Social Theory and Health*, **3**, pp. 341-358
- Riddel, M., 2003. The fat fatwa won't work. *The Observer*, 8 June
- Rifkin, J., 2000. *The Age of Access: The New Culture of Hyper-Capitalism where all Life is a Paid-for Experience*. London: Penguin
- Robinson, T. and Sicard, J., 2005. Preventing childhood obesity – a solution-orientated research paradigm. *American Journal Preventative Medicine*, **28**, pp. 294-201
- Rodriguez, L., 1998. *East Side Stories: Gang Life in LA*. New York: Powerhouse Books
- Rogerson, R., 1999. Quality of Life and City Competitiveness. *Urban Studies*, **36** (5-6), pp.969-985
- Rojas, X., Coggin, C., Clark, D. and Rojas Z., 2004. *A Health Communication Plan to Address Obesity in Texas*. Fort Worth: University of North Texas Health Science Center at Fort Worth
- Rolls, B., 2004. The supersizing of America: portion size and the obesity epidemic. *Nutrition Today*, **38**(2), pp. 42-54
- Rose, N., 1996a. The death of the social? Re-figuring the territory of government. *Economy and Society*, **25**(3), pp.327-356
- Rose, N., 1996b. Governing advanced liberal democracies. In Barry, A. Ed. *Foucault and Political Reason*. London: UCL Press, pp.37-64
- Rose, N., 2001. The politics of life itself. *Theory, Culture and Society*, **18**(6), pp.1-30
- Rose, N. and Miller, P., 1992. Political power beyond the state. *British Journal of Sociology*, **43**(2), pp. 173-205
- Rose, N., O'Mally, P. and Valverde, M., 2006. Governmentality. *Annual Review of Law and Social Science*, **2**, pp. 83-104
- Rose, N. and Novas, C., 2005. Biological citizenship. In Ong, A. and Collier, S. eds., *Global Assemblages: Technology, Politics and Ethics as Anthropological Problems*. Maldon, MA: Blackwell Publishing, pp. 439-464
- Rosenberg, M., 1998. Medical or health geography? Populations, people and places. *International Journal of Population Geography*, **4**, pp.211-226
- Rosenstock, I., Strecher, V. and Becker, M., 1988. Social Learning Theory and the Health Belief Model. *Health Education and Behaviour*, **15**(2), pp.175-182
- Rosenthal, M., Berndt, E., Donohue, J., Frank, R. and Epstein, A., 2002. Promotion of prescription drugs to consumers. *New England Journal of Medicine*, **346**(7), pp.498-505
- Rosmond, R., 2004. Aetiology of obesity: a striving after wind? *Obesity Reviews*, **5**, pp.177-181
- Ross, C. and Mirowsky, J., 2001. Neighbourhood disadvantage, disorder and health. *Journal of Health and Social Behaviour*, **42**, pp.258-276
- Roston, E., 2004. The corn connection. *Time Magazine*, 7 June
- Rothstein, W., 2004. *Public Health and the Risk Factor: A History of an Uneven Medical Revolution*. Rochester, NY: University of Rochester Press
- Rovio, S., Kåreholt, I., Helkala, E., Viitanen, M., Winblad, B., Tuomilehto, J., Soininen, H., Nissinen, A. and Kivipelto, M., 2005. Leisure-time physical activity at midlife and the risk of dementia and Alzheimer's disease. *Lancet Neurology*, **4**(11), pp. 705-711S

- Ridley, M., 2000. *Genome: The Autobiography of a Species in 23 Chapters*. London: Fourth Estate
- Ridley, M., 2003. *Nature via Nurture: Genes, Experience and What Makes Us Human*. London: Fourth Estate
- Ruppel Shell, E., 2002. *The Hungry Gene: The Science of Fat and the Future of Thin*. London: Atlantic Books
- Ruppel Shell, E., 2003. *Fat War: The Inside Story of the Obesity Epidemic*. London: Atlantic Books
- Ruskin, G. and Schor, J., 2005. Junk food nation: who's to blame for childhood obesity. *The Nation*, 29 August
- Rutt, C. and Coleman, K., 2005. Examining the relationships among built environment, physical activity and body mass index in El Paso, TX. *Preventative Medicine*, **40**, pp. 831-841
- Sack, R., 2003. *A Geographical Guide to the Real and the Good*. London: Routledge
- Saelens, B., Sallis, J., Black, J. and Chen, D., 2003. Neighborhood-based differences in physical activity: an environment-scale evaluation. *American Journal of Public Health*, **93**(9), pp. 1552-1558
- Saguy, A. and Almeling, R., 2005. Fat devils and moral panics: News reporting on obesity science. A speech presented at the *SOMAH Workshop*, UCLA Department of Sociology. June 2005
- Saguy, A. and Riley, K., 2005. Weighing both sides: morality, mortality and framing contests over obesity. *Journal of Health Politics, Policy and Law*, **30**(5), pp.869-922
- Sallis, J., Frank, L., Saelens, B and Kraft, K., 2004. Active transportation and physical activity: opportunities for collaboration on transportation and public health research. *Transportation Research*, **A38**, pp. 249-268
- Sallis, J., Frank, L., Saelens, B and Kraft, K., 2005. Linking objectively measured physical activity with objectively measures urban form. *American Journal of Preventative medicine*, **28**, pp. 117-125
- Sample, I., 2005. Fat to fit: how Finland did it. *The Guardian*, 15 January
- Saracci, I., 1997. The World Health Organisation needs to reconsider its definition of health. *British Medical Journal*, **314**(7091), pp.1409-10.
- Schlosser, E., 2002. *Fast Food Nation*. New York: Perennial
- Schwartz, B., 2004. *The Paradox of Choice: Why Less is More*. London: Harper Collins.
- Schwartz, H., 1986. *Never Satisfied: A Cultural History of Diets, Fantasies and Fat*. New York: Macmillan
- Sciolino, E., 2005. France battles a problem that grows and grows: fat. *New York Times*, 25 January
- Seale, C. ed., 2000. *Researching Society and Culture*. London: Sage
- Seale, C., 2002. *Media and Health*. London: Sage
- Seale, C., 2005. New directions for critical internet health studies: representing cancer experience on the web. *Sociology of Health and Illness*, **27**(4), pp.515-540
- Seaton, M., 2006. The toll of the bell. *The Guardian*, 12 September

