

## PUBLIC HEALTH NUTRITION AND EPIDEMIOLOGY

# 'Health and happiness is more important than weight': a qualitative investigation of the views of parents receiving written feedback on their child's weight as part of the National Child Measurement Programme

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children, feedback, obesity, parents, perceptions, weight.

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### Introduction

The National Child Measurement Programme (NCMP) was established by the Department of Health in 2005 to monitor national trends in heights, weights and body

### Abstract

**Background:** The present study aimed to explore parental perceptions of overweight children and associated health risks after receiving National Child Measurement Programme (NCMP) weight feedback.

**Methods:** Fifty-two parents of overweight and obese children aged 4–5 years and 10–11 years enrolled in the NCMP programme in England in 2010–2011 participated in qualitative, semi-structured interviews about their perceptions of their child's weight and health risk after receiving weight feedback. Interviews were audio tape recorded and were conducted either by telephone ( $n = 9$ ) or in the respondents' homes ( $n = 41$ ). Interviews were transcribed verbatim and analysed using interpretative thematic analysis.

**Results:** Parents who received NCMP written feedback informing them that their child was overweight disregarded the results because they viewed 'health and happiness as being more important than weight'. The feedback was viewed as less credible because it did not consider the individual child's lifestyle. 'Broad definitions of healthy' were described that did not include weight, such as reference to the child having good emotional and physical health and a healthy diet. Parents attributed weight to 'inherited/acquired factors' such as genetics or puppy fat, or did not regard their child's 'appearance' as reflecting being overweight. 'Cultural influence' also meant that being overweight was not viewed negatively by some non-white parents.

**Conclusions:** After receiving written weight feedback, parents use methods other than actual weight when evaluating their child's weight status and health risks. Parents' conceptions of health and weight should be considered when communicating with parents, with the aim of bridging the gap between parental recognition of being overweight and subsequent behaviour change.

mass index (BMI) of children in Reception (aged 4–5 years) and Year 6 (10–11 years) in publicly funded primary schools in England. The NCMP identifies children whose weight may put them at risk of experiencing health problems, and so it is ethical to inform parents of

their child's weight status and offer support. Therefore, since 2008, parents have been provided with feedback regarding their child's weight status and information on the health risks associated with being overweight, usually in written format. The aim of this feedback is to help parents understand their child's health status, support and encourage behaviour change, and provide a mechanism for direct engagement with families with overweight children. Feedback letters follow a standardised template that can be adapted by public health staff involved in the delivery of the NCMP. A template letter and operational guidance is available at: <https://www.gov.uk/government/publications/national-child-measurement-programme-operational-guidance-for-the-2013-to-2014-school-year> (accessed 29 October, 2013). Weight categories are defined with BMI centiles using the UK 1990 growth curves; cut-offs at the 2nd, 91st and 98th centiles defined underweight, healthy weight, overweight and obese (described to parents as 'very overweight' as a result of feedback from parents, child health experts and local NCMP practitioners suggesting that more sensitive terminology be used) (Cole, 1997). Parents of children identified as overweight (> 91st percentile) or obese (> 98th percentile) are typically advised to contact a health professional for further advice.

Healthy lifestyle behaviours are important in the prevention and treatment of obesity. Children's lifestyle behaviours are influenced by their parents, making parents suitable agents for change (Birch & Davison, 2001), although it is well documented that parents are often unaware that their child is overweight (Rietmeijer-Mentink *et al.*, 2013) or that their child's weight poses a risk to their health (Lampard *et al.*, 2008; Park *et al.*, 2013). Informing parents that their child is overweight is likely to be an important step in addressing overweight in children (Warschburger & Kröller, 2009).

