

H. Health domain tables

Camille Lassale *University College London*

Cesar de Oliveira *University College London*

Dorina Cadar *University College London*

Introduction

H.1 This chapter presents results for the Health domain of the latest wave of the English Longitudinal Study of Ageing (ELSA). Results are presented according to six domains of health: general health, diagnosed health conditions, sensory function, physical and functional capability, cognitive function and health behaviours. As this wave also includes a nurse visit, we also present tables on anthropometric measures, physical function tests and blood biomarkers. Where possible, results are presented as follows.

- Cross-sectional tables (H1a to H8b) based on core members respondents of wave 8 (including the refreshment sample members added in 2006–07, 2008–09, 2012–13 and 2014–15). Results are classified by age (divided into five-year categories) and gender, and by gender and wealth groups (quintiles). Results are weighted for non-response using cross-sectional weight.
- Longitudinal tables (HL1a to HL11b), based on a balanced ELSA sample of core members who participated in all waves (waves 4 to 8). Results are classified by age (divided into five-year categories) and gender at wave 4, and by gender and wealth groups (quintiles) at wave 4. Results are weighted using longitudinal weight.
- Nurse visit cross-sectional tables (N1a to N9b) based on core sample member respondents of wave 8 (including the refreshment sample members added in 2006–07, 2008–09, 2012–13 and 2014–15) who then consented to the nurse visit. Results are shown by age (divided into six-year categories) and gender, and by wealth groups (quintiles) and gender. Results are weighted for non-response using two cross-sectional weights. Anthropometric and physical functioning measures are weighted by nurse visit weights, while blood samples results are weighted by blood sampling weights. Note that a number of modules included at previous ELSA nurse waves have been omitted at wave 8, including standing height, waist and hip circumference measurement, lung function, balance, leg rise, chair rise and hair sample. In addition, the weight module was moved from the nurse to the interviewer questionnaire at wave 8.

Cross-sectional tables

General health

H.2 Table H1a shows the percentage of self-rated health categories (from excellent to poor) by age and gender at wave 8. The prevalence of women reporting excellent self-rated health decreases with age and reaches the lowest value at the age of 80 and above. However, for men, the lowest value is reported at the 75–79 age group. Overall, 73% of men and 72% of women report excellent, very good or good health.

H.3 Table H1b shows the percentage of self-rated health by gender and wealth at wave 8. There is a steep economic gradient in self-rated health: men and women in the lowest wealth groups report more frequently fair or poor health than those in the highest wealth groups. Among the highest wealth group, 87% of men and 86% women rate their health good to excellent; the corresponding figures for men and women in the lowest wealth group are 50% and 54%, respectively.

H.4 Table H2a shows the percentage of people reporting a long-standing limiting illness by age and gender at wave 8. The prevalence of men and women reporting a limiting long-standing illness increases with age, from 20% in men and 26% in women aged 55–59 to 55% in men and 57% in women aged 80 and above.

H.5 Table H2b shows the percentage of limiting long-standing illness by gender and wealth at wave 8. The prevalence of men and women in the lowest wealth group reporting a long-standing limiting illness is over 50%, which is more than twice the proportion of those in the highest wealth group.

Health conditions

H.6 Table H3a shows the percentage of diagnosed health conditions by age and gender at wave 8. The same trends were observed for men and women. Overall, the prevalence of health conditions increases with age, except for cancer and respiratory illness, for which prevalence peaks at age 75–79 and lowers for people aged 80 and above, and for depression, which lowers after the age of 70. At all age groups, more men than women report coronary heart disease (CHD), while more women than men report arthritis and depression. Overall, the prevalence of chronic disease, particularly for arthritis and respiratory illnesses, is high in wave 8 of ELSA.

H.7 Table H3b shows the percentage of health conditions by gender and wealth at wave 8. The prevalence of all health conditions is lowest in the highest wealth group for both men and women. The prevalence of CHD, diabetes, depression and respiratory illnesses is approximately double in the lowest wealth group than in the highest for men, and four times higher for women. For cancer, the trend is less marked for men and, for women, prevalence is relatively stable across all wealth groups.

Sensory impairments

H.8 Table H4a shows the percentage of self-rated sensory impairments (eyesight, hearing, smell and taste) by age and gender at wave 8. Hearing impairment is highly prevalent overall (28% of men and 19% of women) and increases steadily with age from 60 onwards to reach 43% of men and 37% of women aged 80 and above. A

similar trend of increase with age is observed for impairment in other senses, with the increase starting from age 65 for men and age 60 for women. In each age group, more men than women reported smell impairment, while more women report eyesight impairments than men. The lowest prevalence is for the taste impairment in both men and women (8% of men and 7% of women across all age groups).

H.9 Table H4b shows the percentage of self-rated sensory impairments by gender and wealth at wave 8. Both men and women in the lowest wealth group report higher sensory impairments in each of the eyesight, hearing, smell and taste functions than those in the highest wealth group.

Physical and functional capability

H.10 Table H5a shows the mean walking speed (m/s) by age and gender at wave 8. The mean walking speed decreases with age for both men and women and is lower in women than men within each age group. The largest difference between women (0.63 m/s) and men (0.72 m/s) is observed in the oldest age group.

H.11 Table H5b shows the mean walking speed (m/s) by gender and wealth at wave 8. The mean walking speed of men and women in the lowest wealth group is, on average, 0.25 m/s lower than that of people in the highest wealth group.

H.12 Table H6a reports the prevalence of limitations with one or more activities of daily living (ADLs) and instrumental activities of daily living (IADLs) by age and gender at wave 8. The prevalence of men and women reporting limitations with one or more ADLs and IADLs increases with age. At all ages, women are more likely to report difficulties with ADLs and IADLs than men.

H.13 Table H6b reports the prevalence of limitations with one or more ADLs and IADLs by gender and wealth at wave 8. There is a strong socio-economic gradient, with more than three times the proportion of men and women having limitations with one or more ADLs and IADLs in the lowest wealth group compared with the highest wealth group. In the lowest wealth groups, there is a gender difference in the prevalence of those reporting limitations with one or more ADLs (with higher prevalence in women than men), which is relatively attenuated in the highest quintiles of wealth. There are no significant gender differences in the prevalence of reporting limitations with one or more IADLs within each wealth group.

Cognitive function

H.14 Table H7a reports the mean cognitive performance on memory, attention and comprehension by age and gender at wave 8. Memory declines with age in both men and women, although the scores are slightly higher for women than men within each age group. A slight decline in attention capability is observed for men by age, while for women there is a stable performance in attention across the age groups. Comprehension decreases a little at older ages for both men and women.

H.15 Table H7b reports the mean cognitive function by gender and wealth at wave 8. In both men and women, all aspects of cognitive functioning – memory, attention and comprehension – are lowest in the lowest wealth group.

Health behaviours

H.16 Table H8a shows the prevalence of several health behaviours (smoking, physical activity, alcohol consumption and fruit and vegetable consumption) by age and gender at wave 8. In both men and women, the prevalence of current smokers decreases with age, while the prevalence of those being physically inactive increases with age. The peak prevalence of men and women reporting daily alcohol consumption is between the ages 70 and 74, and alcohol consumption is slightly lower at older ages. The highest prevalence of consuming five or more portions of fruit and vegetables a day is found for men and women aged 65–79.

H.17 Table H8b shows the prevalence of several health behaviours by gender and wealth at wave 8. In both men and women, the prevalence of current smokers and physical inactivity is highest in the lowest wealth groups. The prevalence of daily alcohol intake and consumption of five or more portions of fruit and vegetables is lowest in the lowest wealth group. Over a third of men and women in the lowest wealth group are physically inactive, and close to half eat fewer than five portions of fruit and vegetables a day.

Longitudinal tables

H.18 Cross-sectional tables using a series of data from different time periods combine the effect of age, time and differential mortality. For example, looking at cross-sectional data on income over time, it would not be possible to isolate the effect of age on income because the effect of time or differential mortality cannot be completely stripped out (i.e. the observation that higher-income individuals tend to live longer than lower-income individuals). Because longitudinal data follow the same individuals over time, by selecting a sample of individuals who are interviewed at every wave, we can eliminate the effect of differential mortality. The tables that follow take the set of individuals who have responded at every wave from waves 4 to 8 (the ‘balanced panel’) and track some health conditions by age, gender and wealth in 2008–09 (the ‘baseline’ years) across waves over eight years follow-up.

General health

H.19 Table HL1a shows the percentage of participants reporting fair or poor self-rated health by age and gender for waves 4 to 8. The prevalence of men and women reporting fair or poor health increases from wave 4 to wave 7, particularly in the older age group.

H.20 Table HL1b shows the percentage of participants reporting fair or poor self-rated health by gender and wealth for waves 4 to 8. The prevalence of men and women reporting fair or poor health is consistently higher for both men and women in the lowest wealth groups compared with the highest wealth groups. The increase across waves is, therefore, less steady in the lowest wealth groups, as the initial percentages are higher than in the highest wealth group, where the proportion more than doubles over time.

Health conditions

H.21 Tables HL2a and HL3a show the percentage of CHD and diabetes by age and gender for waves 4 to 8. The percentage of men and women reporting CHD and diabetes doubles from wave 4 to wave 8, particularly for older individuals.

H.22 Tables HL2b and HL3b show the percentage of CHD and diabetes by gender and wealth for waves 4 to 8. The percentage of men and women reporting CHD and diabetes is highest at every wave among individuals in the lowest wealth group.

H.23 Table HL4a shows the percentage of cancer by age and gender for waves 4 to 8. Overall, the prevalence of cancer increases from wave 4 to 8 and in all age groups, and is higher in women than men. However, trends are different according to age: women aged between 50 and 64 at baseline show a higher prevalence of cancer than men (of the same age) at every wave. It is likely that a survival effect is occurring for men aged 75–79 and for women aged 70–79 at baseline (wave 4) for whom we see a particularly low prevalence of cancer at wave 4.

H.24 Table HL4b shows the percentage of cancer by gender and wealth for waves 4 to 8. There is no marked difference in the prevalence of cancer among wealth groups.

H.25 Table HL5a reports the prevalence of diagnosed depression by age and gender in waves 4 to 8. The percentage of men and women reporting depression increases significantly from wave 4 to wave 8, and at each wave is higher in women than in men. Older men and women show consistently lower percentages of diagnosed depression than younger men and women.

H.26 Table HL5b reports the prevalence of diagnosed depression by gender and wealth in waves 4 to 8. Men and women in the highest wealth groups are less likely to be depressed, and this holds across waves.

Physical and functional capability

H.27 Table HL6a reports the mean walking speed by age and gender for waves 4 to 8. For both men and women, mean walking speed decreases from wave 4 to wave 8 in each age group, and the decline is steeper from the age of 70 onwards for women and from 75 onwards for men. At every wave, walking speed decreases with increasing age.

H.28 Table HL6b reports the mean walking speed by gender and wealth for waves 4 to 8. For both men and women, walking speed is consistently higher in the highest wealth groups.

H.29 Table HL7a reports the prevalence of participants reporting limitations with one or more ADLs by age and gender for waves 4 to 8. In both genders, the prevalence of those reporting limitations with one or more ADLs increases over time, particularly for people aged 60 and above. There is also a clear gradient by age at every wave for both men and women.

H.30 Table HL7b reports the prevalence of participants reporting limitations with one or more ADLs by gender and wealth for waves 4 to 8. In both genders, the prevalence of those reporting limitations with one or more ADLs is consistently higher by almost three times in the lowest wealth group compared with the highest wealth group at every wave for both men and women.