- Segrott, J. and Doel, M., 2004. Disturbing geography: obsessive compulsive disorder as spatial practice. *Social and Cultural Geography*, **5**(4), pp.597-613
- Sen, A., 1981. *Poverty and Famines: An Essay on Entitlement and Deprivation*. Oxford: Clarendon Press
- Senauer, B. and Sur, M., 2001. Ending global hunger in the 21st century: projections of the number of food insecure people. *Review of Agricultural Economics*, **23**(1), pp.68-81
- Sennett, R., 1998. *The Corrosion of Character. The Personal Consequences of Work in the New Capitalism*. New York: W.W Norton and Company
- Shapin, S., 2004. The Great Neurotic Art. *London Review of Books*, 5 August
- Shaw, M., Davey Smith, G. and Dorling, D., 2005. Health inequalities and New Labour: how the promises compare with real progress. *British Medical Journal*, **330**, pp.1016-1021
- Shilts, R., 1988. *And The Band Played On: Politics, People and the AIDS Epidemic*. London: Penguin
- Simonsen, K., 2000. Editorial: the body as battlefield. *Transactions of the Institute of British Geographers*, **25**(1), pp.7-9
- Singleton, V., 2005. The promise of public health: vulnerable policy and lazy citizens. *Environment and Planning D*, **23**(5), pp. 771-786
- Smallman-Raynor, M. and Cliff, A. , 1998. The Philippines insurrection and the 1902-4 cholera epidemic: Part I-Epidemiological diffusion processes in war. *Journal of Historical Geography*, **24**(1), pp. 69-89
- Smallman-Raynor, M. and Cliff, A., 2004. *War Epidemics: An Historical Geography of Infectious Diseases in Military Conflict and Civil Strife, 1850-2000*. Oxford: Oxford University Press
- Smith, C., 1999. Fat Christians in an age of hunger. *Communiqué – A Quarterly Digital Review* ,**1**, pp.1
- Smoyer-Tomic, K., Spence, J. and Amrhein, C., 2006. Food deserts in the Prairies? Supermarket accessibility and neighbourhood need in Edmonton, Canada. *Professional Geographer*, **58**(3), pp.307-326
- Sobal, J., 2001. Commentary: globalisation and the epidemiology of obesity. *International Journal of Epidemiology*, **30**, pp.1136-1137
- Social Issues Research Centre. 2005. *Obesity and the Facts: An Analysis of Data From the Health Survey for England 2003*. Oxford: SIRC
- Sontag, S., 1979. *Illness as Metaphor*. London: Penguin
- Spang, R., 2000. *The Invention of the Restaurant. Paris and Modern Gastronomic Culture*. Cambridge, MA: Harvard University Press
- Spiers, J., 2003. *Patients, Power and Responsibility*. Abingdon: Radcliffe Medical Press
- Sport England. 2006. *Sports Action Zones provide major boost to participation in deprived communities*. [online]. Available from: http://www.sportengland.org/index/news_and_media/news_pr/sport_action_zones_boost_participation.htm [cited 10 October 2006]
- Spurlock., M., 2005a. *Don't eat this book*. London: Penguin
- Spurlock, M., 2005b. Don't go the American Way. *The Guardian*, 8 June

- Squires, S., 2002. Experts declare story low in saturated facts. *Washington Post*, 27 August
- Srinivasan, S., 2003. Creating healthy communities, healthy homes, healthy people: Initiating a research agenda on the built environment and public health. *American Journal of Public Health*, **93**(9), pp.1446-1450
- Staeheli, L. and Mitchell, D., 2005. The complex politics of relevance in geography. *Annals of the Association of American Geographers*, **95**(2), pp. 357-372
- Stearns, P., 1997. *Fat History: Bodies and Beauty in the Modern West*. London: New York University Press
- Sturgis, P. and Allum, N., 2004. Science in society: re-evaluating the deficit model of public attitudes. *Public Understanding of Science*, **13**, pp. 55-74
- Sturm, R., 2005. Economics and physical activity: a research agenda. *American Journal of Preventative Medicine*, **28**, pp. 141-149
- Suarez-Orozco, M. and Paez, M. eds., 2002. *Latinos Remaking America*. Berkeley: University of California Press
- Subramanian, S., Lochner, K. and Kawachi, I., 2003. Neighborhood differences in social capital: a compositional artefact or a contextual construct? *Health and Place*, **9**, pp. 33-44.
- Sui, D., 2003. Musings on the fat city: are obesity and urban forms linked? *Urban Geography*, **24**(1), pp.75-84
- Sundquist, J. and Winkleby, M., 2000. Country of birth, acculturation status and abdominal obesity in a national sample of Mexican-American men and women. *International Journal of Epidemiology*, **29**, pp. 470-477
- Surgeon General. 1996. *Physical Activity and Health: A Report of the Surgeon General*. Washington DC: US Surgeon General
- Surgeon General. 2001. *Surgeon General's Call to action to Prevent and Decrease Overweight and Obesity*. Washington DC: US Surgeon General
- Sustrans. 2006. How transport can save the NHS.[online]. Available from: <http://www.sustrans.org.uk/default.asp?slID=1158137684156> [cited 30 September 2006]
- Swinburn, B. and Eggar, G., 2005. The runaway weight train: too many accelerators, not enough brakes. *British Medical Journal*, **329**, pp. 736-739
- Swinburn, B., Gill, T. and Kumanyika, F., 2005. Obesity prevention: a proposed framework for translating evidence into action. *Obesity Reviews*, **6**, pp.23-33
- Szreter, S., 2002. Rethinking McKeown: the relationship between public health and social change. *American Journal of Public Health*, **92**(5), pp. 722-725
- Szreter, S. and Woolcock, M., 2004. Health by association? Social capital, social theory and the political economy of public health. *International Journal of Epidemiology*, **33**, pp.1-18
- Talen, E., 1999. Sense of community and neighbourhood form: an assessment of the social doctrine of New Urbanism. *Urban Studies*, **36**(8), pp.1361-1379
- Taubes, G., 2002. The Soft Science of Dietary Fat. *Science*, **291**, pp.2536-2544
- Teather, D., 2005. Fatboy Ronald McDonald downsizes to head off critics. *The Guardian*, 9 June

