



## Adult diet data factsheet

### Key points:

- the majority of adults do not eat the recommended minimum of five portions of a variety of fruit and vegetables per day (Figure 1): 30% of adults aged 19–64 years and 41% of those aged 65 years and over meet the '5-a-day' recommendation
- fruit and vegetable consumption is generally higher in women than men; consumption is also greater among those living in higher income households (Figures 2 and 5)
- the average proportion of food energy obtained from total fat is around the maximum recommended total (average of no more than 35%) and is exceeded only by men aged 65 years and over (Figure 7)
- the average proportion of food energy obtained from saturated fat is higher than the maximum recommended levels across all age groups – older adults (65 years and over) consume a greater proportion of their food energy from saturated fat (Figure 8)
- on average, adults of all ages consume more than the recommended maximum level of non-milk extrinsic sugars as part of their food energy intake (Figure 11)
- households with lower incomes consume more non-milk extrinsic sugars as a percentage of food energy, compared to households with higher incomes (Figure 12)
- across all age and income groups, both men and women consume less than the recommended daily amount of fibre (Figure 15)

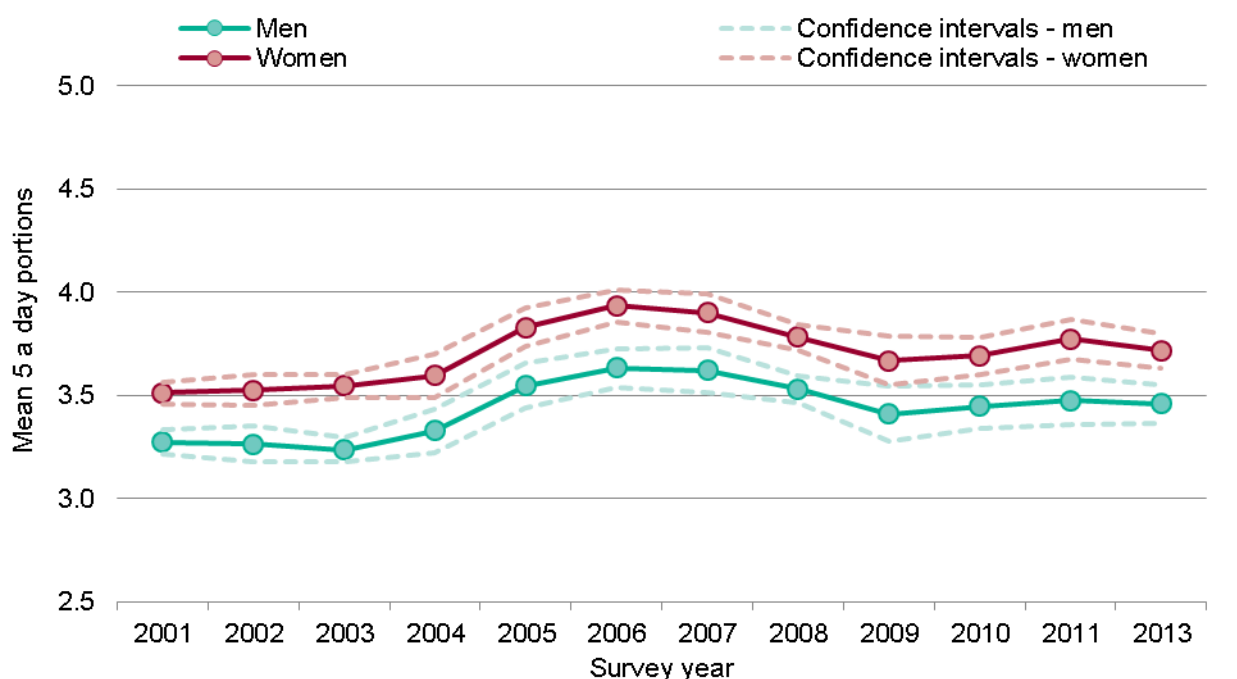
## Fruit and vegetables

It is recommended that adults consume at least five portions of a variety of fruit and vegetables per day (one portion is an 80g serving).<sup>1</sup>

### By sex

Consumption of fruit and vegetables among adults changed very little between 2001 and 2013. The average number of portions peaked in 2006/2007 (3.6 portions for men and 3.9 portions for women). Women eat more fruit and vegetables than men. In 2013 mean average portions per day for men were 3.5 and for women 3.7. The mean consumption in 2013 for women was significantly lower than the peak consumption in 2006/2007 (Figure 1).

**Figure 1. Mean average portions of fruit and vegetables consumed, by survey year and sex**



Source: Health Survey for England 2013

Note: No survey data was available for 2012

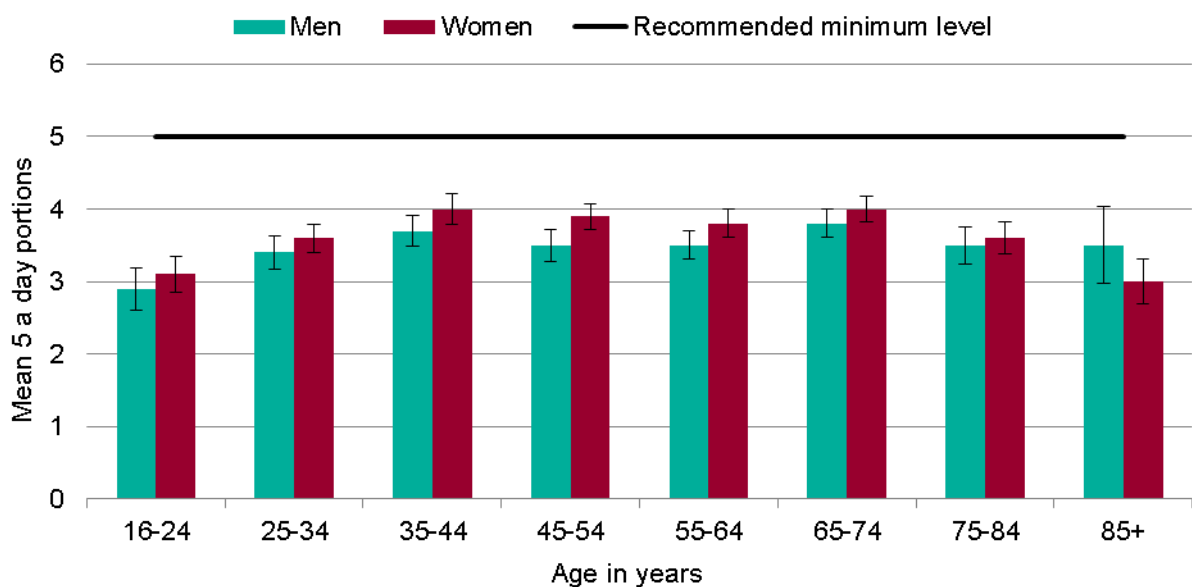
<sup>1</sup> Committee on Medical Aspects of Food and Nutrition Policy. Nutritional Aspects of Cancer. London TSO: 1998

## By age and sex

Data from the National Diet and Nutrition Survey (NDNS) shows that 30% of adults aged 16–64 years and 41% of those aged 65 years and over met the ‘5-a-day’ recommendation over a four day recording period (data not illustrated).