Cognitive function

H.31 Table HL8a reports the mean cognitive performance in memory by age and gender at waves 4 to 8. In men, the overall memory function score is almost constant over time, while for women there is a slight decrease from wave 4 to wave 8. No

decline is observed in men and women aged 50–59 at baseline, while a steeper decline is observed in the older age groups 75 and above.

H.32 Table HL8b reports the mean cognitive performance in memory by gender and wealth at waves 4 to 8. For both men and women, the decrease in memory over time is more pronounced in the lowest wealth group.

Health behaviours

H.33 Table HL9a shows the prevalence of cigarette smoking by age and gender for waves 4 to 8. There is an overall linear decrease in the prevalence of smoking over time for both men and women.

H.34 Table HL9b shows the prevalence of smoking by gender and wealth for waves 4 to 8. In both genders, the proportion of smokers is much higher in the lowest wealth groups compared with highest wealth groups, and the prevalence of current smokers decreases over time in all wealth groups from wave 4 onwards.

H.35 Table HL10a shows the percentage of daily alcohol consumers by age and gender for waves 4 to 8. Overall, the percentage of alcohol consumers decreases over time, particularly from wave 4 to wave 7, and then increases slightly in wave 8. This trend is observed in most age groups.

H.36 Table HL10b shows the percentage of daily alcohol consumers by gender and wealth for waves 4 to 8. The proportion of daily alcohol consumers is much higher in the highest wealth groups compared with the lowest: twice as much in men and three times as much in women.

H.37 Table HL11a shows the prevalence of physical inactivity by age and gender for waves 4 to 8. In both genders, the percentage of those physically inactive increases over time in all the age groups, except the youngest age group 50–54, for whom the prevalence of physical inactivity remains approximately stable from wave 5 to wave 8.

H.38 Table HL11b shows the prevalence of physical inactivity by gender and wealth for waves 4 to 8. Physical inactivity increases over time in all wealth groups. At each wave, the proportion of participants reporting physical inactivity is three to five times higher in the lowest wealth group compared with the highest wealth group.

Nurse visit cross-sectional tables

Anthropometry

H.39 Tables N1a and N1b show the means and body mass index (BMI) categories by gender and age category at wave 8. The overall mean BMI in 2016–17 is similar for men (28.3 kg/m²) and women (28.2 kg/m²). Among men, mean BMI starts decreasing after the ages 65–69 from 29.2 to 27.2 kg/m² for those aged 80 and above. In women, mean BMI also decreases after ages 65–69 from 28.8 to 26.7 kg/m² for those aged 80 and above. Less than 1% of men and women are underweight. A third of women and just over a fifth of men have BMI in the desirable category. More men (46.5%) than women (33.5%) are overweight, and this applies to all age groups, but more women (33.7%) than men (30.7%) are obese. The very oldest groups are the least likely to be obese.

H.40 Tables N1c and N1d show mean BMI and BMI categories by wealth group

and gender. The prevalence of elevated BMI and obesity is lower in the richest wealth groups.

Blood pressure

H.41 Table N2a shows mean systolic (SBP) and mean diastolic (DBP) blood pressure by age category and gender. SBP and DBP are higher among men than women. Among men, SBP increases until age 79 and then there is a small decrease, while among women there appears to be a steady increase in SBP with age. Among both men and women, increased age is associated with decreases in DBP.

H.42 Table N2b shows mean SBP and DBP by wealth category and gender. Mean levels of SBP and DBP do not show a clear pattern of association with wealth.

Lipid profile

H.43 Table N3a shows mean levels of total cholesterol, high density lipoprotein (HDL) cholesterol, low density lipoprotein (LDL) cholesterol and triglycerides by age category and gender. For each of these, the proportion of individuals reporting 'at-risk' values is also reported.

At every age, men have lower levels of total cholesterol than women, and among men, these levels decrease with age. Among women, there is a small decrease in the mean cholesterol levels with age. Overall, 45.6% of men and 66% of women have high total cholesterol levels (greater than 5.0 mmol/l). The gender difference in raised total cholesterol is more pronounced in the older groups because the percentage with higher cholesterol declines sharply with age for men but more gradually for women.

Mean HDL cholesterol is higher for women than for men in every age category. Overall, mean HDL cholesterol levels do not vary appreciably with age in either gender. There are 11% of men and 8.8% of women who have 'high risk' levels of HDL (lower than 1.0 mmol/l for men and less than 1.2 mmol/l for women), and no consistent pattern of difference with age is seen in either gender.

The mean LDL cholesterol levels are slightly lower in men (2.94 mmol/l) than in women (3.19 mmol/l). In men, LDL cholesterol concentrations decrease with age, while there is little variation with age for women. In total, 60.8% of men and 68.2% of women have elevated levels of LDL cholesterol (greater than 3.0 mmol/l). The prevalence of high LDL levels in men decreases with age (e.g. 56% of men aged 50–54 compared with 37% of men aged 75–79). In women, the prevalence of high LDL also decreases with age. Mean triglycerides concentrations are 1.20 mmol/l in women and 1.34 mmol/l in men. In men, there is a decrease in mean levels by age.

There are 32% of men and 25% of women who have elevated levels of triglycerides (greater than 1.7 mmol/l). The prevalence of high levels of triglyceride decreases with greater age in men, while the trend is not so evident among women. Note that values for LDL and triglycerides are available only for participants who provided fasting blood samples.

H.44 Table N3b shows lipid profile by wealth group and gender. Mean levels of total and LDL cholesterol show a marked socio-economic gradient that is the reverse of what might be expected. Increasing wealth is associated with higher levels of both total and LDL cholesterol. However, fewer participants who are in the highest wealth group have low levels of 'good' cholesterol (HDL) that would indicate increased risk. Similarly, levels of triglycerides decrease with increasing wealth.

Inflammatory markers

H.45 Table N4a shows mean concentration levels of inflammatory markers fibrinogen (g/l) and C-reactive protein (CRP) concentrations (mg/l) by age category for men and women. The mean levels of fibrinogen and CRP increase with age in both men and women.

H.46 Table N4b shows mean levels of fibrinogen and CRP by wealth group and gender. With increasing wealth, both fibrinogen and CRP levels decrease.

Glycated haemoglobin

H.47 Table N5a shows the mean glycated haemoglobin (HbA1c) levels by age and gender. There is a small increase with age in both men and women.

H.48 Table N5b shows levels of glycated haemoglobin by wealth category and gender. Glycated haemoglobin is inversely related to wealth such that wealthier participants have lower levels of HbA1c.

Haemoglobin

H.49 Table N6a shows mean haemoglobin levels and the proportion of individuals who are classified as anaemic (haemoglobin below 13g/dl for men and below 12 g/dl for women) by age category and gender. Mean levels of haemoglobin are higher in men than women. For both genders, there is a decrease in levels with age. Overall, 8.5% of men and 9.2% of women have low haemoglobin (anaemia). In both men and women, there is a clear upward shift in the prevalence of anaemia at the oldest age groups. In men, the prevalence of anaemia increases from 1% in the youngest age group to 28% in the oldest age group, with substantial differences between those aged 75 and above and those who were younger. Women show a similar pattern.

H.50 Table N6b shows mean levels of haemoglobin and the percentage of participants with anaemia in wave 8 by wealth group and gender. While mean haemoglobin levels do not differ appreciably by wealth group, the prevalence of anaemia is lower among participants in the highest wealth group.

Insulin-like growth factor-1

H.51 Table N7a shows the mean levels of insulin-like growth factor-1 (IGF-1) by age category and gender. Overall, mean levels decrease with age. The prevalence of those in the lowest quintile of levels of IGF-1 increases considerably with age in both men (from just 10.8% at 55–59 age group to 48.7% at 80 and above) and women (from 16.7% at 50–54 age group to 42.4% at 80 and above).

H.52 Table N7b shows mean levels of IGF-1 by wealth group and gender. A socio-economic gradient is evident, with increases in mean levels and decreases in the proportion of those in the lowest quintile with increased wealth.

Vitamin D

H.53 Table N8a shows the mean levels of Vitamin D by age category and gender. Overall, the mean levels of Vitamin D are similar for both men and women. There also does not appear to be a consistent pattern of change with age.

H.54 Table N8b shows mean levels of Vitamin D by wealth group and gender. A

socio-economic gradient is observed, with increases in levels with increased wealth.

Grip strength

H.55 Table N9a shows mean grip strength by age category and gender. A marked gender difference in grip strength is seen, with men having much higher mean grip strength at every age. For both genders, there is a decrease in grip strength with increasing age.

H.56 Table N9b shows mean grip strength by wealth group and gender. Wealthier participants have higher mean grip strength.

Annex AH. Definitions

AH.1 *Activities of daily living (ADLs) and instrumental activities of daily living (IADLs)*: Respondents were asked to report whether because of a physical, mental, emotional or memory problem they have any difficulty with ADLs (dressing, walking across a room, bathing or showering, eating, getting out of bed, using the toilet) and with IADLs (using a map, preparing a hot meal, shopping for groceries, making phone calls, taking medications, doing work around the house, managing money). From the responses to these questions, two variables were derived to indicate whether the respondent had difficulties with one or more ADLs and IADLs.

AH.2 *Age*: Defined as age at last birthday

AH.3 *Alcohol consumption*: Based on the questions concerning frequency of alcohol consumption, a variable was derived to indicate whether or not the respondent was drinking alcohol three days a week or more (which was then labelled as daily alcohol consumption).

AH.4 *Balanced panel*: The set of individuals are who interviewed in all waves of interest.

AH.5 *Baseline*: The wave of data that is chosen to be the starting point for characteristics in the longitudinal analysis that may change over time.

AH.6 *Cognitive function – attention*: This is an index that combines the scores on the cognitive test on attention and calculation (counting backward and a set of subtractions). Higher scores indicate better attention and executive functioning.

AH.7 *Cognitive function – comprehension and naming*: A score that combines the results of five questions (naming objects and people) relying on comprehension and semantic memory. Higher scores indicate better comprehension and naming capability.

AH.8 *Cognitive function – memory*: This is an overall memory score that combines the scores on the two objective memory tests (immediate and delayed memory) using a 10-word list. The overall score ranges from 0 to 20. Higher scores indicate better memory.

AH.9 *Consumption of fruit and vegetables*: Based on the questions regarding fruit and vegetable consumption, a variable was derived to indicate whether the respondent ate five or more portions of fruits and vegetables a day.

AH.10 *Health conditions*: Respondents were asked whether a doctor had ever told them that they suffered from any of the following conditions: CHD (angina or myocardial infarction), diabetes, cancer, respiratory illness (asthma or pulmonary disease), arthritis and depression.

AH.11 *Limiting long-standing illness*: Respondents were asked whether they suffered from any illness or disability that affected them over a long period and, if so, whether the illness limited their activities in some way.

AH.12 *Physical activity*: Based on the questions regarding frequency of leisure-time physical activity, a variable was derived to indicate whether or not the respondent was physically inactive (sedentary physical activity).

AH.13 *Self-rated hearing acuity*: Respondents were asked to rate their hearing, as excellent, very good, good, fair or poor. Self-rated hearing impairment was defined as having declared a fair or poor hearing.

AH.14 *Self-rated sense of smell*: Respondents were asked to rate their sense of smell as excellent, very good, good, fair or poor. Self-rated smell impairment was defined as having reported a fair or poor sense of smell.