- Teller, C. and Clyburn, S., 1974. Trends in infant mortality. *Texas Business Review*, **29**, pp. 97-108
- Temple, M., 2000. New Labour's Third Way: pragmatism and governance. *British Journal of Politics and International Relations*, **2**(3), pp. 302-325
- Templeton, S., 2005. Focus: cancer treatment: privilege of the rich? *The Sunday Times*, 9 October
- Tesco Plc., 2007. *Annual Report*. Available from: http://www.tescocorporate.com/images/TESCO_FULL%20low.pdf [cited 1 June, 2007]
- Texas Department of Health and the Texas Department of Agriculture's Food and Nutrition Division. 2004. *The Burden of Overweight and Obesity in Texas 2001-2040*. Austin: TDSHS
- Texas Department of State Health Services. 2003. *Strategic Plan for the Prevention of Obesity in Texas 2001-2003*. Austin: TDSHS
- Texas Department of State Health Services. 2004. *Framework for Obesity Prevention: From Evidence to Action*. Austin: TDSHS
- Texas Department of State Health Services. 2005. *Obesity Solution Matrix*. Austin: TDSHS
- Texas Department of State Health Services. 2006. *Strategic Plan for the Prevention of Obesity in Texas 2005-2010*. Austin: TDSHS
- Theran, E., 2005. Legal theory on weight discrimination. In Brownall, K., Puhl, R., Schwartz, M. and Rudd, L. eds., 2005. *Weight Bias: Nature, Consequences and Remedies*. London: The Guildford Press, pp.15-211
- Thigpen, K., 2004. Fighting obesity through the built environment. *Environmental Health Perspectives*, **112**(11) [online]. Available from: <http://ehp.niehs.nih.gov/docs/2004/112-11/niehsnews.html> [cited 7 July 2005]
- Thrift, N., 2002. The Future of Geography. *Geoforum*, **33**(3), pp. 291-198
- Transport for London. 2005. *Transport for London's Five Year investment Programme 2005/06-09/10* London: TfL
- Treichler, P., 1988. AIDS, homophobia and biomedical discourse: an epidemic of signification. In Crimp, D. ed., *AIDS: Cultural Analysis, Cultural Activism*. Boston: MIT Press, pp.31-70
- Trust for America's Health. 2005. *F as in Fat: How Obesity Policies are Failing in America*. [online]. Available from: <http://healthyamericans.org/reports/obesity2005/Obesity2005Report.pdf> [cited 10 May 2006]
- Tudge, C., 2004. *So Shall We Reap*. London: Penguin
- Tumulty, K., 2006. The politics of fat. *Time Magazine*, 27 March
- Turner, B., 1984. *The Body and Society: Explorations in Social Theory*. Oxford: Blackwell
- Turner, B., 1995. *Medical Power and Social Knowledge*. London: Sage
- Turner, B., 2004. *The New Medical Sociology. Social Forms of Health and Illness*. New York: WW Norton and Company
- Ungar, S., 2001. Moral panic versus the risk society: the implications of the changing sites of social anxiety. *British Journal of Sociology*, **52**(2), pp. 271-292

- United States Department of Agriculture. 2000a. *Using the Dietary Guidelines for Americans*. Washington DC: USDA Center for Nutrition Policy and Promotion
- United States Department of Agriculture. 2000b. *Dietary Guidelines for Americans*. Washington DC: USDA Center for Nutrition Policy and Promotion
- United States Department of Health and Human Services. 2002. *Physical Activity is Fundamental to Preventing Disease*. [online]. Available from: <http://aspe.hhs.gov/health/reports/physicalactivity/physicalactivity.pdf> [cited 2 January 2005]
- United States Department of Health and Human Services. 1990. *Healthy People 2000*. [online] Available from: www.healthypeople.gov/publications [cited 9 January 2005]
- United States Department of Health and Human Services. 2004. *Healthy People 2010*. [online] Available from: www.healthypeople.gov/publications [cited 10 January 2005]
- United States Department of Health and Human Services and the Advertising Council. 2004. *Healthy Lifestyles and Disease Prevention Media Campaigns. Take a Small Step to get Healthy*. [online]. Available from: www.smallstep.gov [cited 20 January 2005]
- United States Government. 2006. *Economic Report of the President 2006*. Washington DC: United States Government Printing Office
- United States Public Health Service., 1980. *Promoting Health/ Preventing Disease Objectives for the Nation*. Atlanta: Centers for Disease Control
- Unwin, T., 1992. *The Place of Geography*. Harlow: Longman
- Valadez, A. and Vest, J., 2005. Perception of neighbourhood characteristics and leisure-time physical activity – Austin/ Travis County, Texas, 2004. *CDC Morbidity and Mortality Weekly Reports*, **54**(37), pp.926-928
- Valentine, G., 1999. Eating in: home, consumption and identity. *The Sociological Review*, **4**(3), pp. 491-524
- Valentine, G., 2003. Geography and ethics: in pursuit of social justice – ethics and emotions in geographies of health and disability research. *Progress in Human Geography*, **27**(3), pp.375-380
- Vandegrift, D. and Yoked, T., 2004. Obesity rates, income and suburban sprawl: an analysis of US States. *Health and Place*, **10**(1), pp.221-229
- Vartiainen, E., Jousilahti, P., Alfthan, G., Sundvall, J., Pietinen, P. and Puska, P., 2000. Cardiovascular risk factor changes in Finland 1972-1997. *International Journal of Epidemiology*, **29**, pp.49-56
- Vastag, B., 2004. Obesity is now on everyone's plate. *Journal of the American Medical Association*, **291**(10), pp.1186-1187
- Vlahov, D. and Galea, S., 2002. Urbanization, Urbanicity and Health. *Journal of Urban Health*, **79**(4), pp.51-63
- Vojnovic, I., Jackson-Elmoore, C., Holtrop, J. and Bruch, S., 2006. The renewed interest in public health and urban form: promoting increased physical activity in Michigan. *Cities*, **23**(1), pp.1-17
- Vorley, B., 2003. *Food Inc*. London: UK Food Group
- Wann, M., 1999. *Fat? So?* New York: Ten Speed Press
- Wallis, C., 2004. The obesity warriors. *Time Magazine*, 7 June