Previous studies into the effectiveness of weight feedback have shown that, despite some improvement in parental recognition of their child being overweight after receiving weight feedback, parents remain largely unaware of either weight status or the associated health risks, and minimal changes in lifestyle behaviours have been observed (Grimmett *et al.*, 2008; West *et al.*, 2008). Several studies have investigated demographic predictors of parental recognition of overweight children but there is little consistency in the findings, except for a tendency for parents of older children to be more accurate (Rhee *et al.*, 2005; Eckstein *et al.*, 2006; Wald *et al.*, 2007). Few studies have looked at the reasons why parents do not recognise their child as being overweight or perceive this as a health risk. In previous qualitative studies, parents have been shown to consider health (Goodell *et al.*, 2008), psychosocial factors and physical limitations (Jain *et al.*, 2001)

as being more important than weight *per se* in determining concern over weight-related health risks. However, these studies have focused on preschoolers rather than school age children, and have not investigated parental views after receiving weight feedback for their child. It is important to understand whether similar factors influence the perception of weight and health risk in parents who have actually been told that their child is overweight.

The theory of planned behaviour (Ajzen, 1991) would suggest that motivation to change a health-related behaviour is influenced by two sets of beliefs. First, beliefs about current behaviour (e.g. whether the parent feels their child's diet is putting them at risk of health problems) and, second, beliefs about the ability to change behaviour (e.g. how easy the parent would find it to change their child's diet). Information on weight status alone may be insufficient to bring about change (Chomitz *et al.*, 2003; Grimmett *et al.*, 2008; West *et al.*, 2008) but the NCMP feedback may be an important step to behaviour change if parents are able to understand that their child may be at risk of health problems associated with being overweight.

To our knowledge, this is the first qualitative study to explore the responses of parents of overweight children to written weight feedback about child weight status. We are interested in finding out why some parents still do not recognise their child as being overweight or the associated health risks after weight feedback, and, if they do recognise it, why they do not take action. This will inform future research on how best to communicate with parents regarding overweight children to encourage behaviour change.

## Materials and methods

### Participant recruitment

Parents were recruited from five National Health Service (NHS) Primary Care Trusts enrolled in the NCMP programme in England in 2010–2011 as part of a larger study aiming to evaluate the impact of NCMP feedback. The study methods have been previously reported in detail (Falconer *et al.*, 2012). This qualitative study recruited parents of overweight or obese children purposely on the basis of their response to a pre- and post-NCMP feedback survey, which was sent to all parents with children involved in the NCMP from 2010 to 2011. This questionnaire assessed parents' awareness that their child's weight might pose a risk to their health: the primary outcome of the main study. Responses were obtained for 1844 parents, of whom 285 were parents of obese and overweight children, and therefore eligible for interview. Of these, we aimed to recruit 50 parents, of whom an equal proportion had and had not indicated

awareness that their child's weight might pose a risk to their health. Parents were selected from different socio-economic and ethnic backgrounds to obtain views across a range of social circumstances, and an equal proportion of parents with children aged 4–5 years and 10–11 years was selected. Because we were interested in the views of all parents with children in the NCMP, we did not exclude anyone with a child that may have not been following a typical development trajectory (e.g. as a result of a disability). Parents were sent a written invitation to participate and, if parents did not contact us to decline participation, this letter was followed up by a maximum of three phone calls, carried out during the day and evening to minimise selection bias. If willing to participate, a date was arranged for either a telephone ( $n = 9$ ) or home-based ( $n = 41$ ) interview. Ethical approval for this study was obtained from the London School of Hygiene and Tropical Medicine Ethics Committee.

#### Data collection

An interview schedule was developed by two of the authors, and consisted of open-ended questions, with prompts used as required, to explore parents' perceptions of their child's weight and health (for interview schedule, see Appendix A). For the present study, we focused on responses to questions specifically about reactions to NCMP written feedback and behaviour change after receiving feedback. Example items included 'Do you agree/disagree with the feedback?' and 'Is there anything that would help you to make changes to your child's diet?'. Parents provided written consent before participation. On average, interviews lasted 30 min, with face-to-face interviews in the parents' homes lasting 10 min longer than telephone interviews. Interviews were audio-taped using a digital voice recorder. Interviews were conducted by one researcher with considerable experience in conducting qualitative interviews with parents of school-aged children.

