

Protecting and improving the nation's health

Child diet data factsheet

Key points:

- the majority of children do not eat the recommended minimum of five portions of a variety of fruit and vegetables per day: among children aged 11–18 years, 10.1% of boys and 7.5% of girls meet the five a day recommendation (Figure 4)
- children aged 11–18 years consume an average of 2.9 portions of fruit and vegetables per day, significantly lower than the recommended minimum of five portions per day (Figure 3)
- among children aged 5–15 years, those aged 11–12 years consume the smallest number of portions of fruit and vegetables per day (2.3 portions for boys and 2.8 portions for girls) (Figure 2)
- children living in households with the highest incomes consume the largest number of portions of fruit and vegetables per day (3.9 portions for girls and 3.5 portions for boys) (Figure 5)
- children's consumption of added or processed sugars (non-milk extrinsic sugars) significantly exceeds the maximum recommended level (Figure 6)
- children's consumption of saturated fat as part of their daily food energy significantly exceeds the maximum recommended level of 11% of total food energy; younger children aged 4–10 years obtain significantly more of their food energy from saturated fat than older children aged 11–18 years (13.1% for boys and 13.3% for girls aged 4–10 years, compared to 12.7% for boys and 12.4% for girls aged 11–18 years) (Figure 8)

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Fruit and vegetables

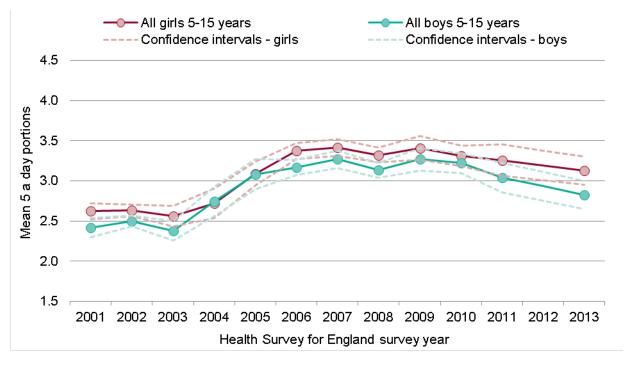
It is recommended that children eat at least five portions of a variety of fruit and vegetables per day. For children aged 11 years and over one portion is considered to be 80g,¹ for younger children no specific portion size is recommended.

Figures 1 and 2 show data on fruit and vegetable consumption from the Health Survey for England (HSE).

By sex and age

Figure 1 shows the trend over time for the average number of portions of fruit and vegetables consumed per day by children aged 5–15 years. Between 2001 and 2013 the average number of portions consumed was significantly lower than five. There were no significant differences between boys and girls over this time period.

Figure 1. Mean intake of fruit and vegetables portions per day, by sex and survey year



Source: Health Survey for England 2013

Note: No survey data was available for 2012

Parents answer on behalf of children aged 12 and under

Committee on Medical Aspects of Food and Nutrition Policy. Nutritional Aspects of Cancer. London TSO: 1998

Data from the HSE shows that in 2013 16% of boys and 17% of girls aged 5–15 years consumed at least five portions of fruit and vegetables on the day prior to the survey (data not illustrated); children aged 11–12 years had the lowest consumption of fruit and vegetables (2.3 portions for boys and 2.8 portions for girls) (Figure 2).

Boys Girls — Recommended minimum level

5

5

6

5

7

8-10

Age in years

Figure 2. Mean intake of fruit and vegetable portions per day, by sex and age

Source: Health Survey for England 2013

Figure 3 shows four years of combined data (2008/09–2011/12) from the National Diet and Nutrition Survey (NDNS). Among children aged 11–18 years the average portions of fruit and vegetables consumed is 2.9, significantly less than the minimum recommended level. Boys eat slightly more fruit and vegetables than girls (average of 3.0 portions compared to 2.7 portions).

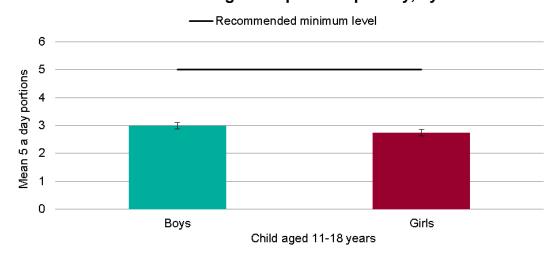


Figure 3. Mean intake of fruit and vegetable portions per day, by sex

Among children aged 11–18 years, 10.1% of boys and 7.5% of girls achieve the recommended level of five or more portions of fruit and vegetables per day (Figure 4).

12% 10% Percentage achieving 5 or more 2% 0% Girls Boys

Child aged 11-18 years

Figure 4. Percentage eating five or more fruit and vegetable portions per day, by sex

Source: National Diet and Nutrition Survey (2008/2009–2011/12)

By household income

Children's fruit and vegetable consumption varies according to household income. Data from the HSE shows that children living in households in the highest equivalised income quintile eat the most fruit and vegetables (3.9 portions for girls and 3.5 portions for boys) (Figure 5).

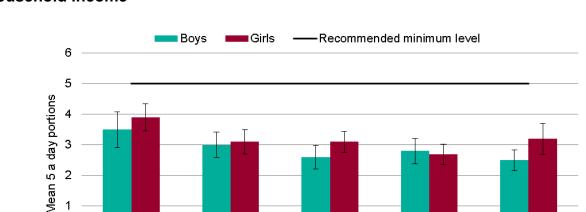


Figure 5. Mean intake of fruit and vegetable portions, by sex and equivalised household income

Source: Health Survey for England 2013

Highest

0

Income is adjusted to take into account the number of people living in the household ('equivalised household income'). Splitting the population into five equal-sized groups (quintiles) based on income level allows for comparison across the range of incomes.