AH.15 *Self-rated taste*: Respondents were asked to rate their sense of taste, as excellent, very good, good, fair or poor. Self-rated taste impairment was defined as having declared a fair or poor sense of taste.

AH.16 *Self-rated general health*: Respondents were asked to rate their health as excellent, very good, good, fair or poor. Because self-rated general health was collected at wave 3 using a different version, for comparability, the results from that wave are omitted from the tables.

AH.17 *Smoking status*: Defined as whether the respondent was a current smoker or not.

AH.18 *Total non-pension wealth*: Total non-pension wealth is reported at the family level and is defined as the sum of net financial wealth, net physical wealth and net housing wealth.

AH.19 *Walking speed*: A walking speed test was performed among participants aged 60 and above. The test involved timing how long it took to walk a distance of 8 feet. The total score indicates the walking speed of respondents in metres per second (m/s) with higher scores indicating faster speed.

AH.20 *Wealth groups*: To form wealth groups, we order all ELSA sample members according to the value of their total (non-pension) family wealth, and we divide the sample into five equal-sized groups. Where analysis is carried out using all ELSA sample members, the groups are equal in size and can be referred to as quintiles. Much of the analysis in this chapter is carried out using subsamples of the ELSA population. Where analysis does not use the whole ELSA sample, the groups are unequal in size and are more accurately referred to as ‘wealth groups’. For consistency reasons, we use the term ‘wealth group’ rather than ‘wealth quintile’ throughout the chapter. The cut-off points for the wealth groups are shown in the following table, reported in January 2017 prices and rounded to the nearest £1,000.

	Wealth group definition, wave 1 (2002–03)	Wealth group definition, wave 4 (2008–09)	Wealth group definition, wave 8 (2016–17)
Lowest	Less than £22k	Less than £60k	Less than £71k
2 nd	Between £22k and £132k	Between £60k and £201k	Between £71k and £210k
3 rd	Between £132k and £229k	Between £201k and £303k	Between £210k and £354k
4 th	Between £229k and £403k	Between £303k and £496k	Between £354k and £575k
Highest	More than £403k	More than £496k	More than £575k

AH.21 Notes to all tables

The unit of observation in all tables is the individual.

Health domain tables

All cross-sectional tables are based on the cross-section of ELSA sample members in each wave of data. This includes refreshment sample members.

All longitudinal tables are based on individuals who have responded in all of waves 4 to 8 (the ‘balanced panel’) unless otherwise specified.

All numbers are based on weighted data. Unweighted frequencies (*N*) are reported.

For cross-sectional analyses, the figures are weighted for non-response. For longitudinal analyses, the figures are weighted for non-response and attrition from wave 4 to wave 8 using longitudinal weights.

The fieldwork dates are shown in the following table.

	Fieldwork dates (inclusive)
Wave 1	March 2002 – March 2003
Wave 2	June 2004 – June 2005
Wave 3	May 2006 – August 2007
Wave 4	June 2008 – July 2009
Wave 5	July 2010 – June 2011
Wave 6	May 2012 – May 2013
Wave 7	June 2014 – May 2015
Wave 8	May 2016 – June 2017

AH.22 *The nurse visit*: All core members were eligible for a nurse visit in person (i.e. not by proxy) either in a private household or in an institution. A nurse visit was provided to only those partners who explicitly request a nurse visit. The CAPI (computer-assisted personal interview) programme was used. After the main interview, the interviewer made an appointment for the nurse to visit the respondent or set up contact between nurse and respondent. The nurse visit consisted of a series of measurements that were only obtained if the appropriate consents were obtained and the respondent was able to respond affirmatively to relevant safety questions. The nurse visit included several standard measures including: anthropometric measures, blood pressure, blood sample and lung function. Full information on all the measurements collected during the nurse visit can be found in the wave 8 technical report.

AH.23 *Height*: Height was measured using a portable stadiometer with a sliding headplate, a base plate and three connecting rods marked with a metric scale. Respondents were asked to remove their shoes. One measurement was taken with the respondent stretching to the maximum height and the head in the Frankfort plane.⁵¹ The reading was recorded to the nearest millimetre.

AH.24 *Weight*: Weight was measured using a portable electronic scale. Respondents were asked to remove their shoes and any bulky clothing. A single measurement was recorded to the nearest 0.1 kg. Respondents who weighed more than 130 kg were asked for their estimated weights because the scales are inaccurate above this level. These estimated weights were included in the analysis.

⁵¹ The Frankfort plane is an imaginary line passing through the external ear canal and across the top of the lower bone of the eye socket, immediately under the eye. This line must be parallel with the floor. This gives the maximum vertical distance from the floor to the highest point of the skull.

AH.25 *Body mass index (BMI)*: BMI is a widely accepted measure of weight for height and is defined as weight in kilograms divided by the square of the height in metres (kg/m^2). BMI was calculated for all those respondents for whom both a valid height and weight measurement were recorded. We categorised the BMI scores into four main groups:

- underweight group ($<18.5 \text{ kg}/\text{m}^2$);
- normal (≥ 18.5 and $<25 \text{ kg}/\text{m}^2$);
- overweight (≥ 25 and $<30 \text{ kg}/\text{m}^2$);
- obese ($\geq 30 \text{ kg}/\text{m}^2$).

AH.26 *Blood pressure*: All respondents were eligible for the blood pressure module, except those who were pregnant. Three readings were collected at one-minute intervals (systolic, diastolic and pulse rate) using the Omron HEM-907 equipment. It was ensured that the room temperature was between 15°C and 25°C . The respondent was asked not to eat, smoke, drink alcohol or take vigorous exercise in the 30 minutes preceding the blood pressure measurement as blood pressure can be raised immediately after any of these activities. Systolic (SBP) and diastolic (DBP) blood pressure was measured using a standardised method. In adults, hypertension is defined as a SBP of at least 140 mmHg or a DBP of at least 90 mmHg or being on medication to control hypertension. The systolic arterial pressure is defined as the peak pressure in the arteries, which occurs near the beginning of the cardiac cycle. The diastolic arterial pressure is the lowest pressure at the resting phase of the cardiac cycle.

AH.27. *Blood sample*: Blood samples were taken from willing ELSA core members, except those who had a clotting or bleeding disorder (e.g. haemophilia and low platelets), had ever had a fit, were not willing to give their consent in writing, were currently on anticoagulant drugs (e.g. warfarin therapy). Fasting blood samples were taken whenever possible. However, respondents aged over 80, those known to be diabetic and on treatment, those who had a clotting or bleeding disorder or were on anti-coagulant drugs (e.g. warfarin), those who had ever had fits and those who seemed frail, or the nurse was concerned about their health, were not asked to fast. Subjects were considered to have fasted if they had not had food or drink except water for a minimum of five hours prior to the blood test. The amount of blood taken from each participant in order to analyse each biomarker is presented below:

- one citrate blue tube (1.8 ml) – fibrinogen;
- one plain red tube (6 ml) – total and HDL cholesterol, triglycerides, ferritin, C-reactive protein (CRP), IGF-1 and DHEAS;
- one fluoride grey tube (2 ml) – fasting glucose;
- one EDTA light purple tube (2 ml) – haemoglobin and glycated haemoglobin;
- two EDTA dark purple tube (4 ml) – genetics.

All the blood samples were analysed at the Royal Victoria Infirmary laboratory in Newcastle.

Blood analytes

These are the blood analytes measured.

- Total cholesterol: cholesterol is a type of fat present in the blood, related to diet. Too much cholesterol in the blood increases the risk of heart disease.

- High density lipoprotein (HDL) cholesterol: this is ‘good’ cholesterol, which is protective for heart disease.
- Low density lipoprotein (LDL) cholesterol: this is the ‘bad’ cholesterol and a risk factor for cardiovascular disease.
- Triglycerides: together with total and HDL cholesterol, they provide a lipid profile that can give information on the risk of cardiovascular disease. Measures of LDL and triglycerides were only taken for participants who were asked to fast.
- Fibrinogen: a protein necessary for blood clotting. High levels are also associated with a higher risk of heart disease.
- C-reactive protein: the level of this protein in the blood gives information on inflammatory activity in the body, and it is also associated with risk of heart disease.
- Glycated haemoglobin: this indicates the presence or risk of type 2 diabetes, which is associated with an increased risk of heart disease.
- Haemoglobin: these are measures of iron levels in the body and are related to diet and other factors. Anaemia is defined as having a haemoglobin level below 13 g/dl for men and below 12 g/dl for women.
- Insulin-like growth factor 1 (IGF-1): this is a hormone that helps to control reactions to stress and to regulate various body processes including digestion, the immune system, mood and energy usage.
- Vitamin D: this is a steroid vitamin, which promotes the intestinal absorption and metabolism of calcium and phosphorus. Under normal conditions of sunlight exposure, no dietary supplementation is necessary because sunlight promotes adequate vitamin D synthesis in the skin. Deficiency can lead to bone deformity (rickets) in children and bone weakness in adults. Vitamin D comes from the diet (eggs, fish and dairy products) and is produced in the skin. Skin production of the active form of vitamin D depends on exposure to sunlight. Active people living in sunny regions produce most of the vitamin D they need from their skin. In less sunny climes, the skin production of vitamin D is markedly diminished in the winter months, especially among the elderly and the housebound. In that population, vitamin D supplements become important.

AH.28 *Grip strength*: The grip strength test is a measure of upper body strength. The test was given to all respondents who were willing to take it, with no upper or lower age limits. Participants were, however, excluded if they had swelling or inflammation, severe pain or a recent injury, or if they had had surgery to the hand in the preceding six months. If there was a problem with only one hand, measurements were taken using the other hand. After adjusting the gripometer (grip gauge) to suit the respondent’s hand and positioning the respondent correctly, the respondent was asked to squeeze the gripometer as hard as they could for a couple of seconds. Three values were recorded for each hand, starting with the non-dominant hand and alternating between hands. Any measurements carried out incorrectly were not included. The gripometer used was the ‘Smedley’s for Hand’ Dynamo Meter, with a scale ranging from 0 to 100 kg. The average of three measurements (in kilograms) is reported here.

Table H1a. Self-rated health (%), by age group and gender: wave 8

	Age in 2016–17						All
	55–59	60–64	65–69	70–74	75–79	80+	
Men							
Excellent	17.1	15.7	13.6	8.8	5.9	6.9	12.4
Very good	35.1	31.9	32.5	26.5	19.9	20.9	29.2
Good	29.2	27.2	30.6	35.2	36.9	31.8	31.2
Fair	13.7	14.4	15.7	20.3	25.1	30.4	18.6
Poor	4.9	10.9	7.6	9.1	12.2	10.1	8.6
Women							
Excellent	19.5	14.7	11.3	9.0	5.9	4.6	11.5
Very good	31.6	31.2	29.6	29.5	23.1	19.8	27.9
Good	28.1	31.5	35.2	31.3	38.2	34.4	32.7
Fair	13.5	15.8	16.6	20.5	23.7	27.7	19.1
Poor	7.2	6.8	7.3	9.7	9.1	13.5	8.8
<i>Unweighted N</i>							
Men	226	551	635	603	435	471	2,921
Women	307	711	869	664	518	697	3,766

For variable definitions, see AH.2, AH.16 and AH.21. For related text, see H.2

Table H1b. Self-rated health (%), by gender and wealth group: wave 8

	Wealth group in 2016–17				
	Lowest	2 nd	3 rd	4 th	Highest
Men					
Excellent	5.6	10.9	10.9	13.1	18.5
Very good	14.7	22.4	31.0	33.8	39.7
Good	29.9	32.6	32.7	32.9	28.4
Fair	26.0	24.5	18.2	16.2	10.9
Poor	23.9	9.6	7.2	4.0	2.5
Women					
Excellent	4.7	9.3	10.7	12.9	20.6
Very good	14.4	22.1	30.0	38.2	34.6
Good	34.9	34.4	32.1	30.7	31.2
Fair	26.8	21.2	20.3	14.7	11.9
Poor	19.2	12.9	6.9	3.5	1.7
<i>Unweighted N</i>					
Men	429	489	595	655	710
Women	656	764	789	744	741

For variable definitions, see AH.16, AH.18, AH.20 and AH.21. For related text, see H.3.