#### Thematic analysis

Interviews were transcribed verbatim and reviewed for accuracy. A thematic analysis was carried out using the qualitative data analysis software package NVIVO (Bazeley & Jackson, 2013). Braun & Clarke (2006) suggest that thematic analysis can be approached in an essentialist/realist way, in which the experiences, meanings and the reality of participants are reported, or in a constructionist way, which explores the ways that experiences are the effects of a range of discourses within society. It was acknowledged that parental views of NCMP feedback will be influenced by social factors, such as culture, his-

tory and language (Willig, 2008), and so, for the present study, a constructionist framework was used, focusing at a latent/interpretative level on the underlying views, assumptions and conceptualisations of parents receiving overweight feedback about their child. Transcripts were read and re-read, and initial codes were drawn from the data. These codes were collated into themes, in close discussion with three of the authors, and a coding frame was developed. One researcher conducted and analysed all the interviews, and themes were driven by her preconceptions, with the research question in mind when conducting and analysing the interviews. Therefore, an epistemological strategy was taken because the researcher's interest in the research area, and a view to potentially improve the NCMP feedback and other services involving parents of overweight and obese children, would have introduced some degree of subjectivity. This subjectivity was important because different parents would inevitably respond to the NCMP feedback in different ways; however, to account for this, one in five transcripts was randomly selected to be coded by a second researcher who was provided with the raw transcripts and coding frame. This inter-rater reliability aimed to check agreement with the themes and ensure that both researchers deduced similar themes from the transcripts. Minor changes to terminology were made, although there were no changes to the emerging themes.

#### Results

One hundred and eight of the 285 parents of obese and overweight children who had responded to the NCMP survey were contacted by letter to request their participation in an interview. Nine parents declined via e-mail. We were able to make telephone contact with 78 of the remaining 99 parents, of whom seven could not remember the written feedback or recalled having received healthy weight feedback. Only 17 parents declined and another two cancelled their interviews, with the reasons including being too busy or upset about the feedback. Interviews were carried out with 52 parents. Theoretical saturation of the data was achieved with 40 interviews and no new themes emerged in the remaining 12 interviews. Table 1 shows the demographic descriptors of the population. The majority (83%) of the interviewees were mothers, an equal proportion of parents were from white and non-white ethnicities, and 44% were from socioeconomically deprived backgrounds, based on the Index of Multiple Deprivation quintiles score from post-code. A larger proportion (63%) of parents who were aware of the risks to their child's health were obese than overweight (Table 2). The majority of parents who declined to participate in the interviews had an obese

**Table 1** Sociodemographic characteristics of parents and children

	<i>n</i>	%
Parent ethnicity		
White	26	50
Non-white	26	50
Parent socioeconomic deprivation		
Deprived (IMD 1/2 quintile)	23	44
Nondeprived (IMD 3/4/5 quintile)	29	56
Parent gender		
Male	9	17
Female	43	83
Child age		
4–5 years	26	50
10–11 years	26	50
Child gender		
Boy	29	56
Girl	23	44
Child weight status		
Overweight	19	37
Obese	33	63

IMD, Index of Multiple Deprivation.

**Table 2** Perception of health risk by weight status

	Child weight status		Total
	Overweight	Obese	
Parental perception of health risk N(%)			
Aware of health risk	6 (27)	16 (63)	22
Unaware of health risk	13 (43)	17 (57)	30

child (73%) rather than an overweight child (27%) and 50% of decliners were aware of health risks and 50% were not.

The predominant theme arising during thematic analysis was termed 'health and happiness is more important than weight'. Parents perceived the overall health of their child as being more important than weight *per se*, and used a variety of methods, other than weight, to determine whether their child was healthy or at risk of health problems related to being overweight. Results were universal across parents, regardless of awareness of health risk, gender, age or ethnicity.