When looking at age, neither men nor women of any group consume an average of five or more portions of fruit and vegetables per day. 25% of men and 28% of women reported eating five portions or more on the day prior to being surveyed (data not illustrated). Men aged 16–24 years and women aged 85 years and over consume the smallest number of daily portions (2.9 portions and 3.0 portions respectively). The highest number of daily portions are consumed by men aged 65–74 years (3.8 portions) and women aged 35–44 years and 65–74 years (4.0 portions) (Figure 2).

**Figure 2. Average portions of fruit and vegetables consumed, by age and sex**

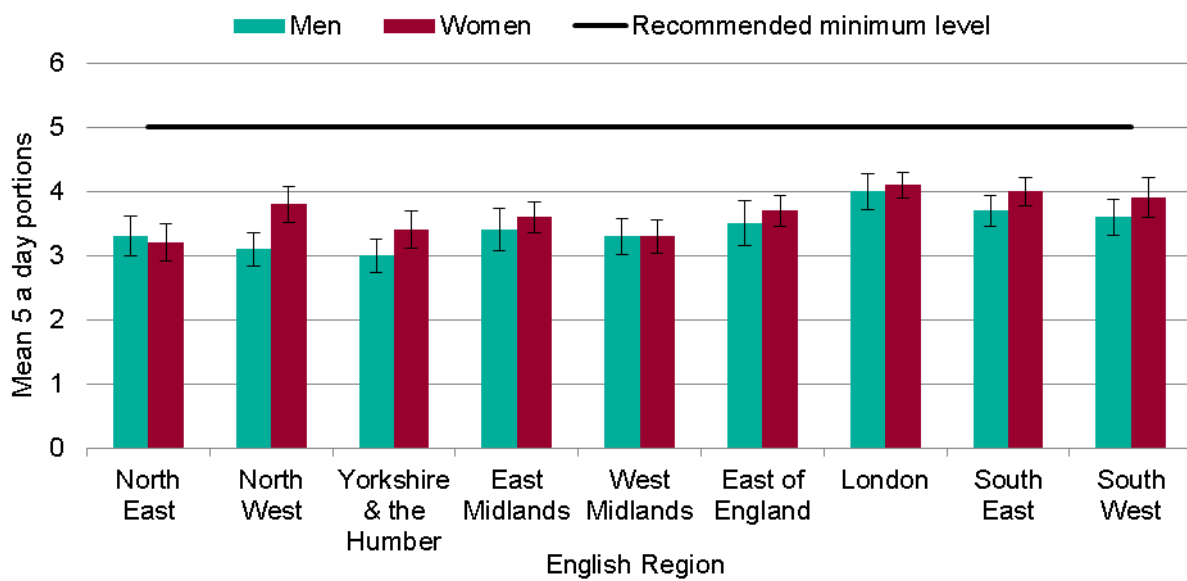


Source: Health Survey for England 2013

## By region

Figure 3 shows the average portions of fruit and vegetables consumed daily by region. People living in London consume the highest average number of portions (4.0 and 4.1 for men and women respectively). The lowest average consumption is among men living in Yorkshire and the Humber (3.0 portions) and women living in the North East (3.2 portions).

**Figure 3. Average portions of fruit and vegetables consumed, age standardised by region and sex**



Source: Health Survey for England 2013

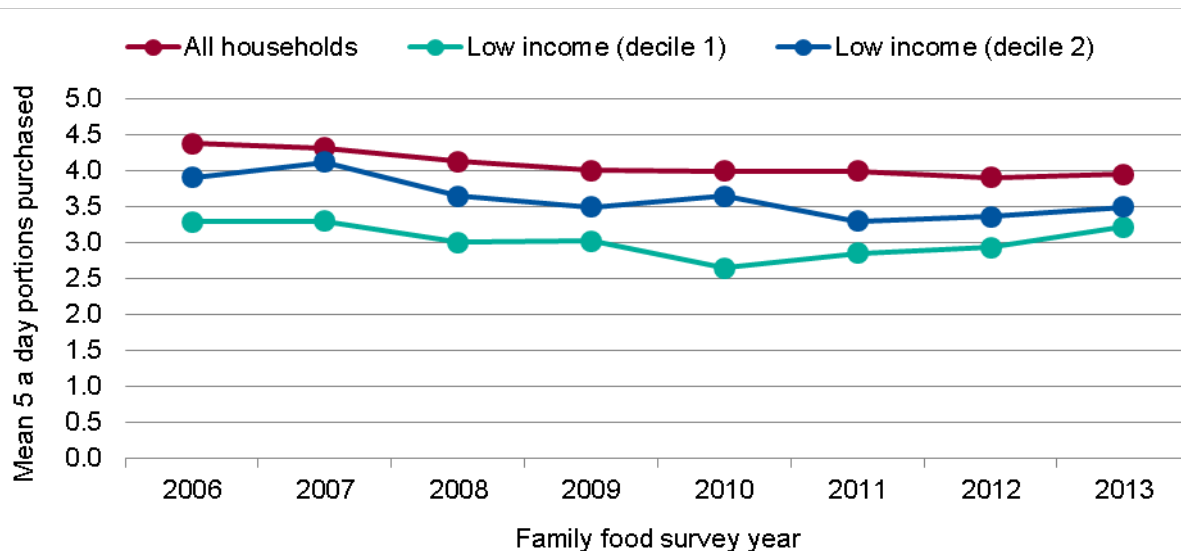
**Standardisation** allows like to be compared with like, by making sure that differences in the number of events (for example individuals being obese) observed in two or more populations (in this case regions) are not due to differences in the age and sex profile between the different populations.

