

Child Diet

Key points

- Overall energy intake is the most important factor when considering obesity and diet. However, much of the available data relate to individual components of the diet rather than to overall energy intake.
- Much of the data presented here concerns fruit and vegetable intake as this has been consistently collected by the Health Survey for England (HSE) since 2001. This provides useful trend data but is not necessarily indicative of wider dietary patterns. Research has not yet identified which elements of dietary intake overall provide the most robust indicators of a healthy diet.
- Many of the figures presented in this briefing are self-reported figures. Self-report data should be used with caution as people may over or under report consumption of certain foods; there may be inaccuracies in children's recall of what they have consumed in a 24-hour period and there is also the potential for confusion or misunderstanding about portion size and content of foods. Parents respond to questions if a child is aged under 12.
- 19% of boys and 20% of girls aged 5–15 met the 'five a day' target for fruit and vegetable consumption in 2010, and the average child ate 3 portions per day. Figures for boys and girls are very similar (Figure 1). These are self-reported data and may be an over-estimate.
- Children's fruit and vegetable consumption varies with household income. Those in the highest income bracket are most likely to meet the 'five a day' target (27% of boys and 30% of girls) (Figure 3).
- Children obtain around 34% of food energy from total fat, a lower figure than in previous years. All boys and younger girls meet the recommended maximum of 35% while older girls' intake is just above it. Children's intake of saturated fatty acids is lower than in previous years but remains higher than is recommended (National Diet and Nutrition Survey Report 2012).
- Around 43% of pupils have catered school lunches. Take up of school lunches at primary school level increased from 39.3% in 2008/09 to 46.3% in 2011/12 (Table 1).
- Around two in three boys and three in four girls accurately report that five portions of fruit and vegetables should be consumed each day. However only 22% of boys and 21% of girls can correctly identify what a portion is.
- Most children aged 11–15 agree that 'healthy foods are enjoyable': 72% of girls compared with 64% of boys (Figure 5).
- In 2010, 83% of women in England breastfed their babies from birth, an increase from 78% in 2005 (Infant Feeding Survey). Mothers in managerial and professional occupations were more likely to breastfeed than mothers in other socioeconomic groups.

Fruit and vegetable consumption

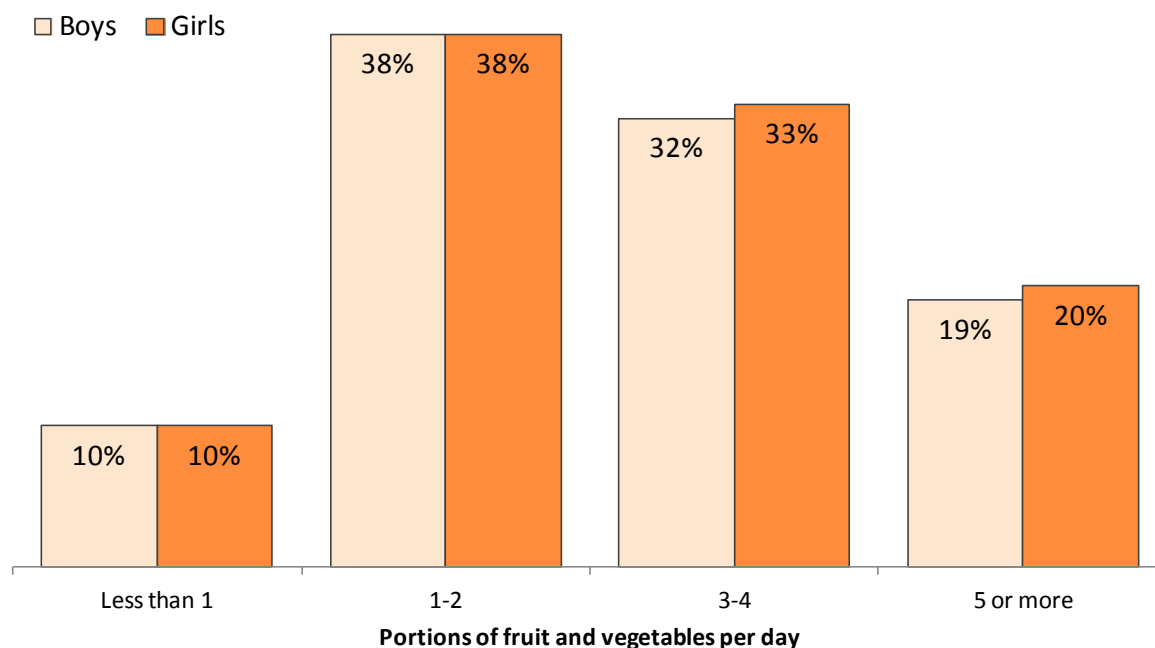
Figures 1–3 show data on fruit and vegetable consumption from the Health Survey for England (HSE). They are based on self-reported information from a 24-hour recall period. Every effort is made to ensure accurate reporting (e.g. by identifying portions using everyday measures), but it has been noted that fruit and vegetable consumption may be over-reported possibly through a desire to show socially desirable behaviour. Parents answer on behalf of children aged 12 and under.