Table H2a. Limiting long-standing illness (%), by age group and gender: wave 8

	Age in 2016–17						All
	55–59	60–64	65–69	70–74	75–79	80+	
Men	19.9	28.1	30.4	35.7	44.6	55.2	33.3
Women	25.5	31.5	34.3	38.5	43.7	56.5	37.5
<i>Unweighted N</i>							
<i>Men</i>	231	576	659	624	458	516	3,064
<i>Women</i>	316	726	888	680	535	759	3,904

For variable definitions, see AH.2 and AH.11. For related text, see H.4.

Table H2b. Limiting long-standing illness (%), by gender and wealth group: wave 8

	Wealth group in 2016–17				
	Lowest	2 nd	3 rd	4 th	Highest
Men	55.0	38.7	30.8	28.4	19.8
Women	55.3	44.1	34.3	29.5	24.0
<i>Unweighted N</i>					
<i>Men</i>	455	519	621	678	733
<i>Women</i>	680	786	804	765	768

For variable definitions, see AH.11, AH.18, AH.20 and AH.21. For related text, see H.5.

Table H3a. Diagnosed health conditions (%), by age group and gender: wave 8

	Age in 2016–17						All
	55–59	60–64	65–69	70–74	75–79	80+	
Men							
CHD	3.9	11.0	14.5	23.0	24.6	31.6	16.1
Diabetes	8.7	15.3	15.3	19.1	21.3	17.5	15.4
Cancer	6.4	6.0	8.4	15.1	22.2	21.9	11.8
Respiratory illness	12.5	17.0	17.1	23.2	23.9	18.7	17.9
Arthritis	19.5	28.6	36.8	43.4	48.4	51.6	35.6
Depression	9.8	13.6	11.9	10.5	7.3	5.0	10.1
Women							
CHD	2.3	3.7	7.7	11.0	17.7	23.9	10.3
Diabetes	9.5	10.7	12.2	15.1	14.3	18.3	13.1
Cancer	8.1	12.2	13.4	17.8	16.7	17.3	13.8
Respiratory illness	14.4	19.3	22.4	24.0	26.6	22.2	20.9
Arthritis	30.3	44.5	55.7	60.2	63.6	70.2	52.5
Depression	16.4	16.5	16.7	16.4	12.0	7.9	14.5
<i>Unweighted N</i>							
Men							
CHD	231	575	658	624	457	516	3,061
Diabetes	231	575	658	624	457	516	3,061
Cancer	231	576	659	624	456	517	3,063
Respiratory illness	231	576	659	624	459	517	3,066
Arthritis	231	576	659	624	456	517	3,063
Depression	231	576	659	624	459	517	3,066
Women							
CHD	316	726	888	680	534	757	3,901
Diabetes	316	726	888	680	534	757	3,901
Cancer	316	726	888	679	535	759	3,903
Respiratory illness	316	726	888	680	535	759	3,904
Arthritis	316	726	888	679	535	759	3,903
Depression	316	726	888	680	535	759	3,904

For variable definitions, see AH.2, AH.10 and AH.21. For related text, see H.6.

Table H3b. Diagnosed health conditions (%), by gender and wealth group: wave 8

	Wealth group in 2016–17				
	Lowest	2 nd	3 rd	4 th	Highest
Men					
CHD	25.8	15.2	19.6	13.8	9.6
Diabetes	23.4	16.4	13.6	14.4	11.3
Cancer	14.2	12.9	11.7	11.7	9.5
Respiratory illness	25.9	19.1	18.2	15.8	13.5
Arthritis	46.8	38.1	37.5	34.7	25.3
Depression	17.5	12.2	7.5	8.8	6.3
Women					
CHD	17.4	13.9	8.9	6.9	3.9
Diabetes	20.9	15.6	12.9	8.6	7.5
Cancer	14.6	11.5	14.8	12.7	14.9
Respiratory illness	30.9	21.1	20.6	16.9	15.0
Arthritis	66.2	56.8	51.9	46.4	42.2
Depression	19.9	15.3	15.3	12.0	10.1
<i>Unweighted N</i>					
Men					
CHD	455	519	619	678	733
Diabetes	455	519	619	678	733
Cancer	454	519	622	678	732
Respiratory illness	455	519	622	678	734
Arthritis	454	519	622	678	732
Depression	455	519	622	678	734
Women					
CHD	679	785	804	765	768
Diabetes	679	785	804	765	768
Cancer	680	786	804	765	767
Respiratory illness	680	786	804	765	768
Arthritis	680	786	804	765	767
Depression	680	786	804	765	768

For variable definitions, see AH.10, AH.18, AH.20 and AH.21. For related text, see H.7.

Table H4a. Self-rated sensory impairment (%), by age group and gender: wave 8

	Age in 2016–17						All
	55–59	60–64	65–69	70–74	75–79	80+	
Men							
Eyesight impairment	7.5	10.1	8.3	10.4	17.7	24.1	11.9
Hearing impairment	21.8	20.2	24.1	32.5	34.3	42.6	27.7
Smell impairment	11.1	16.7	15.5	20.0	21.1	23.2	17.0
Taste impairment	5.2	6.4	5.9	9.2	11.0	11.6	7.6
Women							
Eyesight impairment	10.3	9.9	12.1	15.1	15.5	28.3	14.9
Hearing impairment	12.8	12.3	14.9	17.2	22.7	37.4	19.0
Smell impairment	9.4	10.0	9.8	11.9	12.5	16.4	11.5
Taste impairment	5.7	5.6	6.0	7.2	7.3	11.2	7.0
<i>Unweighted N</i>							
Men							
Eyesight impairment	231	574	659	624	458	517	3,063
Hearing impairment	231	575	659	624	458	517	3,064
Smell impairment	226	549	635	603	435	472	2,920
Taste impairment	226	550	635	603	435	472	2,921
Women							
Eyesight impairment	316	725	888	680	535	758	3,902
Hearing impairment	316	725	888	680	535	759	3,903
Smell impairment	307	711	869	664	518	696	3,765
Taste impairment	307	711	869	664	518	696	3,765

For variable definitions, see AH.2, AH.13–AH.15 and AH.21. For related text, see H.8.

Table H4b. Self-rated sensory impairment (%), by gender and wealth group: wave 8

	Wealth group in 2016–17				
	Lowest	2 nd	3 rd	4 th	Highest
Men					
Eyesight impairment	24.2	12.9	9.7	9.4	6.5
Hearing impairment	32.9	32.1	29.5	27.3	19.4
Smell impairment	17.4	19.1	19.3	15.6	14.7
Taste impairment	11.4	8.3	7.2	6.2	5.9
Women					
Eyesight impairment	27.8	17.5	13.2	9.7	6.4
Hearing impairment	28.3	21.4	19.2	12.3	14.0
Smell impairment	14.7	13.3	10.7	9.9	8.3
Taste impairment	10.1	8.5	6.2	6.1	4.0
<i>Unweighted N</i>					
Men					
<i>Eyesight impairment</i>	455	519	621	677	733
<i>Hearing impairment</i>	455	519	621	678	733
<i>Smell impairment</i>	428	490	595	654	710
<i>Taste impairment</i>	429	490	595	654	710
Women					
<i>Eyesight impairment</i>	679	786	803	765	768
<i>Hearing impairment</i>	680	786	804	765	767
<i>Smell impairment</i>	655	764	789	744	741
<i>Taste impairment</i>	655	764	789	744	741

For variable definitions, see AH.13–AH.15, AH.18, AH.20 and AH.21. For related text, see H.9.

Table H5a. Mean walking speed (m/s), by age group and gender: wave 8

	Age in 2016–17					All
	60–64	65–69	70–74	75–79	80+	
Men	0.96	0.93	0.88	0.82	0.72	0.88
Women	0.92	0.89	0.84	0.78	0.63	0.83
<i>Unweighted N</i>						
Men	494	586	557	396	356	2,389
Women	647	799	598	468	517	3,029

For variable definitions, see AH.2, AH.19 and AH.21. For related text, see H.10.

Table H5b. Mean walking speed (m/s), by gender and wealth group: wave 8

	Wealth group in 2016–17				
	Lowest	2 nd	3 rd	4 th	Highest
Men	0.74	0.83	0.88	0.92	0.98
Women	0.69	0.78	0.83	0.88	0.94
<i>Unweighted N</i>					
Men	302	375	507	551	617
Women	458	588	662	625	653

For variable definitions, see AH.18–AH.21. For related text, see H.11.

**Table H6a. Limitations with one or more ADLs and IADLs (%),
by age group and gender: wave 8**

	Age in 2016–17						All
	55–59	60–64	65–69	70–74	75–79	80+	
Men							
ADLs	8.4	13.1	14.6	18.0	19.9	37.1	17.0
IADLs	7.7	14.3	15.4	17.8	25.2	40.6	18.3
Women							
ADLs	11.2	15.0	15.5	18.5	18.5	36.2	18.8
IADLs	12.9	18.1	17.8	22.2	28.6	52.1	24.5
<i>Unweighted N</i>							
<i>Men</i>	231	576	659	624	459	517	3,066
<i>Women</i>	316	726	888	680	535	759	3,904

For variable definitions, see AH.1, AH.2 and AH.21. For related text, see H.12.

**Table H6b. Limitations with one or more ADLs and IADLs (%),
by gender and wealth group: wave 8**

	Wealth group in 2016–17				
	Lowest	2 nd	3 rd	4 th	Highest
Men					
ADLs	33.7	20.0	15.7	11.4	9.0
IADLs	34.1	23.1	16.8	13.5	8.5
Women					
ADLs	41.3	32.5	20.3	15.6	13.3
IADLs	32.2	24.6	17.5	10.6	8.6
<i>Unweighted N</i>					
<i>Men</i>	455	519	622	678	734
<i>Women</i>	680	786	804	765	768

For variable definitions, see AH.1, AH.18, AH.20 and AH.21. For related text, see H.13.

Table H7a. Mean cognitive function, by age group and gender: wave 8

	Age in 2016–17						All
	55–59	60–64	65–69	70–74	75–79	80+	
Men							
Memory	11.2	11.4	11.0	9.8	8.6	7.3	10.2
Attention	6.1	6.0	6.0	5.9	5.7	5.6	5.9
Comprehension	4.8	4.8	4.8	4.8	4.7	4.4	4.7
Women							
Memory	12.3	12.2	11.8	10.7	9.6	7.4	10.8
Attention	5.6	5.7	5.7	5.5	5.3	5.3	5.6
Comprehension	4.8	4.8	4.8	4.8	4.6	4.3	4.7
<i>Unweighted N</i>							
Men							
Memory	226	548	629	599	428	466	2,896
Attention	213	531	604	575	404	422	2,749
Comprehension	225	537	619	584	416	444	2,825
Women							
Memory	306	710	864	661	514	687	3,742
Attention	289	668	796	599	448	595	3,395
Comprehension	300	695	854	643	494	659	3,645

For variable definitions, see AH.2, AH.6–AH.8 and AH.21. For related text, see H.14.