- Walsh, S., Page, W. and Gesler, W., 1997. Normative models and healthcare planning: network-based simulations within a geographic information systems environment. *Health Services Research*, **32**(2), pp. 243-260
- Wardle, J., 2005. The triple whammy. *The Psychologist*, **18**(4), pp.216-219
- Wardle, J. and Griffith, J., 2001. Socioeconomic status and weight control practices in British adults. *Journal of Epidemiology and Community Health*, **55**, pp.185-190
- Wardle J., Rapoport L., Miles A., Afuape T. and Duman M., 2001. Mass education for obesity prevention: the penetration of the BBC's Fighting Fat, Fighting Fit Campaign. *Health Education Research*, **16**, pp. 343-355.
- Wardle, J. and Johnson, F., 2002. Weight and dieting: examining levels of weight concern in British adults. *International Journal of Obesity*, **26**, pp.1144-1149
- Wardle, J. and Steptoe, A., 2003. Socioeconomic differences in attitudes and beliefs about healthy lifestyles. *Journal of Epidemiology and Community Health*, **57**, pp.440-443
- Watney, S., 1997. The political significance of statistics in the AIDS epidemic: epidemiology, representation and re-gayng. In Oppenheimer, J. and Reckitt, H. *Acting on AIDS: Sex, Drugs and Politics*. London: Serpent's Tail, pp. 76-101
- Watson, J., 1997. *Golden Arches East: McDonalds in East Asia*. Stanford: Stanford University Press
- Watts, M., 1993. Development : power, knowledge, discursive practice. *Progress in Human Geography*, **17**, pp. 257-273
- Watts, M., 2000. Political Ecology. In Shepherd, E. and Barnes, T. eds., *A Companion to Economic Geography*. Oxford: Oxford University Press, pp.257-274
- Weightman, A., Ellis, S., Cullum, A., Sander, L. and Turley, R., 2005. *Grading Evidence and Recommendations for Public Health Interventions: Developing and Piloting a Framework*. London: National Institute for Health and Clinical Excellence and the Health Development Agency.
- Weil, E., 2005. In Bush's oil-rich Texas the children of the poor don't starve – they just get fatter. *Observer Food Monthly*, 7 October
- Westcott, J., 2003. Fears as obese children face an early grave. *Daily Express*, 10 November
- Whelan, A., Wrigley, N., Warm, D. and Cannings, D., 2002. Life in a "food desert". *Urban Studies*, **39**(11), pp.2083-2100
- Which? 2005. *Which? Choice: Food*. [online]. Available from: http://www.which.net/campaigns/choice/0509foodchoice_rep.pdf [cited 4 August 2006]
- White, E., 1988. *The Beautiful Room is Empty*. London: Picador
- White, E., 1991. *A Boy's Own Story*. London: Picador
- White, E., 1997. *The Farewell Symphony*. London: Picador
- White, N., 1981. Modern health concepts. In White, N. ed., *The Health Conundrum*. Toronto: TV Ontario, pp. 9-18
- Whitehouse, The. 2002. *Executive Order: President's Council on Physical Fitness*. [online]. Available from: <http://www.whitehouse.gov/news/releases/2002/06/20020620-5.html> [cited 2 October 2005]

- Whitehouse, The. 2003. *President Bush highlights health and fitness initiative*. [online]. Available from: <http://www.whitehouse.gov/news/releases/2003/07/20030718-1.html> [cited 6 October 2005]
- Whole Foods. 2005. *2005 Annual Report*. Austin: Whole Foods Market. [online]. Available from: <http://www.shareholder.com/visitors/dynamicdoc/document.cfm?CompanyID=WFMI&documentID=1246&PIN=&resizeThree=no&Scale=100&Keyword=type%20keyword%20here&Page=5> [cited 7 August 2006]
- Wilkes, M., Bell, R. and Kravitz, R., 2000. Direct-to-consumer prescription drug advertising: trends, impacts and implications. *Health Affairs*, **19**(2), pp.1-19
- Wilkinson, J., 1996. *Unhealthy Societies*. London: Routledge
- Wilkinson, J., 2005. *The Impact of Inequality: How to Make Sick Societies Healthier*. London: The New Press
- Williams, S., 1995. Theorising class, health and lifestyles: can Bourdieu help us? *Sociology of Health and Illness*, **17**(5), pp.577-604
- Williams, J and Kumanyika, S., 2002. Is social marketing an effective tool to reduce health disparities? *Social Marketing Quarterly*, **13**(4), pp.14-32
- Winson, A., 2004. Bringing political economy into the debate on the obesity epidemic. *Agriculture and Human Values*, **21**(4), pp. 299-312
- Wintour, P. and White, M., 2004. Government health strategy criticised. *The Guardian*, 25 February
- Witt, L., 2003. Why we're losing the war against obesity. *American Demographics*, **25**(10), pp.27-32
- Wolch, J. and Philo, C., 2000. From distributions of deviance to definitions of difference: past and future mental health geographies. *Health and Place*, **6**(3), pp.137-157
- Wolfe, S., 2002. Direct-to-consumer advertising – education or emotion promotion? *New England Journal of Medicine*, **346**(7), pp.524-526
- Wollaston, S., 2005. When the chips are down. *The Guardian*, 24 February
- Woolcock, N., 2006. Cycle numberplate plan to catch lawless riders. *The Times*, 28 July
- World Health Organisation. 1948. *World Health Organisation Constitution*. Geneva: WHO
- World Health Organisation. 1978. *Declaration of Alma-Ata*. Geneva: WHO
- World Health Organisation. 2002. *A Physically Active Life through Everyday Transport*. Copenhagen: WHO Regional Office for Europe.
- World Health Organisation. 2003a. *Diet, Nutrition and the Prevention of Chronic Diseases. Report of a Joint WHO/FAO Expert Consultation* Geneva: World Health Organization (WHO Technical Report Series, No. 916)
- World Health Organisation. 2003b. *Obesity and Overweight: Fact Sheet*. Geneva: World Health Organization. [online]. Available from: http://www.who.int/hpr/NPH/docs/gs_obesity.pdf [cited 1 October 2004]
- World Health Organisation. 2004. *Global Strategy on Diet, Physical Activity and Health*. Geneva: World Health Organization. [online]. Available from: http://www.who.int/gb/ebwha/pdf_files/WHA57/A57_R17-en.pdf [cited 3 November 2004]