Current fruit and vegetable consumption

Around one in five boys and girls aged 5–15 met the government's recommended 'five a day' guidelines for fruit and vegetable consumption in 2010 (19% of boys and 20% of girls). The average number of portions consumed was approximately 3 per day for both boys and girls.

Figure 1 shows how few children are meeting the recommended 'five a day' target for fruit and vegetable consumption. 10% of boys and girls eat less than 1 portion per day and 38% of boys and girls eat 1–2 portions.

Figure 1: Portions of fruit and vegetables per day eaten by children (aged 5–15), 2010

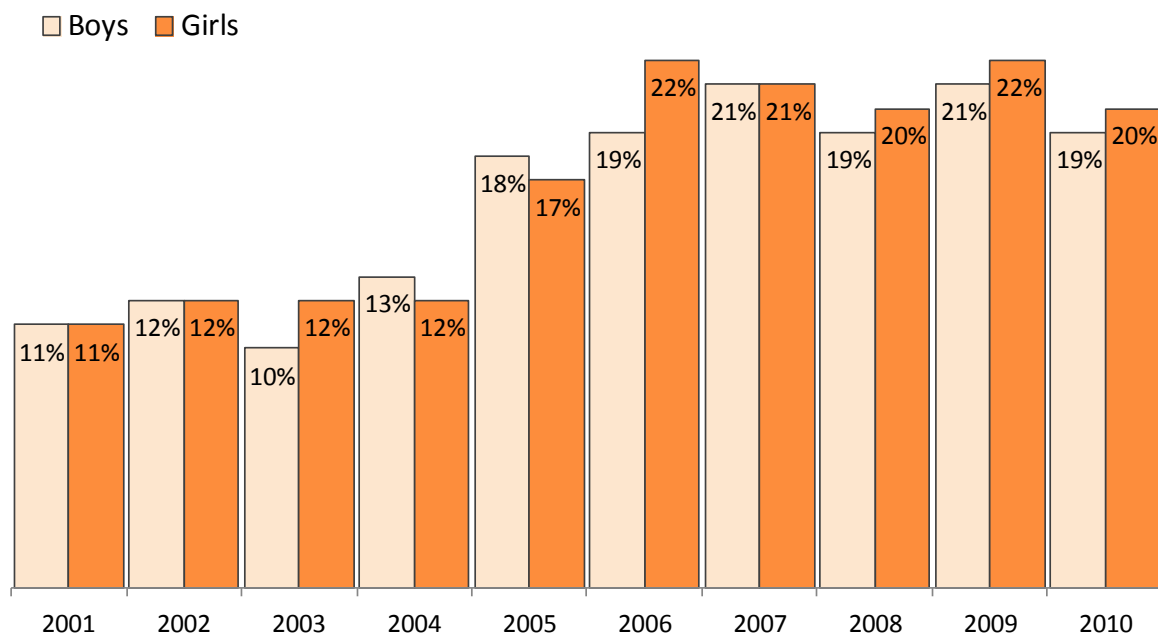


Source: Health Survey for England

Trends in fruit and vegetable consumption

Even though a minority of children meet the 'five a day' target, Figure 2 shows that the percentage of children meeting the target rose from 11% to around 20% between 2001 and 2010. Overall, between 2001 and 2010 an average of 17% of children ate 5 or more portions of fruit and vegetables per day.