## By household income

Fruit and vegetable purchasing and consumption are related to household income. The higher the household income, the greater the average number of portions of fruit and vegetables purchased and consumed (Figures 4, 5 and 6).

Figure 4 shows the average number of portions of fruit and vegetables per person purchased by households between 2006 and 2013. Households with lower incomes consistently purchased fewer portions of fruit and vegetables compared to the average across all households. In 2013, households in the lowest two income deciles purchased on average 3.2 portions and 3.5 portions per person per day, compared to 4.0 portions for all households.

**Figure 4. Trends in fruit and vegetable purchases measured as portions, by survey year and income decile**

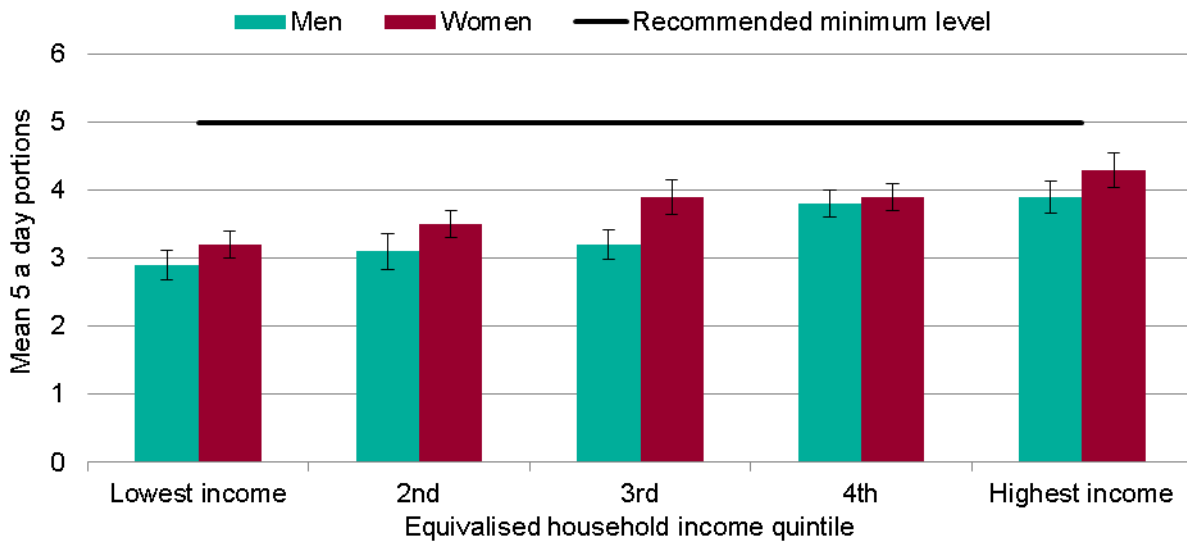


Source: Family Food 2013

**Equivalent household income** is a measure that takes account of the number of people in the household. For this analysis household income is split into ten equal-sized groups banded by income level (deciles) where decile 1 signifies lowest income and decile 10 highest income.

HSE data shows a clear trend of fruit and vegetable consumption falling as income level declines. Both men and women in the lowest income quintile eat a whole portion less of fruit and vegetables per day than men and women in the highest income quintile (2.9 compared to 3.9 and 3.2 compared to 4.3 respectively) (Figure 5).

**Figure 5. Average portions of fruit and vegetables consumed, age standardised by equivalised household income and sex**



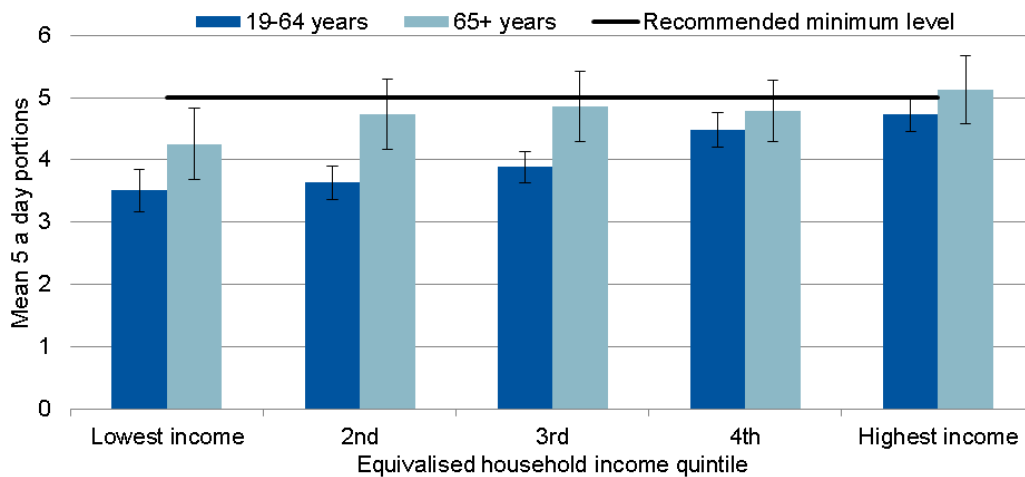
Source: Health Survey for England 2013

**Equivalised household income** is a measure that takes account of the number of people in the household. For this analysis, households were split into five equal-sized groups banded by income level (income quintiles).

**Standardisation** allows like to be compared with like, by making sure that differences in the number of events observed in two or more populations (in this case income groups) are not due to differences in the age and sex profile between the different populations.

Similar patterns are seen in NDNS data (Figure 6). Those aged 19–64 and 65 years and over within the highest income quintile eat more portions of fruit and vegetables (4.7 and 5.1 respectively) compared to those in the lowest income quintile (3.5 and 4.3 respectively).

