

1. Diet

It is now universally recognised that a diet which is high in fat, particularly saturated fat, sodium and sugar and which is low in complex carbohydrates, fruit and vegetables increases the risk of chronic diseases – particularly cardiovascular disease (CVD) and cancer. These risks are outlined in the World Health Organization 2003 report *Diet, nutrition and the prevention of chronic diseases*¹. The more recent World Health Organization *Global strategy on diet, physical activity and health* emphasised further the need to improve diets in individuals and populations across the world².

The dietary changes which would help to reduce rates of coronary heart disease (CHD) in the UK population were detailed in the 1994 report of the Government's Committee on the Medical Aspects of Food and Nutrition Policy (COMA)³. This recommended a reduction in fat intake, particularly saturated fat intake, a reduction in sodium intake and an increase in fruit and vegetable and complex carbohydrate intake. In the 2003 report *Salt and Health*, the Scientific Advisory Committee on Nutrition (SACN) (which replaced COMA in 2000) repeated COMA's guidance on salt intake in adults and introduced additional guidance on reducing salt intake in children⁴. In 2005 the Government dietary objectives were reiterated in *Choosing a Better Diet: a food and health action plan*⁵.

Research from the World Health Organization and others highlighted the specific importance of low fruit and vegetable consumption as a cause of CHD. The World Health Report 2002 estimated that around 4% of all disease burden in developed countries was caused by low fruit and vegetable consumption, and that just under 30% of CHD and almost 20% of stroke in developed countries was due to fruit and vegetable consumption levels below 600g/day⁶. Other dietary causes of ill health such as high saturated fat intake or a high sodium intake are probably just as important as a low fruit and vegetable intake but the World Health Organization have yet to calculate the precise proportion of the disease burden due to such causes.

Public health targets

There are a number of public health targets and objectives for healthy diets in England, Wales and Scotland, but none have been set for Northern Ireland (Table 1.1). Salt consumption remains well above the levels recommended by SACN (Table 1.2 and Figure 1.2). A reduction in the salt content of processed foods and drinks is required if the target is to be met. Progress towards the targets for saturated fat, total fat, added sugar, fibre and fruit and vegetable consumption has been limited (Table 1.3 and Figures 1.3a, 1.3b and 1.3c).

Overall levels of consumption – sex and age differences

Levels of consumption of food and nutrients are fairly difficult to assess. The National Diet and Nutrition Survey (NDNS)⁷ provided data on food and nutrient consumption collected using a seven-day food diary. The 2000/01 NDNS suggested that the percentage of food energy derived from fat was around 36% in men and 35% in women compared with COMA's recommendation of 35%, and from saturated fat it was just over 13% for both men and women (compared with

the recommendation of 11%). In 2000/01 the NDNS reported that, on average, both men and women consumed fewer than three portions of fruit and vegetables a day – 2.7 for men and 2.9 for women (Table 1.2). Overall, just 13% of men and 15% of women consumed the recommended five or more portions of fruit and vegetables a day. These proportions increased with age: none of the men and just 4% of the women aged 19–24 years surveyed in the NDNS consumed five or more portions of fruit and vegetables, compared with 24% of men and 22% of women aged 50–64 years.

The NDNS used 24-hour urine collections to determine salt intake. Data from 2000/01 suggested that the average daily salt intake for men was 11.0g and for women 8.1g (Table 1.2 and Figure 1.2), both exceeding the SACN target of no more than 6g a day.

Temporal trends

Data from the National Food Survey (up to 2000) and the more recent Expenditure and Food Survey (2001/02 onwards)⁸ allow us to look at general trends in the British diet over time.

The percentage of total energy derived from total fat in the British diet is decreasing, but only gradually, from around 40% in 1975 to just less than 37% in 2004/05. The type of fat eaten has changed more significantly. The proportion of total energy derived from saturated fat fell from around 19% in 1975 to just less than 15% in 2004/05. Consumption of both non-milk extrinsic sugars⁹ and fibre has not changed markedly in the last ten years (Table 1.3 and Figure 1.3a).

The Expenditure and Food Survey included food purchased outside of the home for the first time in 2001/02, so only short term trends are available for such foods. The data showed that there had been a slight decrease in the consumption of total fat and salt in foods purchased outside the home over the past four years (Table 1.4).