Figure 2: Percentage of children (aged 5–15) eating 5 or more portions of fruit and vegetables per day, 2001 to 2010



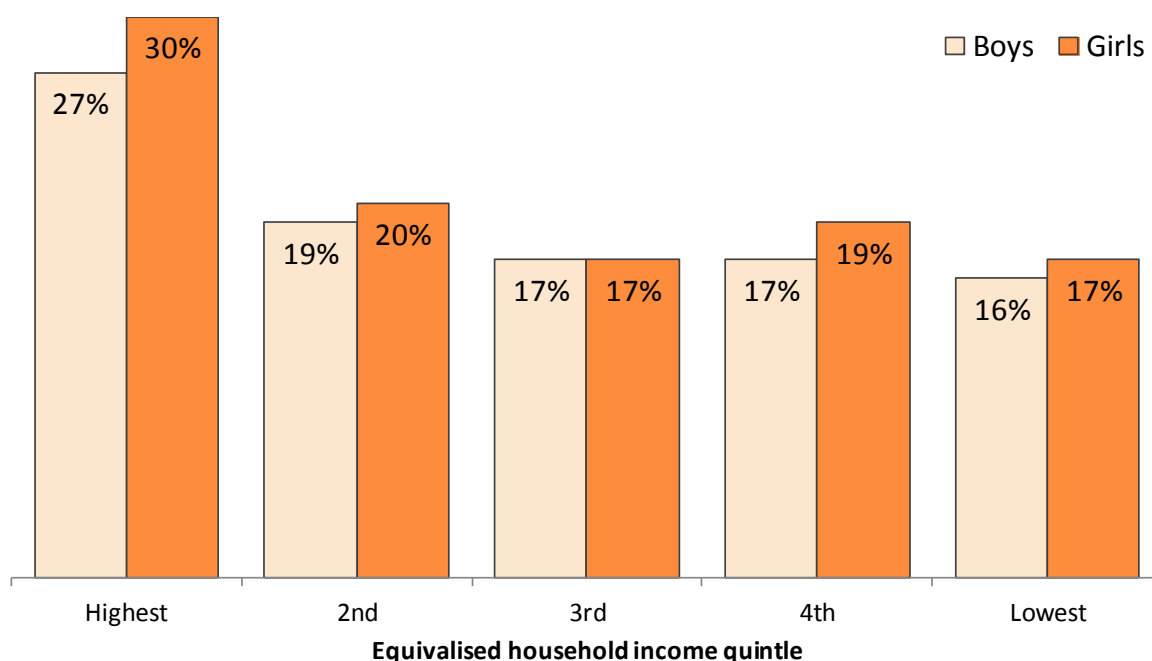
Source: Health Survey for England

Fruit and vegetable consumption by income

Figure 3 shows that children's fruit and vegetable consumption varies with household income. Children in the highest income bracket are most likely to meet the 'five a day' target (27% of boys and 30% of girls). Interestingly, there was not much difference between the remaining four quintiles (results range from 16% to 19% in boys and 17% to 20% in girls).

The average number of portions consumed per day (data not shown here) also decreased from the highest income bracket to the lowest. Only 2% of children in the highest quintile had eaten no fruit or vegetables in the last 24 hours, compared to 12% of boys and 7% of girls in the lowest quintile.

Figure 3: Percentage of children (aged 5–15) consuming five or more portions of fruit and vegetables per day, by equivalised[†] household income, 2008



Source: Health Survey for England*

[†] 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). Fruit and vegetable portions consumed were compared between these groups.

Note that 2008 data are the most recently available for this indicator.

Children's fat intake

The National Diet and Nutrition Survey (NDNS) report 2012 (showing data from 2008/09 to 2010/11) shows that children obtain around 34% of food energy from total fat. The recommended maximum average intake is 35%. All boys and girls aged 4–18 years meet this recommendation.

Children aged 4–10 years obtain 13.3% of their food energy from saturated fat and those aged 11–18 years obtain 12.6%. These figures are higher than the recommended maximum average intake of 11%.

The recommended maximum average intake of trans fat is 2% of food energy. Children aged 4–18 years obtain 0.7% of their food energy from trans fat, which meets the recommendation.

Take-up of school lunches

Around 43% of primary and secondary school pupils receive catered school lunches, which have to meet certain nutrition and quality standards. Due to a change in methodology used to calculate take-up of school lunches, comparable data are only available from 2008/09. Table 1 shows the take-up of school lunches has increased, from 39.3% in 2008/09 to 46.3% in 2011/12 for primary schools, and from 35.0% to 39.8% for secondary schools.