Themes were grouped as follows and are explored in more detail below:

*Broad definitions of healthy:* healthy diet, activity levels and happiness were more important markers of health than a weight classification.

*Inherited/acquired factors:* puppy fat, genetics, height, big build or being big as a baby.

*Appearance:* parents' perceptions of how overweight their child looked.

*Cultural influence:* role of ethnic background on views of body weight.

### Broad definitions of healthy

Parents reported that they placed more importance on their child's emotional and physical health than weight: 'I see it more as being healthy as opposed to being you're too fat or you're too thin' (20015: overweight, 10–11 years). Almost all parents were aware of the potential emotional consequences for children of being overweight, with bullying frequently being mentioned as the main impact. However, this was often in reference to other children and not their own: 'They might well get teased from other people, from peers, and that has a negative effect on them emotionally as well' (20031: obese, 10–11 years). Some parents reported that their child had never been bullied about their weight and therefore their emotional health was not a concern: 'No-one has ever called her fat or said to her she was overweight' (20001: obese, 4–5 years). Parents would often report that their child was happy and not suffering emotionally in relation to their weight: 'No he's a happy boy, he's a proper happy little boy. He's not concerned about anything ... he doesn't get picked on in any way by anybody' (20024: obese, 4–5 years). The child's happiness was seen as a more important marker of health to some parents than their weight: 'I think if he is happy with the way that he looks and he's happy with himself I think then that's absolutely fine' (20031: obese, 10–11 years).

Many parents also considered their child's lifestyle (diet and activity level) as being more important than weight: 'I never thought of the weight side particularly, I just looked at what the lifestyle was. He does exercise and he does eat well' (20022: obese, 4–5 years). For some, this made the NCMP written feedback less credible: 'It only measures weight to height ratio and doesn't take into account their lifestyle, their activity and things like that' (20010: overweight, 10–11 years). Diet was viewed as being particularly important when judging a child's weight and, because many parents felt that their child had a healthy diet, they were unconcerned about the NCMP feedback: 'I know that she's been eating healthy food and that's why I'm not worried about it' (20021: obese, 4–5 years). Many parents would describe in detail the ways in which their child's diet was healthy: 'We don't eat takeaways. He's eating food from the house and he doesn't eat ... we don't give him crisps, drinks, and he's eating his fruit, five a day and all that sort of thing so how do you judge that then to be unhealthy?' (20020: overweight, 4–5 years). Other parents focused on physical

activity as a marker of health risk and as their child was active they did not perceive them to be overweight: 'We don't see obviously that he's obese because he's so active' (20013: obese, 4–5 years); or at risk of health problems: 'If she's not active I would be worried but she's active, she runs, she do all of them things so I'm not worried about her health' (20021: obese, 4–5 years).

### Inherited/acquired factors

When asked why they thought their child had been classified as overweight, the most common explanation was that the child had puppy fat: 'I look at him and I see puppy fat, I don't see overweight fat, I think they're two different things' (30004: overweight, 10–11 years). Parents therefore believed their child would grow into their weight as they got older: 'It's not a huge concern at the moment because I think we've got to get through puberty and see how she goes and how she grows' (30001: obese, 4–5 years). This was backed up by experiences of other family members: 'I mean I found with my daughter, they're a bit chubby but once puberty hits them they lose the fat and put on a bit of height and all that' (20009: obese, 10–11 years).

Some parents did not perceive their child to be overweight based on their stature in terms of height (tall/short): 'She's not overweight she's just very, very tall' (30004: obese, 10–11 years); or being of a 'big build': 'I suppose she is quite solid. She is extremely strong and muscley' (20027: overweight, 10–11 years). Some parents felt that their child was genetically predisposed to be heavy: 'Some of it is down to poor diet from us but a lot of it has got to be to do with genetics' (20035: obese, 4–5 years); or that they had been a large baby and have remained that way: 'It didn't feel that bad because from childhood she was the chubbiest baby. She was premature and then she became slowly, slowly chubby' (20008: obese, 10–11 years).