- World Health Organisation. 2005. *Preventing Chronic Diseases - A Vital Investment*. Geneva: World Health Organization. [online]. Available from: http://www.who.int/chp/chronic_disease_report/contents/en/index.html [cited 10 September 2005]
- Wright, D., Goodchild, M. and Proctor, D., 1997. Demystifying the present ambiguity of GIS as “tool” versus “science”. *Annals of the Association of American Geographers*, **87**(2), pp. 346-362
- Wrigley, N., Warm, D. and Margetts, B., 2003. Deprivation, diet and food-retail access: findings from the Leeds ‘food deserts’ survey. *Environment and Planning A*, **35**(1), pp. 151-188
- Yancey, A., Kumanyika, S., Ponce, N., McCarthy, W., Fielding, J., Leslie, J. and Akbar, J., 2004. Population-based interventions engaging communities of color in healthy eating and active living research: a review. *Preventing Chronic Disease*, **1**(1), pp. A09 -13
- Yach, D., 2004. Case commentary: complex and controversial causes for the obesity epidemic. *International Journal of Medical Marketing*, **4**(3), pp.288-295
- Yach, D., and Beaglehole, R. 2004. Globalization of risks for chronic diseases demands global solutions. *Perspectives on Global Development and Technology*, **3**(1-2), pp. 1-21
- Young, L. and Nestle, M., 2002. The contribution of expanding portion sizes to the US obesity epidemic. *American Journal of Public Health*, **92**(2), pp.246-249
- Younge, G., 2005. Airlines lose life-vests to fit fat flyers. *The Guardian*, 13 August
- Zaninotto, P., Wardle, H., Stamatakis, E., Mindell, J. and Head, J., 2006. *Forecasting Obesity to 2010*. London: DH
- Zimring, C., Joseph, A., Nicoll, G. and Tsepas, S., 2005. Influences of building design and site design on physical activity: research and intervention opportunities. *American Journal of Preventative Medicine*, **28**, pp. 186-193

2. Methodologies

2.1 Methods

This thesis draws on both quantitative and qualitative methods in order to explore the governance of health in the US and UK and, more specifically, in the case study sites of Austin and London. In the first instance, this research draws upon health survey and census data. For the US, the surveys chosen were the Behavioral Risk Factor Surveillance System (BRFSS), National Health and Nutrition Examination Survey (NHANES) and the US Census (2000). In the UK, the Health Survey for England 2004 (HSE), the UK Census (2001) and the National Diet and Nutrition Survey (NDNS) (2002) have been used. These data sets together provide a basis for understanding the demographic and socioeconomic composition of the study area (and how this compares to the rest of the country), lifestyle habits (such as physical activity and nutritional health) as well as more general data about self-reported health status and insurance coverage.

The BRFSS and NHANES were accessed through the Centers for Disease Control's statistics portal at <http://www.cdc.gov/nchs/nhanes.htm> and <http://www.cdc.gov/brfss/>. Both sites allow access to the telephone questionnaires used and data sets by question. In the UK, the 2001 census provides essential demographic and socioeconomic information at a variety of scales including national, regional, county, borough and census tract. The census is available from the Office of National Statistics (ONS) at www.statistics.gov.uk and the site allows detailed searches with a variety of data output formats. The HSE reports obesity prevalence, self-reported health status and physical activity rates by Strategic Health Authority. While basic data can be accessed through the Department of Health site (www.dh.gov.uk), an application had to be made to the National Centre for Social Research's (NatCen) review committee to access the more detailed Camden and Islington data. The National Diet and Nutrition Survey (NDNS) provides information on

the dietary intakes of 19-64 year olds in the UK, including the quantities of different food types consumed and fruit and vegetable intakes (as a measure of health) and both the raw data and secondary analysis are available from the Food Standards Agency. All data is segmented both socially and geographically, and this work has chosen to take gender, race, income and place of residence as the main variables for descriptive analysis, reflecting the main risk factors for obesity and overweight identified by interviewees and secondary data sources. This is reflected in the presentation and analysis of the data in this thesis.

In order to augment the quantitative data and to, as Isabel Dyck (1999) suggests, bridge the conceptual divide between abstract data sets and the socio-cultural theoretical frameworks of this work, semi-structured interviews were conducted with a variety of stakeholders engaged with obesity prevention efforts. A total of 80 interviews were conducted in the two cities over the period of a year from the summer of 2005, to the summer of 2006. Forty interviews were undertaken in Austin in two separate trips, one in Summer 2005 and another, longer trip in Spring 2006. Interviews in London were ongoing over the same year, fitting around the schedules of interviewees. In order to be comparable, stakeholders were chosen from five key groups of actors: the departments of health/ public health bodies; other central government departments with an identified role in obesity prevention; local government; non-profit organizations/ charities/ activist organizations and the 'consciousness industries' (advertising, marketing, PR agencies and think tanks). These groups reflect the diversity of stakeholders engaged in the enterprise of preventing further rises in obesity in the two countries and also, interestingly, underlie the reason why the joined-up thinking and governance that many deem essential to really tackling obesity as a public health issue remains an optimistic thought.

Interviewees were recruited through various methods, with pre-selection guiding the initial choices and sequential sampling later being used (Curtis *et al*, 2000). Potential interviewees were initially identified from policy document authors, obesity working group members or relevant non-profit groups and contacted via email explaining the research and asking for their input. In Austin, initial interviews were conducted with prominent players in the Texas Department of Health and Human Services' *Strategic Plan* including the project leader, Kim Bandalier and her colleague Donna Nichols. As is common practice when recruiting interviewees, initial contacts proved to be an invaluable resource in helping to find informative stakeholders for later interviews.