Table 1: Percentage of primary and secondary school pupils who have catered school lunches, England, 2008/09 to 2011/12

Percentage of pupils who have school lunches	2008/09	2009/10	2010/11	2011/12
Primary schools	39.3%	41.4%	44.1%	46.3%
Secondary schools	35.0%	35.8%	37.6%	39.8%

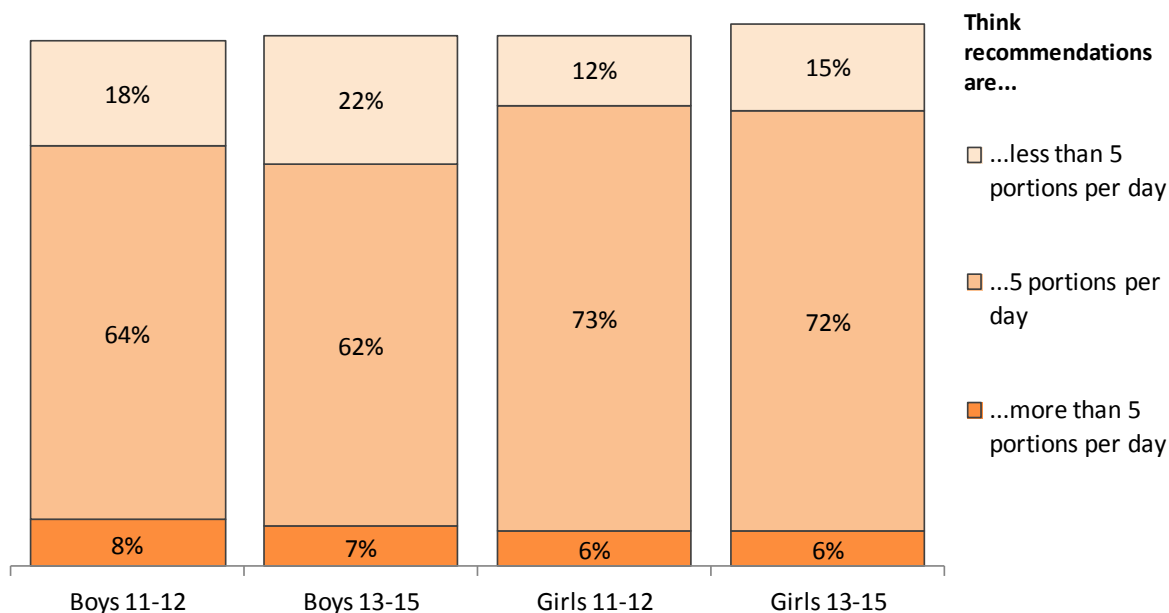
Note: LAs completed the 2010/11 and 2011/12 surveys on a voluntary basis. Prior to 2010/11, it was mandatory for LAs to provide this information.

Source: DfE from data collected annually by School Food Trust.

Knowledge and attitudes to diet

64% of boys and 73% of girls aged 11–12, and 62% of boys and 72% of girls aged 13–15 accurately report that five portions of fruit and vegetables should be consumed each day. However only 22% of boys and 21% of girls aged 11–15 can correctly identify the size of a portion.

Figure 4: Estimates of the recommended level of daily fruit and vegetable consumption, by age group and sex (children aged 11-15), 2007



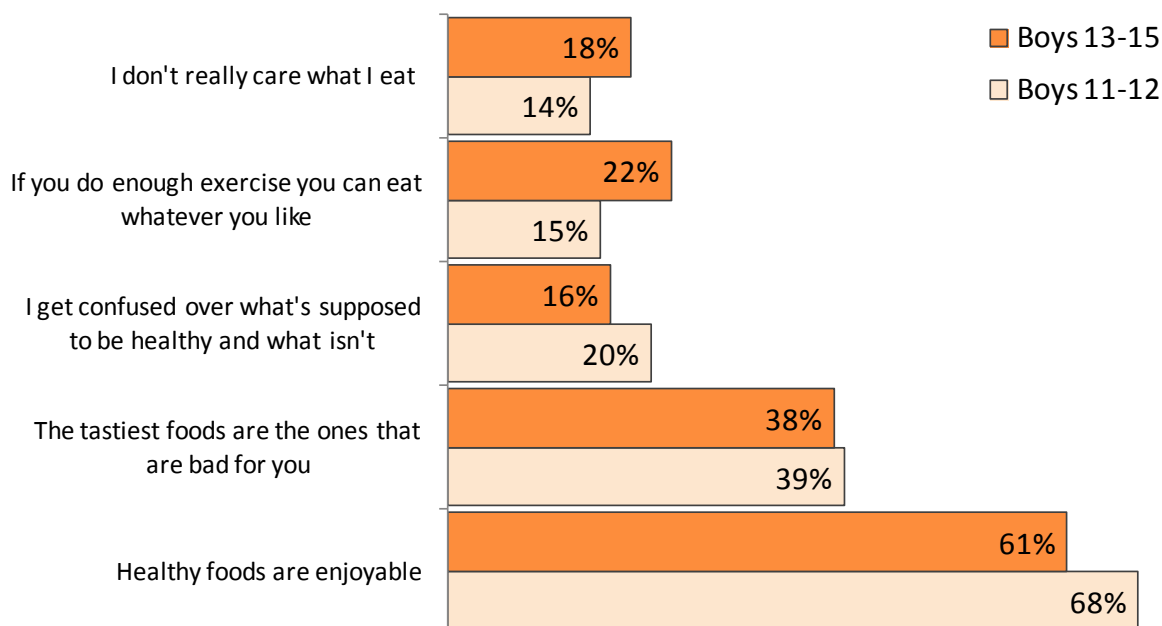
*Source: Health Survey for England 2007 Report**