**Figure 6. Average portions of fruit and vegetables consumed, by equivalised household income and age**



Source: National Diet and Nutrition Survey (2008/09–2011/12)

**Equivalised household income** is a measure that takes account of the number of people in the household. For this analysis, households were split into five equal-sized groups banded by income level (income quintiles)

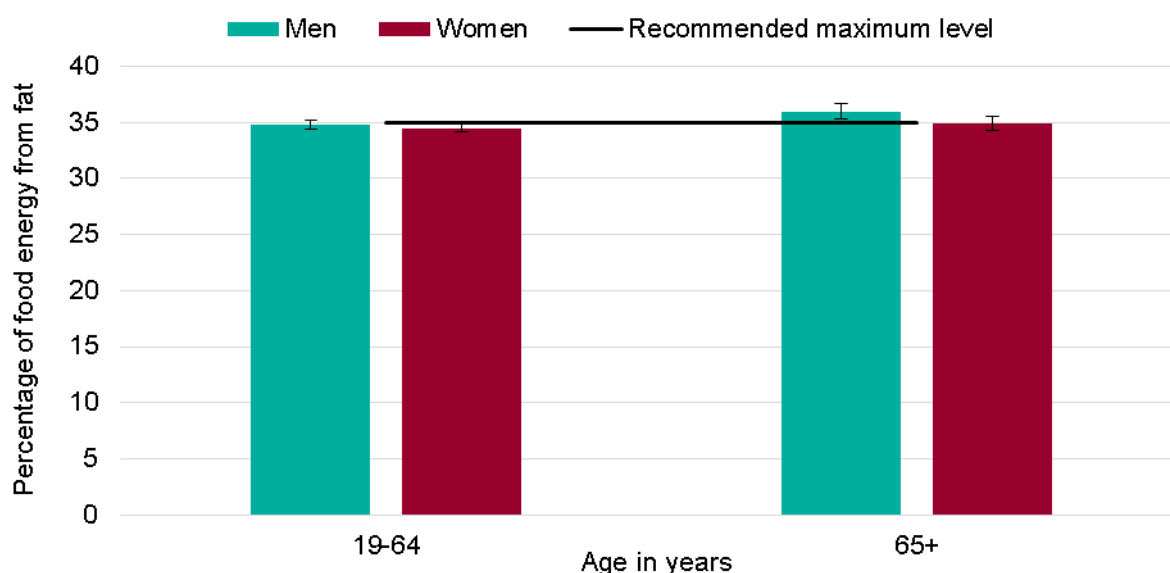
## Fat

It is recommended that total fat should contribute no more than 35% of food energy and saturated fat should contribute a maximum of 11% of food energy.<sup>2</sup>

### By age and sex

Data from the NDNS shows that for adults, the average proportion of food energy obtained from total fat is around the maximum recommended average of no more than 35%. This is exceeded only by men aged 65 years and over (Figure 7).

**Figure 7. Energy from total fat as a percentage of food energy by age and sex**



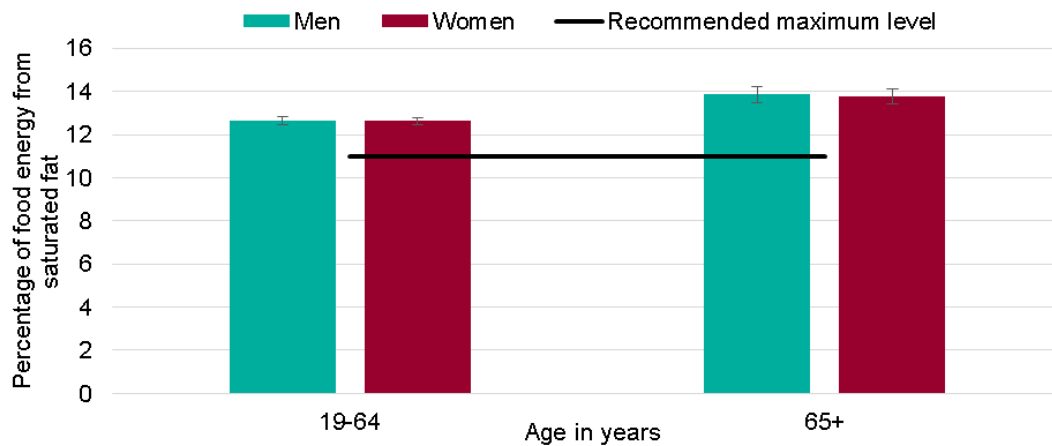
Source: National Diet and Nutrition Survey (2008/09–2011/12)

Both men and women of all ages significantly exceed the maximum recommended level of saturated fat intake. The average diet of those aged 65 years and over has significantly more food energy from saturated fat compared to that of younger adults (13.9% in men and 13.8% in women aged 65 years and over compared to 12.6% for men and women aged 19–64) (Figure 8).

<sup>2</sup> Committee on Medical Aspects of Food Policy. Dietary Reference Values for Food Energy and Nutrients for the United Kingdom. Norwich TSO: 1991  
Committee on Medical Aspects of Food Policy. Nutritional Aspects of Cardiovascular Disease. London HMSO: 1994



**Figure 8. Energy from saturated fat as a percentage of food energy, by age and sex**

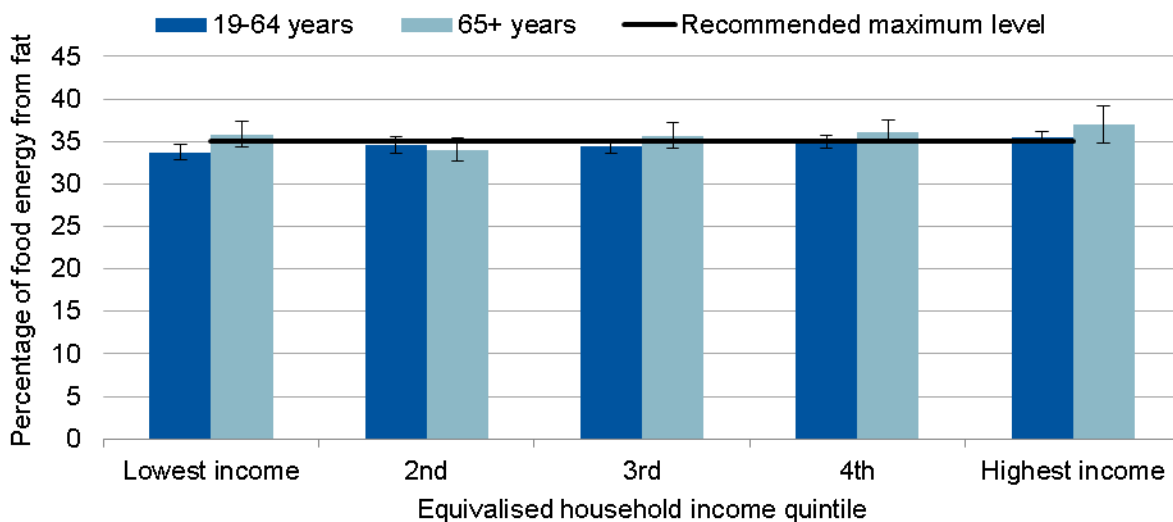


Source: National Diet and Nutrition Survey (2008/09–2011/12)

### By household income

There is very little variation in the percentage of food energy from fat according to household income, however 19–64 year olds in the lowest income quintile obtain significantly less food energy from fat (33.7%) than the recommended maximum level of 35% (Figure 9).