The same was true in the UK, with initial contacts at the British Nutrition Foundation and Camden Primary Care Trust pointing out new research avenues and contacts. It should be highlighted that in the UK, gaining permission to interview employees at the Department of Health or National Health Service (NHS) was complicated by the need to go through a lengthy NHS ethics committee approval process and register the project with the North Central London Research Consortium (NoCLoR) before any employees would agree to be interviewed. The recently simplified NHS ethics committee process is designed to cover medical or drug trials as well as all other research and so, inevitably, many of the questions and ethical concerns raised had little pertinence to this project. However, more basic questions of gaining consent from interviewees, ensuring that interviewees took place on NHS property and assurances that anonymity could be guaranteed if requested were all essential to consider.

The process took almost a year to complete and required the author's personal defence of the project in front of the committee. Despite this, the final required signature was only reluctantly given with an aside warning NHS employees not to "waste their time" with this research. Despite these hurdles, such sequential sampling methods, as Curtis *et al* (2000) point out, are an effective way of allowing the interviewee choice to evolve

alongside the development of theory derived inductively from the data as it is collected and analysed. It should also be highlighted that such sequential methods bring rewards, but also frustrations as a point inevitably emerges when all contacts start to lead to the same person whose door remains stubbornly shut, blocking off potentially illuminating interview material. The point also arises when new opportunities for interview contacts become harder and harder to come by as interviewees suggest people that have already been contacted. This process happened much faster in London than in Austin and demonstrates that although stakeholders are many and varied, they nonetheless remain a relatively small and insular group of experts.

2.2 Format of interviews

The interviews ranged in length from 30 minutes to two hours and were generally held at a location convenient to the interviewee. Some interviews lent themselves to follow-ups, generally assessing changes in attitude or rationale behind obesity prevention after a year. The semi-structured interviews had no set questions, but rather five more general thematic areas around which questions could be flexibly structured depending on the affiliation of the interviewee:

1. How their group has come to be involved in obesity or shifted the focus of their existing work to incorporate calls to address obesity.
2. The particular challenges faced in Texas and the UK, and by Austin and central London in particular, in reducing obesity prevalence.
3. The interventions that their organisation is undertaking or plans to take to prevent further rises in or to reduce existing obesity prevalence and their target “risk group” and “intervention area”.
4. Their personal suggestions for long term, plausible and practicable solutions to obesity.

5. Their view on who should assume responsibility for delivering these solutions and ultimately, who the responsibility to lead healthy lifestyles rests upon.

Interviews were recorded, unless the interviewee requested otherwise. Detailed notes covering themes, linkages to other areas of research and key quotations were then taken from these tape recordings. A considerable number of interviewees, particularly in the UK, requested that interviews were not recorded for confidentiality reasons, although none directly stated that their views could not be noted down or cited. Within this work interview material is denoted by square brackets containing a number that corresponds to the list below. Sometimes interviewee surnames are also used in the text, but their number is always cited to distinguish interview material from secondary sources.

2.3 List of interviewees

1. Nancy Stanley (18/5/05) Account Director, DNA Advertising, London
2. Clare Hutchinson (18/5/05) Account Manager, AMVBBDO Advertising, London
3. Annabelle Watson (25/7/05) Account Manager, AMVBBDO, London
4. Paul Davis (21/11/05) Forward Planning and Projects, Camden Borough Council Department of Transport
5. Sally Jarvis (18/11/05) Communications Manager, Sport England
6. Chrissie Dillon (21/2/06) Healthy Schools Officer, Camden Borough Council
7. Catherine Slater (25/12/05) National Social Marketing Centre for Excellence
8. Katie Williams (24/1/06) Obesity Task Force, Camden PCT
9. Louise Diss (13/10/05) CEO, The Obesity Awareness and Solutions Trust
10. Tom Franklin (15/8/05) Director, Living Streets
11. Judy Butriss (17/10/05) Senior Science Director, British Nutrition Foundation
12. David Pye (19/10/05) Director, Good Going
13. Dr Paul Chadwick (26/10/05) UCL Health Behaviour Unit and Weight Concern
14. Rachel Eaton (26/10/05) Analyst, CABE
15. Charlie Powell (15/11/05) Sustain
16. Clive Blair-Smith (16/11/05) National Social Marketing Centre
17. Alison Blackwood (21/1/06) Camden Health Forum, Voluntary Action Camden
18. Sue Dibb (12/12/05) National Consumer Council

19. Des De Moor (16/1/06) Walking Promotion Officer, The Ramblers Association
20. Sandra Van der Feen (2/2/06) Women's Forum, Voluntary Action Camden
21. Kawser Zannath (28/2/06) Bangladeshi Women's Health Forum, Camden PCT
22. Jane Wardle (20/10/05) UCL Health Behaviour Unit
23. Tom Macmillan (6/12/05) Executive Director, Food Ethics Council
24. Loriann Robinson (21/6/06) Fabian Society
25. Katherine King (22/6/06) Sustainable Transport Officer and Camden Health Strategy 2012
26. Dr Maggie Barker (27/6/06) Deputy Director, London Regional Public Health Group and London Food Strategy
27. Kate Jones (28/6/06) Camden PCT
28. Kate Trant (29/9/06) Commission for Architecture and the Built Environment, London
29. Jack Stilgo (30/6/06) Demos Obesity Foresight Project
30. Paula Cooze (4/7/06) Physical Activity Director, Islington PCT
31. Paul Davis (17/7/06) Sustainable Transport Officer, Camden
32. Simon Jefferson (28/6/06) AKQA Advertising, Account Manager Nike RunLondon
33. Martin Caraher (13/7/06) Food Policy Institute, City University
34. Hannah Pheasant (17/7/06) Public Health Project Officer, NHS London
35. Catherine Slater (4/7/06) National Consumer Council, Social Marketing Centre for Excellence
36. Bryony Butland (18/7/06) Project Manager, Foresight Obesity Project, Department of Trade and Industry
37. Clare Pritchard (7/7/06) HGN Team Leader & Joint Project Manager GCFI GCDA Forum
38. Melba Wilson (4/9/06) Director, London Development Centre, Head Wandsworth PCT
39. Bruce McVean (7/9/06) Commission for Architecture and the Built Environment, London
40. Tim Long (20/11/06) Legible London Project, London