A small number of parents perceived their child as extremely athletic or they had a medical condition and were upset that the NCMP did not consider this: 'I was a bit shocked and a bit upset and I said "don't they know that my child doesn't walk?", seriously' (20006: obese, 4–5 years).

### Appearance

Almost half (43%) of parents were aware that their child's weight might be a risk for their health after receiving written feedback. Some parents therefore agreed their child was overweight, and perceived them to look overweight: 'She looks fat' (30001: overweight, 10–11 years). However, the majority of parents, regardless of whether

or not they agreed with the written feedback, reported that their child did not look overweight: 'I don't think when you look at her you don't look at her and think she's overweight. She doesn't have that overweight look feature-wise' (20001: obese, 4–5 years). Parents referred to other children they perceived to look more overweight as confirmation that their child is not overweight: 'He honestly doesn't really look overweight to me so you see children in the street and they're little round puddings. He's not one of them' (20024: obese, 4–5 years).

### Cultural influence

Although not commonly commented on, some parents of non-white ethnicity described a disparity between 'traditional' British views of overweight and those of their culture where being overweight was more acceptable. Being overweight was not viewed negatively by these parents, as one parent of non-white ethnicity highlights: 'Back in my country saying a child is overweight means it is a good thing' (20017: obese, 4–5 years).

### Discussion

To our knowledge, this is the first qualitative interview study to explore the responses of parents of overweight children to written weight feedback about child weight status. Despite being told that their child was overweight, parents considered many factors, other than weight, when determining whether their child was overweight or at risk of health problems. It has previously been suggested that 'feedback on the child's risk to become overweight is necessary to increase maternal awareness and willingness to take part in prevention programs' (Park *et al.*, 2013). The NCMP was specifically designed for this purpose. However, although written feedback may improve parental recognition of overweight children, this does not necessarily translate into concern for health or behaviour change, consistent with previous weight feedback research (Chomitz *et al.*, 2003; Grimmer *et al.*, 2008; West *et al.*, 2008). The present study helps to explain why written weight feedback may not lead to behaviour change. The theory of planned behaviour (Ajzen, 1991) would suggest that the first step to these parents implementing behaviour change involves them perceiving their child to be overweight and at risk of health problems as a result of current behaviour (e.g. poor diet, sedentary lifestyle). They would then need to believe that they were able to change those behaviours. In other words, behaviour change will not occur if parents do not perceive their child to be overweight or at risk of health problems. The present study shows that, despite selecting a proportion of parents who had reported perceiving their child to be

at risk of health problems as a result of being overweight, the majority of parents were still not entirely convinced by the feedback. Some parents appeared to disagree entirely with the feedback, or agreed their child was overweight but attributed it to puppy fat, genetics or stature, and did not consider it to be impeding their health. The most common belief was that the child would grow out of being overweight; a finding consistent with previous research (Carnell *et al.*, 2005) suggesting that being overweight is viewed as a temporary issue, whereas there is substantial evidence indicating that obesity in childhood tracks into adulthood (Singh *et al.*, 2008). Some parents suggested that the finding of being overweight was a result of the child being tall or short; however, because BMI is a height/weight ratio, this may indicate some misunderstanding of how BMI is calculated, which has also been demonstrated in previous research (Oettinger *et al.*, 2009). Also consistent with previous studies, we found that parents used positive adjectives such as 'big-boned' to describe their child's weight (Park *et al.*, 2013). This suggests that overweight is either not viewed negatively or as a cause for concern, or that parents acknowledge that their child is 'large' but do not perceive them to be 'overweight'.