**Figure 9. Percentage of food energy from total fat by equivalised household income and age group**

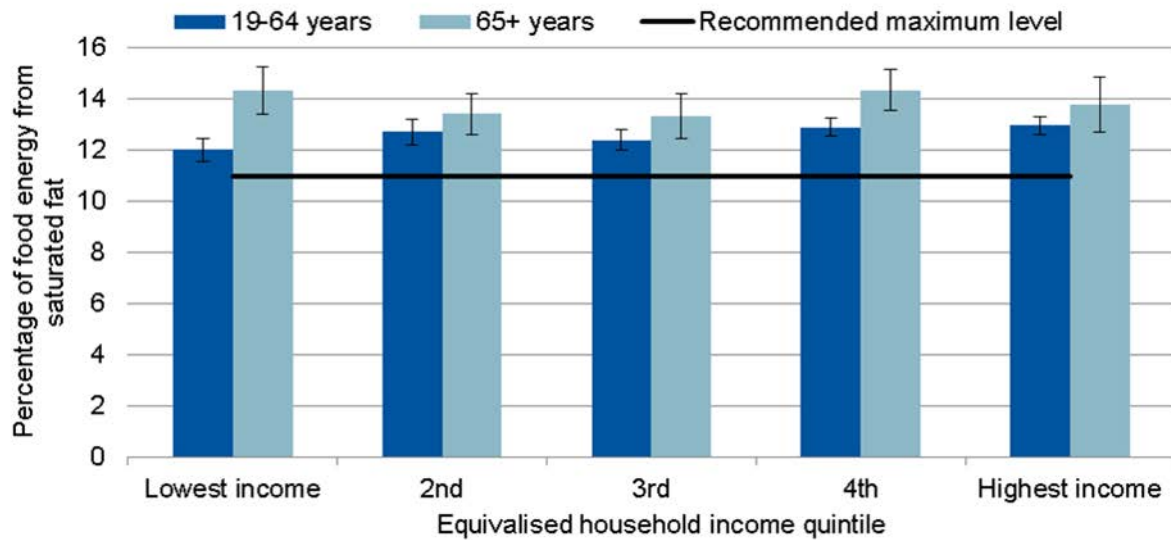


Source: National Diet and Nutrition Survey (2008/09–2011/12)

**Equivalised household income** is a measure that takes account of the number of people in the household. For this analysis households were split into five equal-sized groups banded by income level (income quintiles)

Figure 10 shows that there is very little variation in the percentage of food energy from saturated fat according to household income. Every adult age group in each quintile significantly exceeds the maximum recommended level.

**Figure 10. Percentage of food energy from saturated fat by equivalised household income and age group**



Source: National Diet and Nutrition Survey (2008/09–2011/12)

**Equivalised household income** is a measure that takes account of the number of people in the household. For this analysis households were split into five equal-sized groups banded by income level (income quintiles).

## Sugar

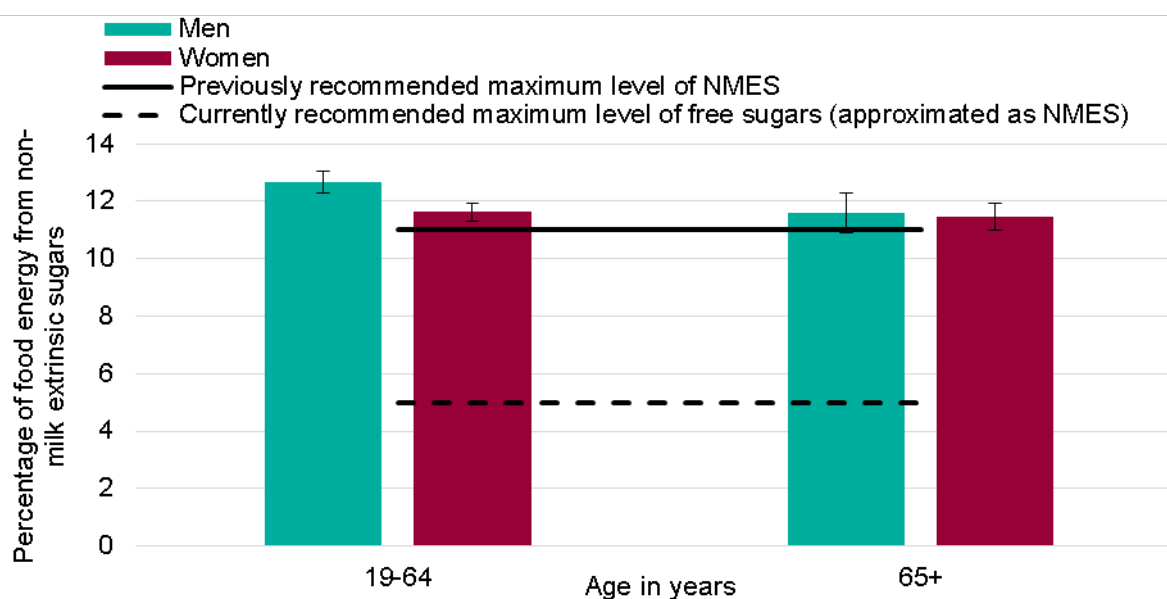
In July 2015 the UK government adopted newly published advice which recommends that the average intake of free sugars<sup>3</sup> should not exceed 5% of total dietary energy for adults.<sup>4</sup>

Currently available data on the sugars intake of the UK population are expressed in terms of non-milk extrinsic sugar (NMES).<sup>5</sup> Up until July 2015, it was recommended that NMES should account for no more than 11% of food energy intake.<sup>6</sup> The new advice based on free sugars represents approximately a 50% reduction in recommended intake.