Table H7b. Mean cognitive function, by age group and gender: wave 8

	Wealth group in 2016–17				
	Lowest	2 nd	3 rd	4 th	Highest
Men					
Memory	8.6	9.7	9.8	10.9	11.5
Attention	5.6	5.7	6.0	6.2	6.1
Comprehension	4.4	4.8	4.7	4.8	4.9
Women					
Memory	9.2	10.2	10.7	11.6	12.5
Attention	5.0	5.4	5.5	5.8	6.0
Comprehension	4.5	4.6	4.7	4.8	4.9
<i>Unweighted N</i>					
Men					
Memory	426	488	587	649	703
Attention	366	462	553	635	691
Comprehension	406	470	571	642	694
Women					
Memory	653	759	783	741	734
Attention	545	695	704	693	697
Comprehension	623	737	760	727	727

For variable definitions, see AH.6–AH.8, AH.18, AH.20 and AH.21. For related text, see H.15.

Table H8a. Health behaviours (%) by age group and gender: wave 8

	Age in 2016–17						All
	55–59	60–64	65–69	70–74	75–79	80+	
Men							
Current smokers	11.7	15.3	9.7	10.1	8.2	2.3	10.1
Physically inactive	8.0	11.4	11.6	14.5	23.5	39.8	16.2
Daily alcohol consumption	14.6	24.9	26.5	29.0	23.8	24.4	23.4
At least five portions of fruit and veg/day	39.5	48.4	56.9	55.5	56.1	54.5	50.9
Women							
Current smokers	14.4	14.2	11.6	9.1	7.1	3.9	10.4
Physically inactive	11.3	13.7	16.3	22.5	26.4	51.1	22.8
Daily alcohol consumption	13.5	15.0	14.1	15.7	13.1	13.7	14.2
At least five portions of fruit and veg/day	66.1	61.6	65.9	67.0	66.0	56.5	63.9
<i>Unweighted N</i>							
Men							
Current smokers	231	576	657	623	459	516	3,062
Physically inactive	231	574	659	623	458	516	3,061
Daily alcohol consumption	197	487	597	547	399	406	2,633
At least five portions of fruit and veg/day	196	485	594	541	396	400	2,612
Women							
Current smokers	316	726	888	679	535	759	3,903
Physically inactive	316	721	887	679	534	759	3,896
Daily alcohol consumption	263	655	803	614	466	566	3,367
At least five portions of fruit and veg/day	262	656	803	614	467	558	3,360

For variable definitions, see AH.2, AH.3, AH.9, AH.12, AH.17 and AH.21.

For related text, see H.16.

Table H8b. Health behaviours (%) by gender and wealth group: wave 8

	Wealth group in 2016–17				
	Lowest	2 nd	3 rd	4 th	Highest
Men					
Current smokers	26.8	10.2	8.0	4.5	4.5
Physically inactive	37.4	19.5	15.4	8.7	6.3
Daily alcohol consumption	17.9	20.4	18.6	23.4	32.1
At least five portions of fruit and veg/day	43.8	46.5	56.1	53.0	52.8
Women					
Current smokers	19.3	11.7	10.2	5.4	4.6
Physically inactive	43.4	30.6	19.6	12.6	8.0
Daily alcohol consumption	6.5	9.8	12.8	16.6	23.8
At least five portions of fruit and veg/day	51.2	60.0	64.8	65.3	75.9
<i>Unweighted N</i>					
Men					
Current smokers	455	519	621	675	734
Physically inactive	453	519	622	677	732
Daily alcohol consumption	346	423	536	618	673
At least five portions of fruit and veg/day	343	422	526	615	669
Women					
Current smokers	679	786	804	765	768
Physically inactive	677	784	803	763	768
Daily alcohol consumption	537	667	717	700	695
At least five portions of fruit and veg/day	536	664	717	695	697

For variable definitions, see AH.3, AH.9, AH.12, AH.17, AH.18, AH.20 and AH.21.

For related text, see H.17.

Table HL1a. Fair or poor self-rated health (%), by age and gender: waves 4 to 8

Age in 2008–09	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Unwtd N
Men	21.1	21.8	26.8	26.1	30.3	2,379
50–54	19.7	17.8	22.7	22.7	27.0	272
55–59	19.3	18.6	23.2	21.5	23.0	509
60–64	22.6	23.8	26.8	24.8	28.8	591
65–69	22.4	20.3	28.6	29.8	34.5	411
70–74	21.1	24.6	30.2	29.4	34.6	353
75–79	19.9	27.1	28.5	34.0	39.6	171
80+	27.0	32.5	43.8	35.9	50.0	72
Women	23.4	24.9	26.8	28.6	29.7	3,019
50–54	20.8	23.5	24.6	21.4	24.6	341
55–59	20.9	19.9	21.3	23.1	22.7	660
60–64	21.8	20.9	25.0	25.1	25.0	728
65–69	25.4	23.2	24.5	28.3	29.2	507
70–74	21.6	28.0	32.1	36.8	37.8	446
75–79	29.3	36.3	35.6	40.8	46.4	214
80+	33.9	42.1	41.4	42.2	43.7	123

For variable definitions, see AH.2, AH.5, AH.16 and AH.21. For related text, see H.19.

Table HL1b. Fair or poor self-rated health (%), by gender and wealth: waves 4 to 8

Wealth group 2008–09	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Unwtd N
Men						2,330
Lowest	46.1	45.8	53.1	49.9	53.4	300
2 nd	28.1	30.0	34.0	37.2	36.3	385
3 rd	16.5	16.6	23.3	22.7	29.3	456
4 th	16.9	16.2	19.7	20.1	24.5	537
Highest	7.9	10.0	13.7	10.7	17.0	652
Women						2,953
Lowest	45.1	44.9	45.4	46.9	48.8	456
2 nd	28.6	29.8	33.4	32.4	35.0	554
3 rd	21.3	23.3	26.2	30.5	29.1	622
4 th	17.0	16.4	18.3	20.7	21.2	608
Highest	8.8	13.6	14.0	15.7	17.5	713

For variable definitions, see AH.5, AH.16, AH.18, AH.20 and AH.21. For related text, see H.20.

Table HL2a. Diagnosed CHD (%), by age and gender: waves 4 to 8

Age in 2008–09	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Unwtd N
Men	10.9	16.9	17.8	19.2	20.6	2,484
50–54	3.2	6.9	7.1	10.1	11.5	285
55–59	7.0	10.2	11.2	12.3	13.6	535
60–64	8.4	14.5	16.0	17.6	18.8	616
65–69	14.1	22.5	23.6	24.7	25.8	425
70–74	17.5	25.0	25.2	26.2	27.6	370
75–79	23.5	30.0	30.4	31.7	32.3	173
80+	20.7	36.1	37.7	37.7	41.4	80
Women	6.6	10.8	11.4	12.2	12.8	3,090
50–54	0.6	2.2	2.9	3.3	3.5	349
55–59	1.9	4.1	4.1	4.8	5.1	678
60–64	4.4	7.5	7.9	9.2	9.9	744
65–69	8.6	13.7	14.1	15.0	15.8	519
70–74	9.6	17.0	19.1	20.1	21.2	453
75–79	17.1	25.4	25.9	25.9	25.9	219
80+	17.8	23.4	25.8	26.9	27.6	128

For variable definitions, see AH.2, AH.5, AH.10 and AH.21. For related text, see H.21.

Table HL2b. Diagnosed CHD (%), by gender and wealth: waves 4 to 8

Wealth group 2008–09	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Unwtd N
Men						2,434
Lowest	17.6	25.0	26.5	28.0	28.6	318
2 nd	9.0	16.7	17.8	19.1	21.0	403
3 rd	11.8	17.9	18.3	19.4	21.2	477
4 th	10.5	15.8	16.8	19.0	20.6	557
Highest	7.4	11.5	12.3	13.3	14.1	679
Women						3,024
Lowest	11.0	17.3	18.3	19.5	20.2	463
2 nd	8.6	13.0	13.6	14.2	14.9	568
3 rd	6.8	11.4	12.2	13.3	14.2	635
4 th	3.8	7.6	8.0	8.5	8.8	626
Highest	4.0	6.1	6.6	7.1	7.4	732

For variable definitions, see AH.5, AH.10, AH.18, AH.20 and AH.21. For related text, see H.22.

Table HL3a. Diagnosed diabetes (%), by age and gender: waves 4 to 8

Age in 2008–09	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Unwtd N
Men	10.2	12.5	14.4	16.3	17.7	2,483
50–54	7.8	9.0	11.6	12.8	13.8	285
55–59	7.0	10.7	12.7	15.0	16.5	535
60–64	10.2	11.6	13.7	15.3	16.6	616
65–69	13.1	15.4	17.5	19.9	20.7	425
70–74	14.8	16.7	17.4	19.3	21.0	369
75–79	13.4	15.9	17.5	18.3	19.5	173
80+	8.9	12.0	12.9	15.7	19.3	80
Women	7.7	9.5	10.9	12.6	14.0	3,091
50–54	4.8	6.1	7.8	8.9	10.9	349
55–59	5.6	6.5	7.6	9.9	11.5	678
60–64	8.2	10.1	11.4	12.5	13.8	745
65–69	6.4	8.0	8.9	10.6	12.5	519
70–74	10.5	13.7	14.5	16.2	17.1	453
75–79	12.4	15.7	20.2	22.7	23.5	219
80+	11.3	12.5	12.5	13.3	14.8	128

For variable definitions, see AH.2, AH.5, AH.10 and AH.21. For related text, see H.21.

Table HL3b. Diagnosed diabetes (%), by gender and wealth: waves 4 to 8

Wealth group 2008–09	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Unwtd N
Men						2,433
Lowest	13.4	18.3	21.0	22.7	24.6	318
2 nd	10.7	13.4	16.1	18.8	21.0	403
3 rd	10.3	12.3	12.9	15.0	15.8	477
4 th	9.7	10.8	12.8	14.9	15.5	556
Highest	8.2	9.7	11.5	12.3	14.0	679
Women						3,025
Lowest	13.0	15.8	18.0	21.6	24.0	463
2 nd	9.6	12.0	13.4	15.7	17.2	568
3 rd	6.9	8.7	10.0	10.7	12.1	636
4 th	7.4	8.2	9.6	11.1	12.1	626
Highest	2.9	4.4	5.2	6.0	7.2	732

For variable definitions, see AH.5, AH.10, AH.18, AH.20 and AH.21. For related text, see H.22.

Table HL4a. Diagnosed cancer (%), by age and gender: waves 4 to 8

Age in 2008–09	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Unwtd N
Men	5.4	7.5	9.5	11.6	14.0	2,496
50–54	4.0	4.3	6.3	6.5	7.4	287
55–59	1.6	3.0	3.7	5.6	7.7	535
60–64	4.4	7.0	8.1	9.6	12.1	618
65–69	6.2	9.1	12.8	15.5	18.7	426
70–74	11.1	14.8	18.1	23.7	26.9	374
75–79	9.9	12.9	15.1	17.3	19.7	175
80+	11.8	12.5	17.1	17.9	20.0	81
Women	8.6	10.3	11.7	13.8	16.0	3,115
50–54	5.3	6.9	7.7	7.7	10.2	352
55–59	7.4	8.6	10.5	13.3	15.3	679
60–64	8.3	10.4	11.9	14.2	16.3	751
65–69	11.3	13.4	14.5	16.8	18.2	521
70–74	9.5	11.4	12.1	14.1	16.7	459
75–79	6.8	8.6	10.3	13.1	13.6	222
80+	13.7	15.8	16.4	18.9	24.4	131

For variable definitions, see AH.2, AH.5, AH.10 and AH.21. For related text, see H.23.