Austin, Texas

41. Amanda Harris (12/7/05) Texas Department of Health and Human Services, Women, Infants and Children Program
42. Tracey Erickson (13/7/05) University of North Texas, Department of Public Health
43. Lynn Wild (12/7/05) Texas Department of Health and Human Services, Women, Infants and Children Program
44. Shelli Shores (12/7/06) Texas Department of Health and Human Services, Women, Infants and Children Program

45. Ximena Urrutia-Rojas (13/7/05) University of North Texas, Department of Public Health
46. Kevin Tuerff (13/7/05) CEO, Enviromedia, Austin, TX
47. Debra Gabor (13/7/05) Branding Manager, TKO Advertising, Austin, TX
48. Donna Jones (12/7/05) Texas Department of Health and Human Services, Diabetes Prevention Program
49. Donna Nichols (12/7/05) Texas Department of Health and Human Services, Obesity Study Group: Diabetes
50. Kristy Hansen (11/7/05) Texas Department of Health and Human Services, Obesity Study Group: Physical Activity Coordinator
51. Lesli Beidiger (11/7/05) Texas Department of Health and Human Services, Obesity Study Group: Nutrition Coordinator
52. Lynn Davis (12/7/06) Steps to a Healthier Austin
53. Marion Stoutner (12/7/05) Texas Department of Health and Human Services, School Health Program
54. Robin Atwood (11/7/05) University of Texas at Austin Department of Kinesiology: Intervention Community Program
55. Kim Sasser (11/7/05) Texas Department of Health and Human Services, Manager, Obesity Study Group
56. Donna Nichols (10/4/06) Texas Department of Health and Human Services, Obesity Study Group: Diabetes
57. Kim Bandalier (13/4/06) Texas Department of Health and Human Services, Manager, Obesity Study Group
58. Melanie Harris (14/4/06) Director, In the Move
59. Paul Carrozza (17/4/06) CEO, RunTex, Austin, TX
60. Kevin Tuerff (18/4/06) CEO, Enviromedia, Austin, TX
61. Lynn Davis (19/4/06) Steps to a Healthier Austin
62. Jeanette Chardon (20/4/06) East Austin Community Health Partnership
63. Melody Myers (27/4/06) Executive Director, American Diabetes Association, Texas Division
64. Marty McCartt (21/4/06) Executive Director, Texas Round Up (Governor's Council on Physical Fitness)
65. Kay Morris (23/4/06) Director, Marathon Kids, Austin, X
66. Dianne Bangle (25/4/06) Director, Shoes for Austin, Austin, TX
67. Camille Miller (3/5/06) CEO, Health Policy Institute, Austin, TX
68. Peter Cribb (20/4/06) Coordinated Approach to Children's Health (CATCH)
69. Diana Everett (4/5/06) Texas Association for Health, Physical Education, Recreation and Dance (TAHPERD)
70. Adolfo Valadez (17/5/06) Medical Director, Texas Department of Health and Human Services, Austin, TX.
71. Holly Riley (24/4/06) Department of Ageing and Disability Services, Texercise

Program

72. Reverend Ed Gomez (27/4/06) Chief Executive, El Buen Samaritano, Austin, TX
73. Octavio Barajas (28/4/06) Community Health Promotion Officer, The American Heart Association
74. John Perkins (3/5/06) Texas Department of Agriculture, Square Meals Program
75. Betsy Foster (3/5/06) Vice President of Development, Wholefoods
76. Ginny Barr (5/6/06) Austin Parks and Recreation Department
77. Ronda Gomez (19/4/06) Sustainable Food Center, Austin, TX
78. Andrew Ortagon (11/5/06) Marketing Manager, Steps to a Healthier Austin
79. Lou Earle (11/5/06) Editor, Austin Fit Magazine
80. Heidi McConnell (5/6/06) Governor's Advisor, Governor's Office of Texas

2.4 Methodological Auto-critique:

Both qualitative and quantitative methods are replete with problems and limitations. Many of these quickly rise to the surface in the process of researching health and, more specifically, undertaking research on a topic such as obesity that inevitably calls into question personal judgment, morality and the ability to speak for or about the experience of others. There are also inherent problems in researching what to many is a medical or public health topic within geography. The news that I was a geographer was greeted with a range of reactions from curious interest to mirth, with the former being the norm in the US and the latter the more common reaction, especially among incredulous public health practitioners, in the UK. While the main limitations of the quantitative data sets are explored in the concluding chapter, this appendix will draw out some of the finer issues raised during and by the interview process.

While medical geography was long the domain of quantitative studies describing the distribution or diffusion of disease incidence through space, the more recent turn to social theory within health geography has brought qualitative methods firmly to the fore (see Dyck, 1999; Crang, 2002; 2003). Of these methods, the semi-structured interview has emerged as one of the best ways of exploring the context within which decisions

concerning personal health and the health of others are made. Interviews also highlight important local perspectives, knowledge and priorities on health issues that may often only be thought through at a national scale in policy. They also help clarify the meaning and significance of quantitative data, especially in the case of the relationship between race and health status, where existing data (especially in the UK) is rendered less accurate by the fact that race is not routinely recorded in hospital admissions or on death records. Obesity as a topic raises some potentially thorny methodological questions, deriving from the choice of interviewees, the researcher's personal subject position, the relationship between the interviewer and interviewee, personal biases, experiences, as well as general perspectives on the issues of personal autonomy, rights and health.