The trends in fat consumption are associated with changes in food purchasing patterns. Since the 1970s there have been falls in the consumption of many different types of foods with a relatively high total fat and saturated fat content, including whole milk and butter. There have also been increases in the consumption of foods which are relatively low in total fat and/or saturated fat such as reduced fat milks and spreads (Table 1.5 and Figures 1.5a, 1.5b, 1.5d and 1.5e).

Data from the Expenditure and Food Survey showed that between 1975 and 2004/05 the combined consumption of fruit and vegetables rose only slightly (Fig 1.3c)¹⁰. Data from the National Food Survey and the Expenditure and Food Survey suggested that the total consumption of fresh fruit had increased around fourfold since the early 1940s, but total consumption of fresh vegetables had declined (Table 1.5 and Figure 1.5c).

Children and young people

The 1997 NDNS for children¹¹, which used similar data collection methods as the adult NDNS, found that for both boys and girls around 35% of food energy was derived from fat and around 14% from saturated fat. Fat intake for children met the COMA target of 35%, while saturated fat intake was well above the target of 11%. Non-milk extrinsic sugars provided over 16% of food energy for both boys and girls, well above the COMA target of 11% (Table 1.6).

The 1997 NDNS for children found fruit and vegetable consumption among children was low

with one in five children eating no fruit at all during the week of survey (Table 1.6). More recently the 2004 Health Survey for England^{12,13} assessed fruit and vegetable consumption in children aged 5–15 years. Overall, only 13% of boys and 12% of girls reported eating the recommended five portions of fruit and vegetables daily, and 10% reported eating no portions of fruit or vegetables in the previous day. There has been very little change in the amount of fruit and vegetables consumed by children since 2001 (Table 1.7).

The Health Behaviour in School-aged Children survey¹⁴ (conducted for the World Health Organization) asked school children from participating countries about their dietary habits. English children aged 15 reported a lower fruit consumption than younger children. There was no similar trend for vegetable consumption. Older children were also more likely to eat sweets and drink soft drinks every day than younger children and similar trends were observed in Scotland and Wales although children in Scotland reported higher consumption of all foods (Table 1.8).

In the UK school meals contribute significantly to the diets of children. Primary and secondary school meals in England were recently compared with the Caroline Walker Trust guidelines for healthy school meals^{15, 16, 17}. Primary schools meals were found to be broadly in line with the guidelines. In secondary schools, however, the average nutritional content of the consumed meals failed to meet the guidelines for fat, saturated fat, non-milk extrinsic sugars and fibre (Table 1.9). Primary school children were much more likely to select vegetables and salads (14% of all food selections) than secondary school children (2% of all selections). Secondary school children were more likely to select high fat main dishes (such as burger or pizza) than primary school children (18% of all selections, compared with 10%) (Table 1.10 and Figures 1.10a and 1.10b).

National and regional differences

The Expenditure and Food Survey showed that people in Northern Ireland, Scotland, Wales and the North of England consumed less fruit and vegetables than those in the South East, South West, East or London. For example, in 2004/05 people living in the South West consumed nearly 50% more fruit and vegetables (excluding potatoes) than people living in Northern Ireland. The consumption of table salt varied widely in the UK. Within England salt consumption appeared to be lower in London than in other regions. There appeared to be no regional differences in total fat, saturated fat and non-milk extrinsic sugars consumption (Table 1.11).

Socio-economic differences

The Expenditure and Food Survey suggested that while there was little difference in the fat and saturated fat intake of different socio-economic groups, more fruit and vegetable were consumed in higher socio-economic groups (Table 1.12). Similar patterns for fat and fruit and vegetables consumption were shown for income quintiles; people in the highest income quintile consumed 15% more fruit and vegetables than those in the lowest income quintile (Table 1.13).

Data from the 2000/01 NDNS showed that adults in receipt of state benefits consumed fewer portions of fruit and vegetables than those who did not receive benefits. About one third of those in benefit households (35% of men and 30% of women) ate no fruit at all during the week of the survey compared with around one in seven of those (19% men and 12% women) in non-benefit households.