Table HL4b. Diagnosed cancer (%), by gender and wealth: waves 4 to 8

Wealth group 2008–09	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Unwtd N
Men						2,446
Lowest	6.2	7.8	12.0	14.6	15.4	318
2 nd	6.1	7.3	10.3	13.9	15.6	407
3 rd	5.3	7.1	8.2	10.2	12.5	479
4 th	4.2	6.6	7.5	8.7	11.7	560
Highest	5.8	9.2	10.6	12.3	15.5	682
Women						3,049
Lowest	7.8	8.9	10.9	13.3	15.9	473
2 nd	8.1	9.7	10.5	12.0	14.1	569
3 rd	9.4	11.1	12.4	14.8	16.5	640
4 th	8.9	11.8	12.8	15.5	18.1	631
Highest	8.1	9.9	11.2	13.2	15.3	736

For variable definitions, see AH.5, AH.10, AH.18, AH.20 and AH.21. For related text, see H.24.

Table HL5a. Diagnosed depression (%), by age and gender: waves 4 to 8

Age in 2008–09	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Unwtd N
Men	7.7	8.9	9.5	10.2	10.5	2,502
50–54	8.6	11.1	12.2	13.6	13.6	288
55–59	10.2	11.6	11.7	12.5	13.0	537
60–64	8.3	9.7	10.3	10.9	11.3	618
65–69	8.2	9.4	10.7	11.4	11.5	427
70–74	4.4	4.7	6.0	6.0	6.7	376
75–79	0.7	0.7	0.7	0.7	0.7	175
80+	5.3	5.3	5.3	5.3	5.3	81
Women	10.7	12.3	13.5	14.5	15.1	3,121
50–54	10.9	14.2	17.2	20.0	20.8	353
55–59	12.0	13.9	14.9	16.2	17.0	680
60–64	14.4	15.7	17.1	17.4	18.1	752
65–69	11.4	12.5	13.8	14.6	14.8	523
70–74	7.2	7.8	8.6	9.1	9.5	460
75–79	4.7	6.2	6.2	7.5	7.5	222
80+	6.9	7.8	7.8	8.9	8.9	131

For variable definitions, see AH.2, AH.5, AH.10 and AH.21. For related text, see H.25.

Table HL5b. Diagnosed depression (%), by gender and wealth: waves 4 to 8

Wealth group 2008–09	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Unwtd N
Men						2,452
Lowest	13.1	15.4	16.0	17.2	18.1	319
2 nd	7.5	8.7	9.2	9.8	9.8	408
3 rd	6.8	7.8	9.3	10.0	10.4	479
4 th	6.9	7.9	8.6	8.8	9.1	562
Highest	5.9	6.4	6.6	7.2	7.3	684
Women						3,055
Lowest	14.8	16.7	18.4	20.5	21.3	473
2 nd	11.6	13.4	15.4	16.6	16.7	570
3 rd	9.9	11.5	12.2	12.4	13.3	640
4 th	8.8	10.4	11.1	12.5	12.9	634
Highest	8.9	9.6	10.6	11.2	11.7	738

For variable definitions, see AH.5, AH.10, AH.18, AH.20 and AH.21. For related text, see H.26.

Table HL6a. Walking speed (mean, m/s), by age and gender: waves 4 to 8

Age in 2008–09	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Unwtd N
Men	0.99	0.98	0.97	0.92	0.87	1,203
60–64	1.03	1.02	1.04	0.99	0.94	475
65–69	1.01	1.00	0.98	0.94	0.88	327
70–74	0.95	0.94	0.91	0.88	0.83	268
75–79	0.89	0.89	0.85	0.77	0.72	120
80+	0.87	0.86	0.85	0.68	0.61	13
Women	0.94	0.93	0.90	0.85	0.82	1,480
60–64	1.00	0.99	0.97	0.92	0.90	578
65–69	0.97	0.96	0.93	0.88	0.87	390
70–74	0.91	0.88	0.84	0.79	0.74	336
75–79	0.81	0.80	0.75	0.71	0.64	136
80+	0.75	0.73	0.63	0.58	0.54	40

For variable definitions, see AH.2, AH.5, AH.19 and AH.21. For related text, see H.27.

Table HL6b. Walking speed (mean, m/s), by gender and wealth: waves 4 to 8

Wealth group 2008–09	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Unwtd N
Men						1,178
Lowest	0.88	0.88	0.83	0.81	0.75	121
2 nd	0.92	0.93	0.89	0.85	0.80	159
3 rd	0.96	0.94	0.94	0.88	0.84	249
4 th	1.01	0.99	0.98	0.93	0.88	289
Highest	1.08	1.06	1.07	1.02	0.95	360
Women						1,448
Lowest	0.82	0.80	0.76	0.72	0.70	177
2 nd	0.88	0.88	0.84	0.82	0.78	249
3 rd	0.94	0.92	0.89	0.83	0.79	325
4 th	0.96	0.95	0.92	0.88	0.86	314
Highest	1.03	1.01	0.99	0.94	0.90	383

For variable definitions, see AH.5 and AH.18–AH.21. For related text, see H.28.

Table HL7a. At least one difficulty with ADL (%), by age and gender: waves 4 to 8

Age in 2008–09	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Unwtd N
Men	14.3	14.4	15.9	17.2	20.3	2,500
50–54	11.5	10.3	10.3	11.4	13.4	287
55–59	9.7	11.9	12.5	12.0	15.7	536
60–64	14.2	13.5	13.8	16.5	16.9	618
65–69	14.6	15.5	14.7	16.2	19.1	427
70–74	17.4	17.5	17.7	21.1	25.0	376
75–79	22.6	20.5	26.3	27.3	32.9	175
80+	26.8	23.9	44.7	44.8	55.7	81
Women	17.1	17.8	18.9	19.7	21.1	3,119
50–54	14.0	14.0	15.1	16.0	15.8	353
55–59	11.3	11.4	12.8	13.1	14.9	680
60–64	14.1	12.5	15.0	15.2	17.4	751
65–69	16.9	16.5	19.0	20.5	17.2	523
70–74	19.8	23.5	24.6	23.0	25.1	460
75–79	27.2	28.2	28.1	29.1	30.9	221
80+	36.0	42.9	38.0	44.5	54.6	131

For variable definitions, see AH.1, AH.2, AH.5 and AH.21. For related text, see H.29.

Table HL7b. At least one difficulty with ADL (%), by gender and wealth: waves 4 to 8

Wealth group 2008–09	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Unwtd N
Men						2,450
Lowest	30.0	26.1	28.5	29.3	37.1	319
2 nd	14.8	17.9	17.0	17.9	23.1	407
3 rd	10.7	13.4	15.2	15.9	17.1	479
4 th	10.8	12.1	13.9	15.1	17.6	562
Highest	9.9	7.3	9.4	11.3	12.1	683
Women						3,053
Lowest	35.4	33.5	31.9	34.9	35.2	473
2 nd	19.5	22.6	22.6	24.9	27.8	570
3 rd	15.4	15.9	19.2	18.3	19.4	640
4 th	10.5	11.1	13.8	13.2	14.5	632
Highest	7.1	8.4	9.3	9.7	11.5	738

For variable definitions, see AH.1, AH.5, AH.18, AH.20 and AH.21.

For related text, see H.30.

Table HL8a. Mean memory score, by age and gender: waves 4 to 8

Age in 2008–09	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Unwtd N
Men	10.8	10.7	10.8	10.3	10.0	2,356
50–54	11.5	11.7	11.8	11.6	11.6	271
55–59	11.7	11.5	11.9	11.7	11.5	509
60–64	11.2	11.1	11.3	10.8	10.6	582
65–69	10.3	10.4	10.2	9.6	9.2	404
70–74	9.8	9.5	9.6	8.9	8.5	351
75–79	9.6	9.4	9.2	8.2	7.8	167
80+	8.5	8.3	8.2	6.8	6.3	72
Women	11.5	11.4	11.4	11.0	10.8	2,989
50–54	12.3	12.3	12.9	12.5	12.6	340
55–59	12.2	12.3	12.5	12.2	12.2	658
60–64	12.1	12.1	12.2	11.7	11.6	720
65–69	11.2	11.1	10.9	10.7	10.4	502
70–74	10.6	10.5	10.3	9.8	9.2	437
75–79	9.6	9.5	9.1	8.1	7.7	212
80+	9.0	8.3	8.1	7.2	6.3	120

For variable definitions, see AH.2, AH.5, AH.8 and AH.21. For related text, see H.31.

Table HL8b. Mean memory score, by gender and wealth: waves 4 to 8

Wealth group 2008–09	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Unwtd N
Men						2,306
Lowest	9.6	9.9	9.6	8.9	8.7	297
2 nd	10.2	10.0	10.3	9.8	9.4	384
3 rd	10.4	10.4	10.4	9.9	9.6	451
4 th	11.1	11.0	11.3	10.6	10.4	529
Highest	11.6	11.5	11.5	11.2	11.0	645
Women						2,924
Lowest	10.2	10.2	10.1	9.4	9.3	453
2 nd	10.9	10.8	11.0	10.5	10.1	549
3 rd	11.3	11.3	11.3	10.9	10.7	618
4 th	11.9	11.9	11.9	11.5	11.2	599
Highest	12.4	12.3	12.3	12.0	12.0	705

For variable definitions, see AH.5, AH.8, AH.18, AH.20 and AH.21. For related text, see H.32.

Table HL9a. Current smoker (%), by age and gender: waves 4 to 8

Age in 2008–09	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Unwtd N
Men	14.5	13.4	12.2	10.9	9.9	2,445
50–54	20.4	17.9	18.9	16.5	15.5	283
55–59	18.9	18.1	16.0	14.5	12.1	524
60–64	16.8	15.1	13.3	13.1	11.8	602
65–69	11.5	10.7	9.5	7.1	7.5	421
70–74	9.6	8.4	7.4	5.9	6.7	364
75–79	3.9	4.0	3.0	3.5	2.4	174
80+	1.0	1.0	1.0	0.0	0.0	77
Women	13.9	13.0	11.5	10.6	9.6	3,040
50–54	23.2	21.9	20.9	17.6	16.4	346
55–59	17.3	16.3	14.4	13.2	12.8	667
60–64	14.7	12.7	12.0	11.1	9.6	731
65–69	11.5	11.0	9.5	8.3	7.8	513
70–74	8.6	7.6	6.8	6.5	5.3	439
75–79	9.6	10.3	7.0	8.3	6.5	216
80+	3.6	3.6	1.8	2.9	1.8	128

For variable definitions, see AH.2, AH.5, AH.17 and AH.21. For related text, see H.33.