Figure 5 shows that most children aged 11–15 agree that 'healthy foods are enjoyable': 72% of girls and 64% of boys. 38% of boys and 34% of girls agree that 'the tastiest foods are the ones that are bad for you'. Most children disagree with the statements, 'I get confused over what's supposed to be healthy', 'if you do enough exercise you can eat whatever you like' and 'I don't really care what I eat'.

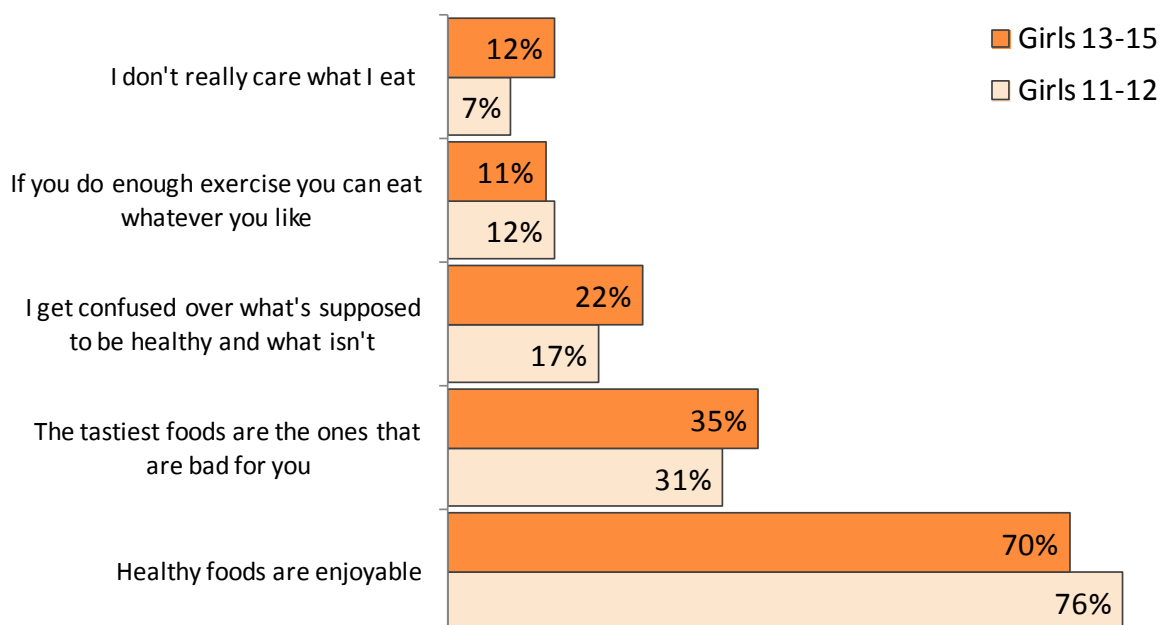
Attitudes towards healthy eating are strongly associated with children's perceptions of their own diet. For example, children who judge their own diet to be healthy are more likely to agree with the statement 'healthy foods are enjoyable'.

Figure 5: Proportion of children (aged 11–15) agreeing with attitudes to healthy eating, by age and sex, 2007

Boys



Girls



Source: Health Survey for England 2007 Report*

Breastfeeding

The Infant Feeding Survey 2010 found that 83% of women in England breastfed their babies from birth, an increase from 78% in 2005. Mothers breastfed for longer in 2010 compared to 2005. 72% of mothers were breastfeeding at one week in 2010 compared to 66% in 2005. At six weeks 57% of mothers were breastfeeding in 2010 compared to 50% in 2005. At six months the levels were 36% in 2010 and 26% in 2005.