3rd

Equivalised household income

4th

2nd

Lowest

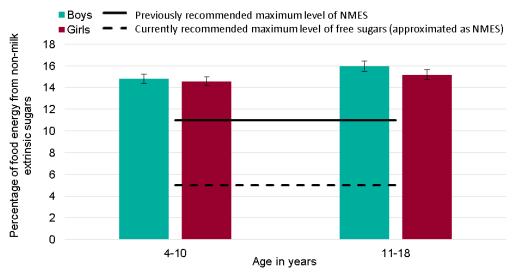
Sugar

In July 2015 the UK government adopted newly published advice which recommends that the average intake of free sugars² should not exceed 5% of total dietary energy for age groups from two years upwards.³

Currently data on the sugars intake of the UK population are expressed in terms of non-milk extrinsic sugar (NMES).⁴ Up until July 2015 it was recommended that NMES should account for no more than 11% of food energy intake.⁵ The new advice based on free sugars represents approximately a 50% reduction in recommended intake.

Data from the NDNS shows that recommended maximum sugar intakes are exceeded significantly in the diets of both boys and girls. (Energy from NMES:14.8% for boys aged 4–10 years and 16.0% for boys aged 11–18 years; 14.6% for girls aged 4–10 years and 15.2% for girls aged 11–18 years) (Figure 6).

Figure 6. Percentage of food energy from non-milk extrinsic sugars (NMES), by age and sex



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

Boys aged 11–18 years consume significantly more NMES as a percentage of their food energy intake than boys or girls aged 4–10 years. There are no significant differences between boys and girls within either age group.

² See definition on page 11

³ Scientific Advisory Committee on Nutrition. Carbohydrates and Health. London: TSO: 2015

See definition on page 11

Committee on Medical Aspects of Food Policy. Dietary Reference Values for Food Energy and Nutrients for the United Kingdom. Norwich TSO: 1991

Fat

For children aged five years and over, it is recommended that no more than 35% of food energy should be from total fat.^{6,7} Figure 7 shows that average intakes in all age groups from 4 to18 years meet this recommendation. There are no significant differences between age groups. For boys and girls aged 4–10 years, 33.3% and 33.6% of food energy comes from fat respectively, compared to 33.8% and 34.2% for boys and girls aged 11–18 years.

■ Girls Recommended maximum level Boys 40 Percentage of food energy from fat 35 30 25 20 15 10 5 0 11-18 4-10 Age in years

Figure 7. Percentage of food energy from fat, by sex and age

Committee on Medical Aspects of Food Policy. Dietary Reference Values for Food Energy and Nutrients for the United Kingdom. London TSO: 1991

Committee on Medical Aspects of Food Policy. Nutritional Aspects of Cardiovascular Disease. London HMSO: 1994

It is recommended that no more than 11% of total food energy should come from saturated fat for children aged five years and over. All children significantly exceed this. Younger children aged 4–10 years obtain significantly more of their food energy from saturated fat than older children aged 11–18 years (13.1% for boys and 13.3% for girls aged 4–10 years, compared to 12.7% for boys and 12.4% for girls aged 11–18 years) (Figure 8).

Boys Girls — Recommended maximum level

16

14

12

10

8

6

4

2

0

4-10

Age in years

11-18

Figure 8. Percentage of food energy from saturated fat, by sex and age

Salt

Figure 9 shows that estimated salt intake for children⁸ exceeds the maximum recommended intake⁹ for each age group except for girls aged 7–10 years. Average estimated salt intake for children aged 4–6 years was 3.7 grams per day (g/day). In children aged 7–10 years, average intake was 5.5g/day for boys and 4.6g/day for girls. Average intake of salt for those aged 11–18 years was 7.1g/day for boys and 6.2g/day for girls.

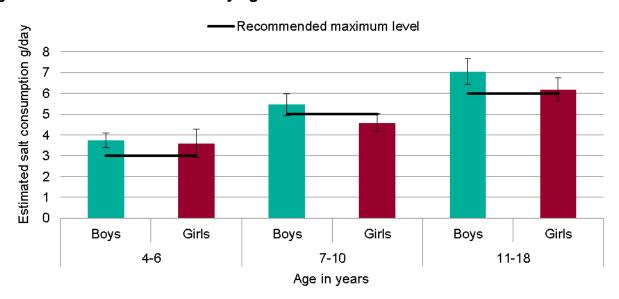


Figure 9. Estimated salt intake by age and sex

⁸ Based on urinary sodium excretion levels.

Scientific Advisory Committee on Nutrition (2003). Salt and Health. The Stationery Office.

Oily fish

It is recommended that children eat at least one portion of oily fish (140g) per week.¹⁰ On average, children of all ages eat far less than the recommended minimum level and consumption varies little by sex and age (Figure 10). The percentage of children eating oily fish is low. Only 12% of 4–10 year olds and 8% of 11–18 year olds consumed oily fish over the four-day recording period (data not illustrated). Boys aged 4–10 years eat the most oily fish per week (15.7g) and boys aged 11–18 years eat the least (12.0g).

Boys — Recommended minimum level

160

140

120

100

80

60

40

20

0

4-10

Age in years

11-18

Figure 10. Mean average consumption of oily fish per week, by sex and age

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

Note: The daily average mean consumption of oily fish (based on mean consumption in the four-day recording period) was multiplied by 7 to get the mean average consumption for a week for the population surveyed

Committee on Medical Aspects of Food Policy. Nutritional Aspects of Cardiovascular Disease. London HMSO: 1994

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.

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

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

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