Table HL9b. Current smoker (%), by gender and wealth: waves 4 to 8

Wealth group 2008–09	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Unwtd N
Men						2,411
Lowest	36.0	34.3	29.4	28.3	27.4	313
2 nd	14.9	13.0	11.3	8.4	7.7	401
3 rd	11.6	10.9	11.5	9.0	8.4	475
4 th	8.1	6.9	7.1	6.0	5.6	553
Highest	7.2	6.5	5.5	6.1	4.2	669
Women						2,975
Lowest	24.2	23.7	21.6	20.6	18.6	456
2 nd	17.7	16.0	13.7	12.6	10.4	560
3 rd	14.6	13.3	12.0	10.4	10.0	627
4 th	7.7	7.2	5.8	5.4	5.3	612
Highest	7.0	6.5	5.6	5.1	4.7	720

For variable definitions, see AH.5, AH.17, AH.18, AH.20 and AH.21. For related text, see H.34.

Table HL10a. Daily alcohol consumer (%), by age and gender: waves 4 to 8

Age in 2008–09	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Unwtd N
Men	28.3	26.4	25.9	24.8	26.1	1,769
50–54	24.9	20.7	20.3	16.9	19.1	186
55–59	23.3	27.2	25.9	23.5	25.8	383
60–64	33.1	31.9	30.5	31.0	30.5	449
65–69	31.1	27.5	27.8	28.4	27.9	322
70–74	26.5	21.1	23.4	20.6	21.7	269
75–79	36.3	27.0	25.9	27.0	31.6	111
80+	25.7	18.3	18.1	19.8	23.0	49
Women	17.5	16.9	16.2	14.5	14.9	2,253
50–54	18.3	16.3	15.2	15.1	13.4	248
55–59	16.4	18.1	17.4	15.1	15.9	503
60–64	17.1	17.8	17.2	15.7	15.8	578
65–69	18.3	16.6	17.9	14.7	14.7	401
70–74	17.6	15.9	13.8	13.2	12.2	327
75–79	19.4	16.1	15.6	15.7	17.0	128
80+	17.8	12.5	8.4	5.1	13.4	68

For variable definitions, see AH.2, AH.3, AH.5 and AH.21. For related text, see H.35.

Table HL10b. Daily alcohol consumer (%), by wealth and gender: waves 4 to 8

Wealth group 2008–09	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Unwtd N
Men						1,744
Lowest	20.4	18.4	17.8	14.8	15.0	173
2 nd	20.6	19.1	18.8	18.7	22.3	263
3 rd	24.3	21.3	20.2	19.3	19.7	353
4 th	28.8	26.3	26.1	26.2	27.4	429
Highest	38.6	38.2	37.9	35.9	36.7	526
Women						2,207
Lowest	8.1	7.6	7.6	6.3	6.8	274
2 nd	9.0	8.5	7.2	9.4	8.6	387
3 rd	14.1	12.9	11.3	10.6	10.0	487
4 th	21.2	18.8	18.3	15.2	16.6	468
Highest	28.3	29.9	29.7	24.9	26.4	591

For variable definitions, see AH.3, AH.5, AH.18, AH.20 and AH.21. For related text, see H.36.

Table HL11a. Physical inactivity (%), by age and gender: waves 4 to 8

Age in 2008–09	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Unwtd N
Men	9.6	11.6	12.5	15.2	19.3	2,499
50–54	5.5	9.0	8.4	11.9	10.1	287
55–59	7.7	8.4	9.1	10.1	12.5	536
60–64	10.0	11.3	11.4	14.2	14.7	617
65–69	12.0	12.0	15.1	14.6	20.4	427
70–74	11.3	15.0	13.8	19.1	26.5	376
75–79	9.7	17.3	14.3	21.8	37.0	175
80+	18.8	19.2	33.9	39.8	56.3	81
Women	17.7	17.4	19.9	22.9	26.3	3,113
50–54	12.0	13.3	14.7	17.1	13.7	352
55–59	13.9	10.7	13.2	13.1	16.5	679
60–64	10.1	12.1	12.9	15.6	18.4	748
65–69	16.6	15.9	18.8	20.3	25.0	523
70–74	19.6	21.3	22.7	27.5	33.6	458
75–79	33.0	34.7	34.6	43.6	47.4	222
80+	44.8	38.7	54.1	63.1	70.6	131

For variable definitions, see AH.2, AH.5, AH.12 and AH.21. For related text, see H.37.

Table HL11b. Physical inactivity (%), by wealth and gender: waves 4 to 8

Wealth group 2008–09	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Unwtd N
Men						2,449
Lowest	21.2	29.1	26.6	32.8	36.6	319
2 nd	14.0	14.0	20.1	21.8	24.6	407
3 rd	7.1	8.3	9.1	13.0	16.7	479
4 th	5.0	7.1	6.3	9.6	13.5	561
Highest	4.7	5.2	6.2	5.5	11.4	683
Women						3,047
Lowest	35.9	34.9	35.3	44.2	47.1	472
2 nd	21.1	24.1	27.8	27.7	33.3	567
3 rd	16.2	13.4	18.9	23.0	25.6	639
4 th	9.1	9.0	10.5	13.8	17.0	632
Highest	9.3	8.3	9.5	9.4	12.0	737

For variable definitions, see AH.5, AH.12, AH.18, AH.20 and AH.21. For related text, see H.38.

Table N1a. Mean body mass index (kg/m²), by age and gender: wave 8

	Age in 2016–17						All
	55–59	60–64	65–69	70–74	75–79	80+	
Men	28.3	28.4	29.2	28.2	28.3	27.2	28.3
Women	28.7	28.6	28.8	28.1	28.0	26.7	28.2
Unweighted N							
<i>Men</i>	174	256	298	279	216	266	1,489
<i>Women</i>	239	308	397	311	254	343	1,852

For variable definitions, see AH.21 and AH.25. For related text, see H.39.

Table N1b. Body mass index categories (%), by age and gender: wave 8

	Age in 2016–17						All
	55–59	60–64	65–69	70–74	75–79	80+	
Men							
Underweight	0.6	0.3	0.7	0.4	0.6	0.5	0.5
Desirable	18.9	24.2	16.3	25.4	22.8	30.0	22.3
Overweight	55.3	40.7	44.8	41.8	46.7	48.5	46.5
Obese	25.1	34.8	38.2	32.4	29.9	21.0	30.7
Women							
Underweight	0.0	0.6	0.9	0.8	0.0	4.0	1.1
Desirable	35.2	31.7	29.6	28.5	31.8	33.2	31.8
Overweight	26.5	30.7	32.6	38.5	38.4	38.3	33.5
Obese	38.4	36.9	36.9	32.3	29.8	24.5	33.7
Unweighted N							
<i>Men</i>	173	256	298	278	216	266	1,487
<i>Women</i>	238	307	397	311	253	341	1,847

Note: Underweight indicates BMI < 18.5, desirable indicates BMI from 18.5 to 24.9, overweight indicates BMI from 25 to 29.9 and obese indicates BMI of 30 or more.

For variable definitions, see AH.21 and AH.25. For related text, see H.39.

Table N1c. Body mass index (kg/m²) means, by wealth group and gender: wave 8

	Wealth group in 2016–17				
	Lowest	2 nd	3 rd	4 th	Highest
Men	29.4	29.2	28.6	27.9	27.4
Women	29.7	28.4	28.9	27.5	26.2
<i>Unweighted N</i>					
<i>Men</i>	180	256	335	348	367
<i>Women</i>	276	368	415	396	379

For variable definitions, see AH.21 and AH.25. For related text, see H.40.

Table N1d. Body mass index categories (%), by wealth group and gender: wave 8

	Wealth group in 2016–17				
	Lowest	2 nd	3 rd	4 th	Highest
Men					
Underweight	1.6	0.3	0.3	0.6	0.0
Desirable	20.9	20.6	16.8	22.7	27.5
Overweight	30.4	39.2	54.4	52.9	49.9
Obese	47.0	39.9	28.5	23.8	22.7
Women					
Underweight	0.9	2.0	0.5	0.6	1.0
Desirable	21.1	27.4	28.6	37.6	45.4
Overweight	33.0	38.1	32.5	30.9	34.2
Obese	45.0	32.5	38.4	30.9	19.5
<i>Unweighted N</i>					
<i>Men</i>	180	256	335	348	365
<i>Women</i>	276	368	414	394	377

Note: Underweight indicates BMI < 18.5, desirable indicates BMI from 18.5 to 24.9, overweight indicates BMI from 25 to 29.9 and obese indicates BMI 30 or more.

For variable definitions, see AH.21 and AH.25. For related text, see H.40.

**Table N2a. Means of systolic and diastolic blood pressure (mmHg), by age and gender:
wave 8**

	Age in 2016–17						All
	55–59	60–64	65–69	70–74	75–79	80+	
Men							
Systolic BP	128.2	132.2	133.6	133.1	134.7	129.8	131.7
Diastolic BP	78.9	75.8	74.5	71.9	69.5	64.3	73.4
Women							
Systolic BP	125.0	129.0	131.0	133.3	135.0	134.5	130.8
Diastolic BP	76.6	75.5	72.5	71.8	69.6	66.5	72.4
<i>Unweighted N</i>							
<i>Men</i>	169	246	289	270	211	266	1,451
<i>Women</i>	229	302	384	300	249	341	1,805

For variable definitions, see AH.21 and AH.26. For related text, see H.41.

**Table N2b. Means of systolic and diastolic blood pressure (mmHg), by wealth group and
gender: wave 8**

	Wealth group in 2016–17				
	Lowest	2 nd	3 rd	4 th	Highest
Men					
Mean Systolic BP	129.8	133.6	131.9	131.7	130.4
Mean Diastolic BP	72.2	73.8	73.1	73.9	73.7
Women					
Mean Systolic BP	131.8	131.0	132.3	129.7	128.1
Mean Diastolic BP	72.2	71.6	72.9	72.9	72.3
<i>Unweighted N</i>					
<i>Men</i>	162	248	333	351	355
<i>Women</i>	268	268	268	268	268

For variable definitions, see AH.21 and AH.26. For related text, see H.42.

Table N3a. Lipid profile (mmol/l), by age and gender: wave 8

	Age in 2016–17						All
	55–59	60–64	65–69	70–74	75–79	80+	
Men							
Mean total cholesterol	5.23	5.16	4.95	4.70	4.49	4.46	4.90
% ≥ 5.0 mmol/l Chol	58.1	54.9	44.5	38.0	30.1	34.8	45.6
Mean HDL cholesterol	1.34	1.43	1.47	1.47	1.44	1.38	1.42
% < 1.0 mmol/l HDL	12.6	9.4	11.4	7.8	9.6	14.6	10.9
Mean LDL cholesterol	3.16	3.07	2.88	2.78	2.59	–	2.94
% ≥ 3.0 mmol/l LDL	56.3	52.5	43.2	41.0	37.3	–	47.4
Mean triglycerides ^a	1.88	1.44	1.54	1.32	1.37	–	1.55
% ≥ 1.7 mmol/l Trig	44.8	30.3	31.6	18.7	25.0	–	31.8
Women							
Mean total cholesterol	5.76	5.74	5.39	5.39	5.09	4.93	5.42
% ≥ 5.0 mmol/l Chol	82.3	77.7	66.2	61.8	47.5	50.0	66.0
Mean HDL cholesterol	1.79	1.76	1.72	1.67	1.75	1.72	1.74
% < 1.2 mmol/l HDL	7.1	9.9	8.8	9.3	7.5	10.3	8.8
Mean LDL cholesterol	3.35	3.40	3.10	3.17	2.76	–	3.19
% ≥ 3.0 mmol/l LDL	65.5	67.6	56.4	55.7	35.8	–	58.3
Mean triglycerides ^a	1.44	1.38	1.36	1.43	1.31	–	1.39
% ≥ 1.7 mmol/l Trig	26.8	25.1	23.3	29.1	18.9	–	25.1
<i>Unweighted N</i>							
Men							
Total cholesterol	156	219	242	224	157	181	1,179
HDL cholesterol	156	219	241	224	157	181	1,178
LDL cholesterol	107	152	187	159	107	–	712
Triglycerides	113	156	190	159	107	–	725
Women							
Total cholesterol	211	259	335	249	204	221	1,479
HDL cholesterol	211	259	336	249	204	221	1,480
LDL cholesterol	148	201	263	193	144	–	949
Triglycerides	149	202	266	193	144	–	954

Note: Triglycerides and LDL cholesterol measurements were carried out on those who are eligible to fast according to the protocol. Chol indicates total cholesterol, HDL indicates HDL cholesterol, LDL indicates LDL cholesterol and Trig indicates triglycerides.