### By age and sex

Data from the NDNS show that adults of all ages and both sexes significantly exceed the recommendations on sugar intake. Men aged 19–64 consume a significantly greater percentage of food energy from NMES than women of this age group (Figure 11).

**Figure 11. Non-milk extrinsic sugars (NMES) as a percentage of food energy by sex and age group**



Source: National Diet and Nutrition Survey (2008/09–2011/12)

<sup>3</sup> See definition on page 17

<sup>4</sup> Scientific Advisory Committee on Nutrition. *Carbohydrates and Health*. London: TSO: 2015

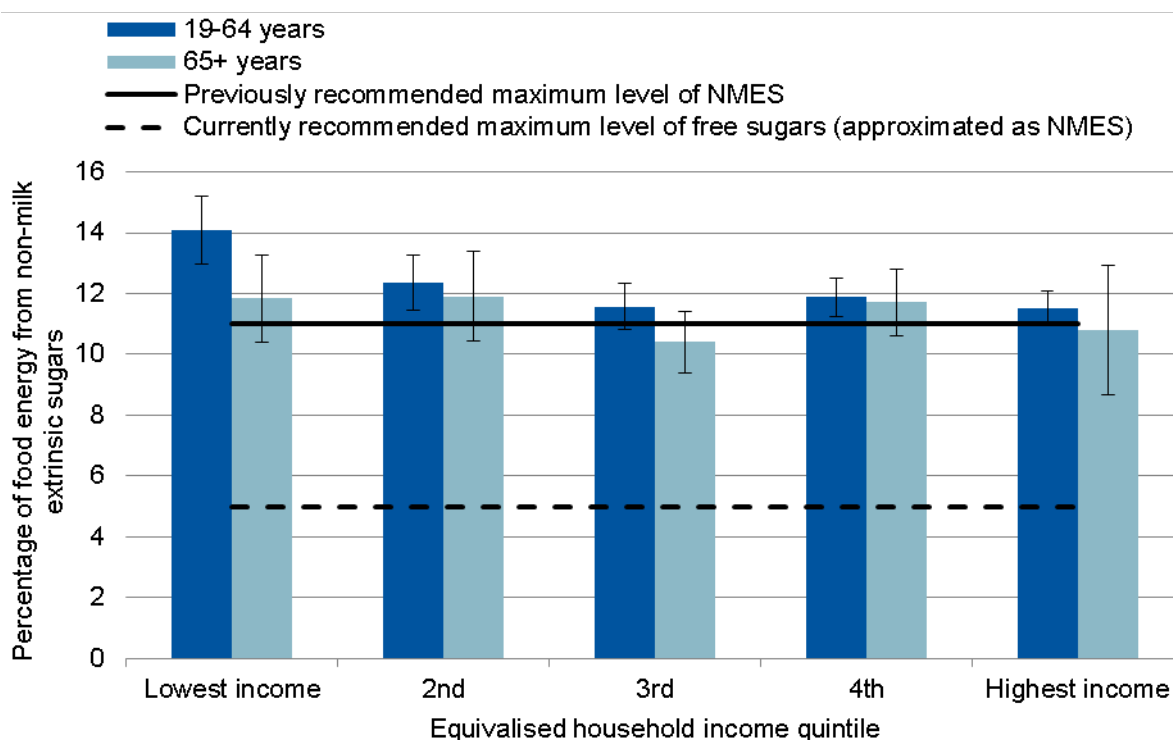
<sup>5</sup> See definition on page 17

<sup>6</sup> Committee on Medical Aspects of Food Policy. *Dietary Reference Values for Food Energy and Nutrients for the United Kingdom*. Norwich TSO: 1991

## By household income

Figure 12 shows how NMES consumption varies with income. For those aged 19–64 years, consumption of NMES decreases as household income level increases. NMES accounts for 14.1% of food energy for those in the lowest income quintile, compared to 11.5% in the highest income quintile. Variation in the percentage of food energy from NMES is smaller among adults aged 65 years and over, with no significant differences between income quintiles (Figure 12).

**Figure 12. Non-milk extrinsic sugars (NMES) as a percentage of food energy by age group and equivalised household income**



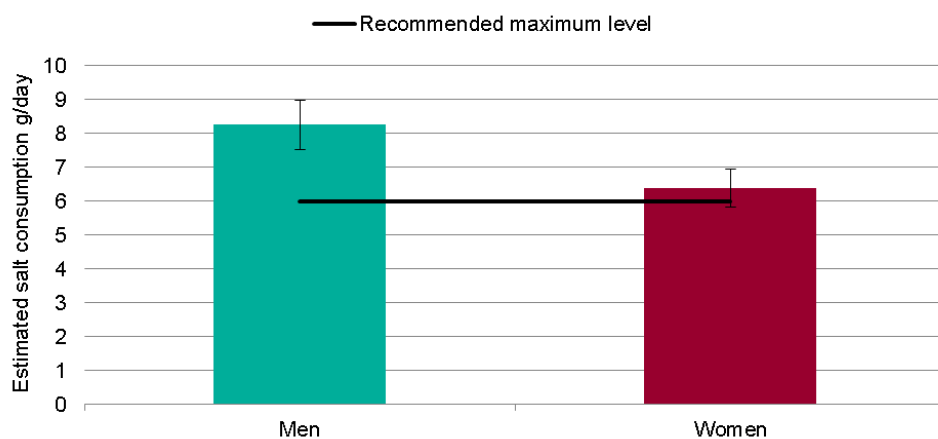
Source: National Diet and Nutrition Survey (2008/09–2011/12)

**Equivalised household income** is a measure that takes account of the number of people in the household. For this analysis, households were split into five equal-sized groups banded by income level (income quintiles).

## Salt

The recommended maximum salt intake for adults is 6 grams per day (g/day).<sup>7</sup> Data from the NDNS estimates that the average salt intake for men and women aged 65 years and over is 8.3 g/day and 6.4g/day respectively (Figure 13). Estimated salt intake, based on urinary sodium for adults aged 19–64 years will be published in due course.