This work draws upon a variety of sources to examine the governance of obesity, of which interview material is a substantial component. However, the choice of interviewees deliberately reflects only one side of an incredibly multi-faceted debate. This work has drawn upon the opinions and expertise of those endeavouring to prevent further rises in obesity in the two case study sites meaning that the voices of those subject to these techniques and rationales of governing health have been consciously omitted. This work has purposefully sought the opinions of those governing at the expense of those they are rendering governable for two reasons. First, for the simple reason that to incorporate the individual voices of those citizens marked out as obese and therefore subject to the wide array of interventions identified and discussed in this work would be to take the thesis in another direction, straying from the path laid down by the original research themes. The voices of obese bodies are often silenced or marginalized by those claiming to be acting in their 'best interests' and there is already a wealth of literature critiquing this tendency from social science, activist and feminist perspectives (see Orbach, 1978; Klein, 1997; Gilman, 2004). Given that obesity and health inequalities are deeply entwined in both countries, there is also a substantial body of

literature from a rights-based perspective that examines the effects of poverty, race and marginalization on health (see Farmer, 1993; 1997; 1999; Wilkinson, 2005; Pickett *et al*, 2005). The second reason for the purposeful omission of obese individuals as interview subjects was due to the author's own subject position and that of stakeholders in obesity prevention, an issue that crosscuts other methodological critiques and therefore warrants further attention.

Researchers do not and cannot always research subjects that have a personal relevance or linkages to them. For example, while feminist studies of gender roles and positions are overwhelmingly conducted by women, not all studies of racial identity are conducted by those from the same ethnic background as the researched. Such distance between the position of the researcher and the researched inevitably raises questions concerning the ability and right to speak for and about others. This contention is also true within health geography where the range of topics is potentially limitless and currently includes disability (Butler and Parr, 1999), mental health (Philo *et al*, 2003), obsessive compulsive disorder (Seagrott and Doel, 2004), HIV/AIDS (Brown, 1998; Gillett, 2003), tuberculosis (Gandy and Zumla, 2002) as well as growing work on obesity (Longhurst, 2005; Colls and Evans, 2007). Just as with many types of identity politics, fat activists tend to decry the overwhelming number of 'underweight', white public health officials deciding what policies are in their best interests (Wann, 1999). They criticise the ability of the non-obese to understand the challenges faced by those who are overweight or obese and also suggest that this lack of understanding is accompanied by a lack of real empathy, often reflected in overly paternalistic policy decisions.

Given that the highest rates of obesity in Austin and London are found among those on low incomes and non-whites, questions of racial and class differences further confound the ability to speak about and for others. This was an issue repeatedly encountered in the process of research, although more frequently during periods of reflection than during

interviews themselves. With the exception of four interviewees, none were obese and the overwhelming majority were white. This was not a conscious sampling method (indeed it would have been impossible to deduce the physical appearance of an interviewee from their name alone), but rather reflects the demographic and class profile of those in the position of making, reacting to or implementing public health policies. For example, in Texas, there is a clear divide between the non-Hispanic whites working in public health and their large 'high-risk' Hispanic target population. The divide is less marked in London as, despite the fact that ethnic minority groups such as Bangladeshis are identified as 'at risk' for obesity, their numbers do not begin to approach those of Hispanics in Austin. While being able to directly identify with those about whom you are writing can help provide unique insight and depth of analysis, it is also interesting to note the manifold ways that other outsiders negotiate and reconcile their own differences with those they are charged with governing in order to find the most efficient and equitable solutions to current public health challenges.

Obesity is an especially difficult topic to navigate as public health policy and effective interventions are still in their infancy, with policy makers in the US and UK actively seeking out examples of 'best practice' from a variety of countries in order to develop the coveted 'evidence-based' policy. In both countries it became apparent that, as this project progressed, the balance of power between interviewer and interviewee became blurred. Over time, I assumed the mantle of fellow expert from interviewees who asked as many questions of me as I had for prepared for them. This was especially true in Texas where interviewees were eager to know about what their contemporaries in the UK were doing to address obesity. In the UK, a stronger divide remained between myself (classified firmly as a geographer) and those in public health who remained unconvinced that a social science perspective could shed any light on how best to conceptualise obesity. The policy-orientated outlook of many interviewees rendered

them unwilling to explore way in which the risk of poor health could be generated as much by the basic interaction of people and their local environments as eating or exercise habits enshrined by supposed cultural traits. However, the comparative approach of this project meant that pointing out the geographic specificity of such interactions to interviewees in both case study sites raised some interesting points for further discussion.

On a final critical note, this research raises questions concerning personal biases, experiences and general perspectives on the issues of personal autonomy, rights and health. Obesity has been such a media draw in recent years not because of its potential cost to the state in healthcare costs and lost productivity, but rather because evidence of rising numbers of overweight adults and children among certain groups raises ethical questions about who has the right to good health, education, the duty of a host of actors towards children, ongoing class divides, how and what we consume, cultural and ethnic differences, the right of the state to intervene upon individual lifestyle choices and, at a more basic level, whether it is morally right to intervene upon obesity. Naturally, with such an array of ethical concerns in the background, this research has uncovered and required the negotiation of my personal biases, experiences and opinions in relation to rights, autonomy and health. The starting point for this research was that obesity represent a biomedical risk that must be addressed. But the questions of how and why it has come to be a problem that should be addressed are the issues needing further exploration.

The UK system of universal healthcare “based on need” and “free at the point of access” (Donaldson, 2002: 835) means that the treatment of obesity’s co-morbidities such as diabetes raises different questions about rights to those generated by the insurance-based US system. Since rates of insurance are lowest and poverty highest amongst Austin’s Hispanic population, there is a tendency in this work to reserve a more sympathetic tone

for the vulnerability of this group. In London, free health care and the strong local resource and support networks coordinated by Primary Care Trusts and GP practices as well as the dense urban fabric mean that while vulnerability to poor health is felt disproportionately by poor, non-whites, more resources exist to adopt healthier lifestyles in London. These opinions, it should be noted, reflect inescapable personal bias as much as much as the findings of the research project itself. No doubt such bias was also evident in the choice of interview questions, perhaps reinforcing the tendency to seek comforting answers that support initial presuppositions. Such bias is also an inescapable product of the British (and my own) fear of “nanny statism” or the state’s increasing propensity to intervene upon essentially common sense personal lifestyle choices and how this marks the descent into a society dominated by mounting levels of surveillance and control with an attendant reduction in individual autonomy. This concept is not as familiar in the United States, although the fact that it has not been fully articulated or named does not preclude its existence as an underlying source of cultural anxiety. Such fundamental differences in ideas about rights and autonomy in relation to health between the US and UK mean that, in the process of explicating these to interviewees, fresh insights into the tensions inherent within the governance of obesity were undeniably uncovered.