Other parents in the present study indicated that they did not perceive their child to look overweight. It has been suggested that the increasing prevalence of overweight may have 'normalised' obesity (Binkin *et al.*, 2011). In the present study, more parents of obese children perceived their child as being overweight than parents of overweight children, suggesting that it was easier for parents of children classified as obese to see that their child was overweight than parents of children in the overweight category. Consistent with previous studies (Lampard *et al.*, 2008; Croker *et al.*, 2012), many parents conceptualised child health in terms of diet, activity level and well-being, and felt that, because their child ate healthily, and was happy and physically active, this meant that all was well. Given that parents have previously been found to over-estimate the healthiness of their child's diet (Kourlaba *et al.*, 2009) and how physically active they are (Corder *et al.*, 2012), this makes it all the more important that parents are reliably informed as to where potential improvements in their child's lifestyle could be made. Emotional and behavioural markers of health may be more meaningful to parents than weight and BMI centiles. BMI centiles have previously been viewed by parents as lacking credibility (Thompson & Story, 2003). We found that, because BMI centiles do not take the child's lifestyle into consideration, some parents discounted the NCMP feedback. In addition, if being overweight is viewed positively in the parent's culture, this will affect parental perceptions of weight and potentially their moti-

vation to make any recommended changes to their child's lifestyle (Roberts *et al.*, 2006).

Despite having been told explicitly that their child was overweight in the present study, it is interesting to note that the reasons why parents did not acknowledge their child to be overweight or at risk of health problems were broadly in line with previous studies in general populations. Providing written weight feedback does not appear to change how parents conceptualise their child's weight. Our findings therefore have implications for the NCMP programme, policymakers, and health and education professionals. The results suggest that parents use a variety of factors to determine whether they accept the evaluation that their child is overweight. Diet, activity levels and happiness were perceived to be more important determinants of health than weight. Also, because the NCMP does not take the child's lifestyle into consideration, and is simply a height and weight measurement, the feedback did not provoke concern for the many parents in the present study who believed their child already had a healthy lifestyle. Health professionals should therefore emphasise the importance of activity and a healthy diet when communicating with parents, rather than focusing solely on weight or BMI centiles. NCMP written feedback may be viewed as more relevant if it acknowledged the individual child's lifestyle. Therefore, bespoke feedback, tailored to the child's weight, diet and exercise patterns may lead to better engagement from parents. Although this would require additional resources, it is important for parents to fully understand the feedback and acknowledge what it means for their child. At present, this is the only weight feedback programme in England, at a public health level. Therefore, it needs more in-depth practical measures put into place to help parents recognise obesity and make subsequent behaviour changes.

Because many parents in the present study did not think their child looked overweight, and because recognising overweight is necessary for behaviour change (Ajzen, 1991), research needs to focus on developing methods to improve parental recognition of childhood overweight and obesity and the associated health risks. More accurate representations of obesity in the media may complement this. In addition, a common perception of parents was that their child's weight was puppy fat, although the reality is that many children will not spontaneously 'grow out' of being overweight, especially older children (Wardle *et al.*, 2006). Research could explore how to better communicate this to parents. Given that, for some parents from non-western cultures, overweight has positive connotations, cultural views should be considered when intervening with parents. There appeared to be some parental misunderstanding surrounding BMI centiles, and so future NCMP development could aim to better explain

to parents how the classifications are formulated and consider alternative methods for improving parental understanding of the results and their implications.

### Strengths and limitations

Although many studies have now reported that parents do not recognise when their child is overweight or the associated health risks, fewer studies have explored the reasons why, and none have looked at this after receiving written weight feedback. We were able to obtain a reasonably large sample of parents for interview, which included individuals from a range of ethnic and socioeconomic backgrounds. However, the findings may not represent the views of parents who did not respond to the quantitative survey and may therefore be biased towards parents who are more invested or able to provide a healthy lifestyle for their child, as well as more educated and more likely to speak English. The inclusion of parents who did and did not recognise the health risks associated with overweight is a strength of our sample because we captured a variety of perceptions that go some way to explaining why some parents remain unconcerned after receiving feedback. The same researcher conducted and analysed all the interviews and, although this ensures consistency, we acknowledge that the researcher's preconceptions and interest in the area of obesity may have influenced the findings, meaning that they were not entirely objective. However, the use of a second coder helped to eliminate some degree of subjectivity.