**Figure 13. Estimated daily salt intake<sup>a</sup> for men and women aged 65+ years and over**



Source: National Diet and Nutrition Survey (2008/09–2011/12)

<sup>a</sup> Based on urinary sodium

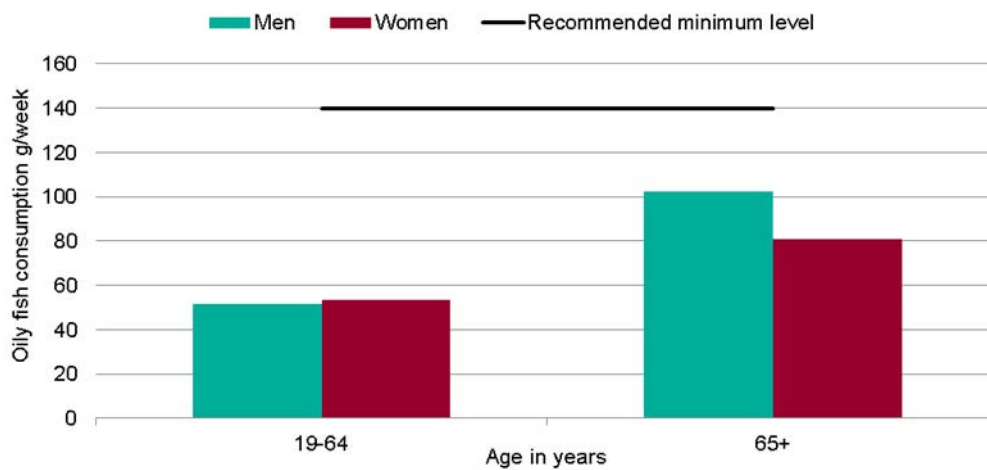
<sup>7</sup> National Diet and Nutrition Survey: Results from 1–4 (combined) of the Rolling Programme (2008/9–2011/12) Executive summary. Current UK diet and nutrition recommendations. Page 9

## Oily fish

Average consumption of oily fish in all age groups is well below the recommended minimum of at least one portion (140g) per week.<sup>8</sup> On average, adults aged 19–64 years consume 53g per week (52g for men and 54g for women), and those aged 65 years and over consume 90g per week (103g for men and 81g for women) (Figure 14).

Over the four-day recording period of the NDNS, 38% of adults aged 65 years and over consumed any oily fish, compared to 23% of those aged 19–64 years (data not illustrated).

**Figure 14. Estimated weekly mean intake of oily fish, by sex and age**



Source: National Diet and Nutrition Survey (2008/09–2011/12)

<sup>8</sup> National Diet and Nutrition Survey: Results from 1–4 (combined) of the Rolling Programme (2008/9–2011/12) Executive summary. Current UK diet and nutrition recommendations. Page 9

## Dietary Fibre

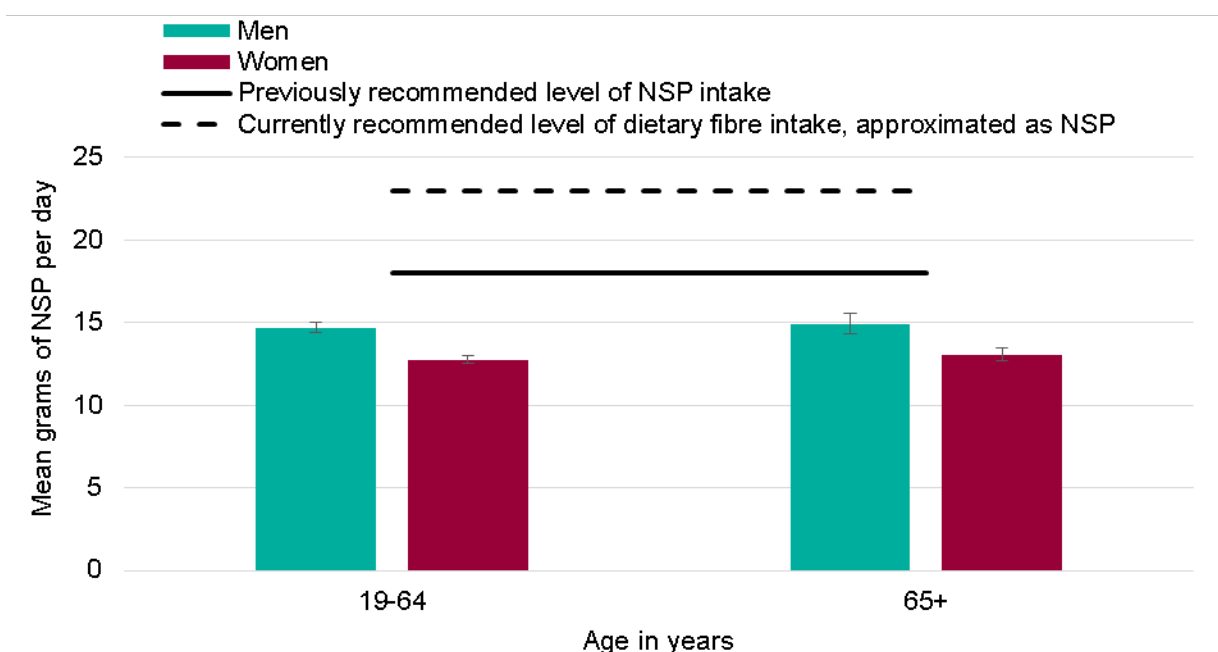
In July 2015 the UK government adopted newly published advice which recommends that the adult population average intake of dietary fibre should be 30g per day.<sup>9</sup>

Currently available data on the fibre intake of the UK population are expressed in terms of non-starch polysaccharides (NSPs), as NSPs were the basis of previous UK recommendations on fibre intake. The new recommended adult average intake of 30g per day of dietary fibre equates to about 23g per day of NSPs. This represents an increase of about 25% in the recommended average daily intake, previously 18g per day.<sup>10</sup>

### By age and sex

Figure 15 shows that both men and women aged 19–64 years and 65 years and over consume far less than the recommended amount of fibre. Men consume on average around 15g NSP per day, and women around 13g NSP per day.