^aGeometric means are reported.

For variable definitions, see AH.21 and AH.27. For related text, see H.43.

Table N3b. Lipid profile (mmol/l), by wealth group and gender: wave 8

	Wealth group in 2016–17				
	Lowest	2 nd	3 rd	4 th	Highest
Men					
Mean total cholesterol	4.61	4.89	4.84	5.05	5.06
% ≥ 5.0 mmol/l Chol	32.0	46.7	43.8	52.9	50.2
Mean HDL cholesterol	1.28	1.36	1.41	1.46	1.53
% < 1.0 mmol/l HDL	19.8	12.8	9.2	8.3	6.0
Mean LDL cholesterol	2.76	2.89	2.89	3.03	3.01
% ≥ 3.0 mmol/l LDL	35.6	40.7	44.4	57.8	49.5
Mean triglycerides ^a	1.8	1.8	1.5	1.5	1.3
% ≥ 1.7 mmol/l Trig	51.5	41.4	34.9	26.1	21.0
Women					
Mean total cholesterol	5.09	5.36	5.44	5.58	5.60
% ≥ 5.0 mmol/l Chol	54.9	64.1	64.2	72.6	76.2
Mean HDL cholesterol	1.61	1.71	1.70	1.83	1.90
% < 1.2 mmol/l HDL	9.8	9.5	11.1	5.6	5.0
Mean LDL cholesterol	3.05	3.10	3.26	3.28	3.23
% ≥ 3.0 mmol/l LDL	56.1	54.7	56.8	63.5	61.2
Mean triglycerides ^a	1.5	1.5	1.5	1.2	1.1
% ≥ 1.7 mmol/l Trig	33.8	25.8	29.9	21.2	10.2
<i>Unweighted N</i>					
Men					
Total cholesterol	134	193	274	277	296
HDL cholesterol	134	193	274	277	296
LDL cholesterol	63	108	167	180	195
Triglycerides	64	111	168	183	198
Women					
Total cholesterol	210	286	331	332	309
HDL cholesterol	210	286	331	332	309
LDL cholesterol	113	190	205	223	214
Triglycerides	113	191	207	223	215

Note: Triglycerides and LDL cholesterol measurements were carried out on those who are eligible to fast according to the protocol. Chol indicates total cholesterol, HDL indicates HDL cholesterol, LDL indicates LDL cholesterol and Trig indicates triglycerides.

^aGeometric means are reported.

For variable definitions, see AH.21 and AH.27. For related text, see H.44.

Table N4a. Fibrinogen (g/l) and C-reactive protein (mg/l) means, by age and gender: wave 8

	Age in 2016–17						All
	55–59	60–64	65–69	70–74	75–79	80+	
Men							
Mean fibrinogen	3.17	3.21	3.28	3.35	3.45	3.41	3.29
Mean C-reactive protein ^a	1.16	1.00	1.26	1.26	1.39	1.62	1.23
Women							
Mean fibrinogen	3.28	3.28	3.32	3.41	3.47	3.35	3.34
Mean C-reactive protein ^a	1.36	1.44	1.38	1.44	1.48	1.52	1.43
<i>Unweighted N</i>							
Fibrinogen							
Men	142	203	216	199	137	159	1,056
Women	190	229	299	225	178	198	1,319
C-reactive protein							
Men	151	210	235	210	147	165	1,118
Women	197	249	319	241	199	211	1,416

^aGeometric means are reported. Participants with levels greater than 10 mg/l were excluded.

For variable definitions, see AH.21 and AH.27. For related text, see H.45.

Table N4b. Fibrinogen (g/l) and C-reactive protein (mg/l) means, by wealth group and gender: wave 8

	Wealth group in 2016–17				
	Lowest	2 nd	3 rd	4 th	Highest
Men					
Mean fibrinogen	3.47	3.31	3.40	3.18	3.12
Mean C-reactive protein ^a	1.81	1.35	1.34	1.12	0.90
Women					
Mean fibrinogen	3.38	3.38	3.37	3.28	3.25
Mean C-reactive protein ^a	1.88	1.45	1.49	1.25	1.13
<i>Unweighted N</i>					
Fibrinogen					
Men	122	175	241	248	266
Women	189	253	294	299	273
C-reactive protein					
Men	122	179	260	265	289
Women	199	275	318	313	299

^aGeometric means are reported. Participants with levels greater than 10 mg/l were excluded.

For variable definitions, see AH.21 and AH.27. For related text, see H.46.

Table N5a. Glycated haemoglobin (%) means, by gender and age: wave 8

	Age in 2016–17						All
	55–59	60–64	65–69	70–74	75–79	80+	
Men	5.69	5.68	5.76	5.89	5.84	5.96	5.78
Women	5.72	5.75	5.76	5.80	5.91	5.78	5.78
<i>Unweighted N</i>							
<i>Men</i>	153	219	242	221	157	184	1,176
<i>Women</i>	208	262	333	247	202	225	1,477

For variable definitions, see AH.21 and AH.27. For related text, see H.47.

Table N5b. Glycated haemoglobin (%) means, by wealth group and gender: wave 8

	Wealth group in 2016–17				
	Lowest	2 nd	3 rd	4 th	Highest
Men	6.00	5.63	5.79	5.76	5.74
Women	5.96	5.78	5.78	5.68	5.66
<i>Unweighted N</i>					
<i>Men</i>	132	194	273	278	296
<i>Women</i>	210	289	327	335	304

For variable definitions, see AH.21 and AH.27. For related text, see H.48.

Table N6a. Mean haemoglobin (g/dl) and anaemia (%), by age and gender: wave 8

	Age in 2016–17						All
	55–59	60–64	65–69	70–74	75–79	80+	
Men							
Mean haemoglobin (g/dl)	15.3	14.9	14.9	14.8	14.2	13.6	14.7
Anaemia (%)	1.1	3.5	3.3	5.8	21.5	28.3	8.5
Women							
Mean haemoglobin (g/dl)	13.5	13.5	13.4	13.4	13.2	13.0	13.3
Anaemia (%)	3.3	6.6	7.9	8.6	9.0	21.4	9.2
<i>Unweighted N</i>							
<i>Men</i>	153	215	241	219	155	179	1,162
<i>Women</i>	208	259	326	243	198	221	1,455

Note: Anaemia defined as haemoglobin level below 13g/dl for men and below 12 g/dl for women.

For variable definitions, see AH.21 and AH.27. For related text, see H.49.

Table N6b. Mean haemoglobin (g/dl) and anaemia prevalence, by wealth group and gender: wave 8

	Wealth group in 2016–17				
	Lowest	2 nd	3 rd	4 th	Highest
Haemoglobin (g/dl)					
Men	14.7	14.8	14.7	14.8	14.7
Women	13.0	13.4	13.5	13.4	13.4
Anaemia (%)					
Men	9.8	8.7	11.5	5.4	6.7
Women	17.8	7.8	7.8	6.3	5.2
<i>Unweighted N</i>					
<i>Men</i>	131	188	270	275	295
<i>Women</i>	209	279	325	331	299

Note: Anaemia defined as haemoglobin level below 13g/dl for men and below 12 g/dl for women.

For variable definitions, see AH.21 and AH.27. For related text, see H.50.

Table N7a. Mean levels of IGF-1 (nmol/l), by gender and age: wave 8

	Age in 2016–17						All
	55–59	60–64	65–69	70–74	75–79	80+	
Men							
Mean IGF-1	17.5	16.3	15.8	15.2	14.6	12.9	15.7
% in lowest quintile	10.8	18.3	27.2	32.8	31.1	48.7	26.0
Women							
Mean IGF-1	14.7	14.4	13.4	13.4	12.9	11.8	13.5
% in lowest quintile	16.7	16.2	23.4	23.0	31.3	42.4	24.7
<i>Unweighted N</i>							
<i>Men</i>	155	218	241	224	156	181	1,175
<i>Women</i>	211	258	335	249	204	221	1,478

Note: Gender-specific quintiles used.

For variable definitions, see AH.21 and AH.27. For related text, see H.51.

Table N7b. Mean levels of IGF-1 (nmol/l), by wealth group and gender: wave 8

	Wealth group in 2016–17				
	Lowest	2 nd	3 rd	4 th	Highest
Men					
Mean IGF-1	14.93	15.40	15.72	16.19	16.10
% in lowest quintile	34.3	27.9	25.1	24.3	18.8
Women					
Mean IGF-1	12.80	13.34	13.53	14.08	13.86
% in lowest quintile	30.8	24.9	26.3	20.6	21.3
<i>Unweighted N</i>					
<i>Men</i>	134	192	272	278	295
<i>Women</i>	210	285	330	332	309

Note: Gender-specific quintiles used.

For variable definitions, see AH.21 and AH.27. For related text, see H.52.

Table N8a. Mean levels of vitamin D (nmol/l), by gender and age: wave 8

	Age in 2016–17						All
	55–59	60–64	65–69	70–74	75–79	80+	
Men	44.0	44.4	49.3	45.9	49.5	42.9	45.9
Women	45.2	46.0	49.9	45.6	50.4	44.4	46.8
<i>Unweighted N</i>							
<i>Men</i>	154	218	241	223	155	180	1,171
<i>Women</i>	207	256	332	248	200	220	1,463

For variable definitions, see AH.21 and AH.27. For related text, see H.53.

Table N8b. Mean levels of vitamin D (nmol/l), by wealth group and gender: wave 8

	Wealth group in 2016–17				
	Lowest	2 nd	3 rd	4 th	Highest
Men	39.4	43.3	48.1	46.5	49.3
Women	43.9	43.9	44.6	52.8	50.1
<i>Unweighted N</i>					
<i>Men</i>	134	192	270	276	295
<i>Women</i>	207	282	328	330	304

For variable definitions, see AH.21 and AH.27. For related text, see H.54.

Table N9a. Mean grip strength (kilograms), by gender and age: wave 8

	Age in 2016–17						All
	55–59	60–64	65–69	70–74	75–79	80+	
Men	42	40	39	35	32	28	37
Women	25	24	22	21	19	16	22
<i>Unweighted N</i>							
<i>Men</i>	178	257	297	277	219	272	1,500
<i>Women</i>	244	306	393	299	252	344	1,838

For variable definitions, see AH.21 and AH.28. For related text, see H.55.

Table N9b. Mean grip strength (kilograms), by wealth group and gender: wave 8

	Wealth group in 2016–17				
	Lowest	2 nd	3 rd	4 th	Highest
Men	34	37	37	38	40
Women	20	21	22	23	24
<i>Unweighted N</i>					
<i>Men</i>	176	257	343	354	367
<i>Women</i>	266	362	422	395	376

For variable definitions, see AH.21 and AH.28. For related text, see H.56.