### Overall conclusions

In this sample of parents who had received written feedback informing them that their child was overweight and that this could cause health problems, the majority of parents regarded their child as healthy and many were unconvinced that their child was overweight. Parents used factors other than actual weight to evaluate their child's weight status and health risks. Diet, happiness and activity levels are important indicators of health for parents, as are child-related factors such as stage of puberty and appearance. The current NCMP written feedback does not take these factors into account, which may partly explain why it does not lead to acknowledgement of health risks or behaviour change. According to the Theory of Planned Behaviour (Ajzen, 1991), only once parents accurately perceive their child as being overweight and/or at risk of health problems can they begin to consider their ability to change lifestyle behaviours. The present study has highlighted the reasons why some parents may not perceive their child as being overweight or at risk of health problems. These should be considered when communicating with parents regarding

overweight children; for example, by acknowledging that although their child may currently be healthy, happy and active, weight has long-term consequences, and that, even though a child may have 'puppy fat' or there are lifestyle changes that can be made to reduce the risk of their child becoming an overweight adult.

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### Conflict of interests, source of funding and authorship

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SK and RV were responsible for the larger NCMP study conception. HC and JW designed the qualitative study. HS and HC managed the study, coordinated the data collection, undertook thematic analyses, and drafted and revised the manuscript. CF participated in developing the study and recruitment. SK was principal investigator for the larger NCMP evaluation. HC and JW were principal investigators for the qualitative study, and act as guarantors for the paper. SS, AK, RV, SK, JW and HC contributed to the conception of the study and all authors contributed to its design. HC, HS, CF and SK designed the interview protocol. HC, CF, SK, HS and LC contributed to the coordination and delivery of the study. HS carried out the interviews and analysed the data. All authors contributed to the interpretation of the findings and approved the final draft of the manuscript submitted for publication.

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## Appendix

### Background

1. Could you tell me a bit about your family.
  - (a) Who lives at home? (b) Ages of children

### Feedback

2. Can you remember what your NCMP feedback said and how it made you feel?
  - (a) Do you agree/disagree with the feedback?
    - (i) If agree – why do you think your child is overweight?
    - (ii) If disagree – why do you think feedback states your child as overweight?
  - (b) How do you judge whether your child is healthy weight or not?

### Actions/behaviour changes

3. What was your reaction to the feedback?
4. What did you do when you got the feedback?

*Prompt:* spoke with child? Their response?

*Prompt:* Any changes to family's diet/lifestyle following feedback? Anything that made this difficult? Anything that helped when making these changes?

\*If no changes: have you wanted to make any? Was there anything that has prevented this or made this difficult?

5. Is there anything that would help you to make changes to your child's diet?

*Prompt:* Anything about feedback that helped/could be improved? Format preference?

### Service use

6. Have you ever contacted any services (e.g. GP, school nurse about your child's weight?)

If yes: (a) When? (b) What was the outcome?

If no: (a) Have you wanted to? (b) Is there anything that has prevented this/made this difficult?

7. Are you aware of all the different services available to you locally/nationally if you were worried about your child's weight/wanted to make lifestyle changes?
8. Is there anything that might help you/other parents to seek help from services?

### Risk perception

9. How do you think being overweight might affect children now/in future?

*Prompts:* health, physically, emotionally

10. Are any of these concerns you have for your child?

*Prompts:* now/in the future

- (a) If yes were these before or after feedback?
- (b) If not why not?

### Overall experience

11. Has getting this feedback influenced whether you would:

Withdraw/allow sibling to take part in NCMP (if applicable)?

Advise friends/family members to let their child take part?

12. Are there any changes you would like made to the NCMP?

*Prompts:* measurements, feedback – anything that would be useful for parents?

NCMP, National Child Measurement Programme.