**Figure 15. Mean intake of non-starch polysaccharides, by age group and sex**



Source: National Diet and Nutrition Survey (2008/09–2011/12)

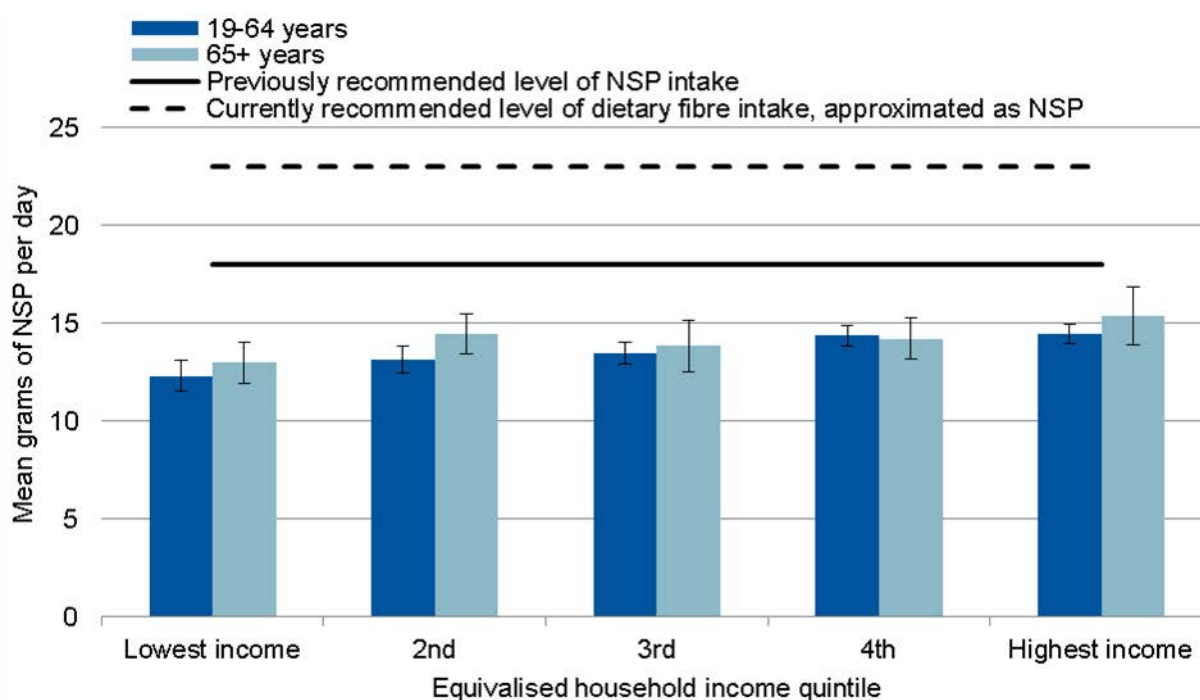
<sup>9</sup> Scientific Advisory Committee on Nutrition. Carbohydrates and Health. London: TSO: 2015

<sup>10</sup> Current data on the dietary fibre intakes of the UK population are based on the Englyst method of fibre analysis. The new recommendation for average dietary fibre intake of 30g/d is based on AOAC methods of fibre analysis and a new broader definition of fibre which includes other components besides NSP.

## By household income

Dietary fibre intake increases with rising household income, however the differences between income quintiles among those aged 65 years and over are not significant. The average daily intake of dietary fibre is lower than the recommended level across all income quintiles and all age groups (Figure 16).

**Figure 16. Mean intake of non-starch polysaccharides by age and equivalised household income**



Source: National Diet and Nutrition Survey (2008/09–2011/12)

**Equivalised household income** is a measure that takes account of the number of people in the household. For this analysis, households were split into five equal-sized groups banded by income level (income quintiles).



## Definitions

### **Confidence intervals on the charts**

Error bars on the charts are 95% confidence intervals. These indicate the level of uncertainty about each value on the chart. Wider intervals mean more uncertainty. Where confidence intervals do not overlap the difference is said to be significant.

### **Food energy**

The energy obtained from the diet, excluding alcohol.

### **Non-milk extrinsic sugars (NMES)**

NMES are defined as sugars in unsweetened fruit juice and honey, as well as sugars that are added to food and drink. They also include 50% of the weight of sugars found in dried, stewed or canned fruit. Sugars naturally occurring in milk or milk products are excluded. This definition is currently used in national surveys within the UK.

### **Free sugars**

In July 2015, the Scientific Advisory Committee on Nutrition (SACN) recommended that the UK adopts the definition of 'free sugars' in place of 'non-milk extrinsic sugars' (NMES). Free sugars are those added to food or those naturally present in honey, syrups and unsweetened fruit juices, but exclude lactose in milk and milk products. The free sugars definition is used by the WHO and does not include the figure of 50% of sugars in dried and cooked fruit.

### **Non-starch polysaccharides (NSP)**

NSPs are complex carbohydrates, other than starch, that are found naturally in food. NSPs are not absorbed by the body and are the major part of dietary fibre.

### **Total fat**

The energy obtained from total fat includes that from polyunsaturated fatty acids, monounsaturated fatty acids, saturated fatty acids and glycerol.

## Data Sources

### Health Survey for England (HSE)

The HSE is a cross-sectional survey which samples a representative proportion of the population. HSE dietary data is based on self-reported information from a 24-hour recall period. Every effort is made to ensure accurate reporting (eg by identifying portions using everyday measures), but it has been noted that fruit and vegetable consumption may be over-reported, possibly through a desire to show socially desirable behaviour. More information available at: [www.hscic.gov.uk/catalogue/PUB16076](http://www.hscic.gov.uk/catalogue/PUB16076)

### National Diet and Nutrition Survey (NDNS)

The NDNS is a cross-sectional survey of diet and nutritional status of the population. Data on consumption by individuals are gathered using a food diary for four consecutive days. Nutritional status is also derived from analysis of blood and urine samples, and background information on dietary habits is collected through a face-to-face interview. More information available at: [www.gov.uk/government/statistics/national-diet-and-nutrition-survey-results-from-years-1-to-4-combined-of-the-rolling-programme-for-2008-and-2009-to-2011-and-2012](http://www.gov.uk/government/statistics/national-diet-and-nutrition-survey-results-from-years-1-to-4-combined-of-the-rolling-programme-for-2008-and-2009-to-2011-and-2012)

### Family Food statistics

Data are collected for a sample of households in the United Kingdom using self-reported diaries supported by till receipts of all purchases, including food eaten out over a two week period. Current estimates are based on data collected in the Family Food Module of the Living Costs and Food Survey and on adjusted data collected in the National Food Survey. More information available at: [www.gov.uk/government/collections/family-food-statistics](http://www.gov.uk/government/collections/family-food-statistics)

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