There was a strong association between breastfeeding and the age of the mother. Mothers under the age of 20 were less likely to breastfeed initially (61%) compared to all other age groups. Mothers aged 30 or over were most likely to breastfeed initially (89%).

Mothers from minority ethnic groups are more likely to initiate and continue breastfeeding than White mothers. Figures for Great Britain as a whole show that 96% of Black or Black British mothers and 95% of Asian or Asian British mothers breastfed initially, compared to 79% of White mothers. At six months the percentage that had continued to breastfeed was 61%, 49% and 32% respectively.

There is also an association between breastfeeding and socioeconomic status. Mothers in managerial and professional occupations were more likely to breastfeed than mothers in other socioeconomic groups. 91% of mothers in managerial and professional occupations breastfed initially, compared to 76% of those in routine and manual occupations and 74% of those who had never worked.

Data sources

Health Survey for England

Most of the data presented here are from the HSE and were the most recent data available at the time of writing. The HSE is a cross-sectional survey which samples a representative proportion of the population.

Timing of data collection: The survey is conducted annually. Data for some of the time series are available for children from 1995 onwards. Certain years include 'boost samples' which focus on specific population groups: e.g. 2004 included a boost of individuals from minority ethnic groups.

Date of next release: The report on the HSE 2011 will be published online in December 2012. The data should be available from the UK Data Archive in the spring following publication of the report.

Infant Feeding Survey

The Infant Feeding Survey is a repeated cross-sectional study that provides baseline statistics about infant feeding practices in the UK.

Timing of data collection:

The Infant Feeding Survey has been conducted every five years since 1975. The 2005 survey was the first to provide separate estimates for England, Scotland, Wales and Northern Ireland, as well as for the UK as a whole, and to provide estimates of exclusive breastfeeding (where the baby is given only breast milk, no other liquids or solids).

The study population for the 2010 survey was mothers who gave birth in the period August-September 2010, resident in the United Kingdom.

Date of next release: The next Infant Feeding Survey will be conducted in 2015.

Take-up of school lunches

An annual survey of local authorities in England is carried out by the School Food Trust to measure take-up of school lunches. It includes information on catering provision from local authority, private and in-house (school) catering.

Timing of data collection: Data have been collected annually since 2006. The fifth annual survey covered the 2011/12 financial year and the data were available in July 2012.

Date of next release: Data for the 2012/13 financial year should be published in July 2013.

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 weighed intake dietary record for four to seven 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.

Timing of data collection: The surveys have been split into four age groups: pre-school children in 1992 to 1993; older adults in 1994 to 1995; school-age children in 1997 and adults in 2000 to 2001. In April 2008, the NDNS changed to a rolling programme with data collected annually from approximately 500 adults and 500 children (aged 18 months or more).

Headline results are delivered annually. The report of the first three years of the NDNS rolling programme (2008/09 to 2010/11) was published in July 2012. This report supersedes the results from the first two years of the survey combined. It focuses on food consumption and nutrient intakes for adults aged 19 to 64 years and 65 years and over; and children aged 18 months to 3 years, 4 to 10 years and 11 to 18 years.

Date of next release: The NDNS rolling programme has been commissioned to collect data over a four year period from 2008/09 to 2011/12 with an extension to a fifth year covering 2012/13.

Useful resources

Health Survey for England

<http://www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles-related-surveys/health-survey-for-england>

<http://www.dh.gov.uk/en/Publicationsandstatistics/PublishedSurvey/HealthSurveyForEngland/Healthsurveyresults/index.htm>

National Diet and Nutrition Survey

<http://mediacentre.dh.gov.uk/2012/07/25/statistical-press-notice-national-diet-and-nutrition-survey-headline-results-from-years-1-2-and-3-combined-200809-201011/>

Infant feeding

<http://www.ic.nhs.uk/pubs/infantfeeding10final>

Take up of school lunches

<http://www.schoolfoodtrust.org.uk/schools/reports/statistical-release-take-up-of-school-lunches-in-england-2011-2012>

Changes summary

- **October 2010** – original report
- **February 2012** – updated to include HSE 2009 data, DCSF 2010/11 data, Early results from the Infant Feeding Survey 2010, NDNS Report, 2010
- **November 2012** – updated to included HSE 2010 data, DfE 2011/12 data, NDNS report for years 1, 2, and 3 combined (2008/09 to 2010/11), Infant Feeding Survey 2010

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