Fruit and vegetable consumption also varied between socio-economic groups among children.

The 2002 Health Survey for England¹⁸ found that children living in managerial or professional households were most likely to eat five portions of fruit and vegetables and ate, on average, the highest number of portions.

Ethnic differences

The Expenditure and Food Survey for 2004/05 showed considerable variation in nutritional intake for different ethnic groups. The percentage of food energy derived from total fat was lower in Chinese people than in any other ethnic group. Intake of saturated fat in Asian, Black and Chinese people was much lower than for White people (under 12% of food energy, compared to 15%). Vegetable consumption was highest among Asian and Chinese populations while fruit consumption was highest among Mixed and Black/British populations. Salt consumption was below the target of 6g/day for all ethnic groups except the White population. The consumption of non-milk extrinsic sugars was lowest in the Asian and Chinese ethnic groups (Table 1.14).

International differences

Data for 2003 from the World Health Organization¹⁹ showed that the proportion of energy available from fat varied across European countries from 14% in Azerbaijan to 42% in France. The proportion of energy available from fat in UK diets (just over 35%) was lower than the EU-25 average of 37% but higher than the European average of 32% (Table 1.15 and Figure 1.15a).

The availability²⁰ of fruit and vegetables was generally higher in Southern European countries than Northern, Western, Central and Eastern European countries (Table 1.15 and Figure 1.15b).

There are no comparable international data for saturated fat and salt intakes.

Factors contributing to uptake of healthy diets

Many factors influence diet. Food choice is affected by the availability, composition, price and commercial promotion of foods, individual factors such as age, income, knowledge and attitudes as well as social factors such as government regulations and cultural conditions.

Recent studies about food choice focus on people's perceptions about preparing and eating meals. The Food Standards Agency (FSA)²¹ found that around 20% of people believed they had time to prepare a meal from raw ingredients at most once a week, and 14% of people ate a main meal with all household members at most once a week (Table 1.16).

In the UK, when food producers make claims such as 'cholesterol lowering' or 'low in fat', they must also provide a label indicating the nutritional quality of the product. In 2005 the FSA found that around a quarter of people rarely or never consulted nutritional information on food labels. Of those who did, the most regular piece of information sought was the fat content. Over 40% of consumers doubted the accuracy of label information and more than half queried the accuracy of health claims (Tables 1.17 and 1.18).

Almost two thirds of people surveyed by the FSA in 2005 agreed that people should eat less foods and drinks containing fat, sugar or salt. Even higher proportions agreed that people should eat more vegetables and salad (86%), and fruit (85%), although there was less agreement on fish (48%) (Table 1.19). Around two thirds of people (67%) were able to recall government advice

that a healthy diet should contain five or more portions of fruit and vegetables per day (Table 1.20).

The relatively high price of fruit and vegetables compared to processed foods or confectionery may be a barrier to a healthy diet. When purchase of food items as a proportion of total food expenditure was considered, people from the highest income group spent nearly 20% more on fruit and vegetables than those from the lowest income group. This social gradient was not found for the purchase of confectionery (Table 1.21 and Figure 1.21).

The inflation-adjusted price of fruit and vegetables has increased by around three times since 1975 compared with a four-fold increase for all foods over the same period. This suggests that fruit and vegetables are less expensive today when compared against all other foods, but more expensive when compared to the cost of living (Table 1.22).

Food advertising may also affect food choices. Advertising can be measured using ‘impacts’; an ‘impact’ being equivalent to one audience member viewing one advertisement. In 2005 Ofcom²² estimated that there were 5 billion ‘impacts’ for food advertisements during children’s viewing time. This was the second highest number of impacts during children’s viewing time behind leisure equipment and included one billion impacts for chain restaurants, 1.1 billion impacts for confectionery and 1.2 billion impacts for cereals (Table 1.23). Food advertising during children’s viewing time comprised advertisements for prepared and convenience foods (26%), confectionery (20%), dairy products (17%) and chain restaurants (12%) (Table 1.24 and Figure 1.24).

Alongside advertising, foods can also be promoted by price reduction campaigns. Recent data collected by the National Consumer Council²³ showed how the top nine UK supermarkets each ran such price promotions on at least as many fatty and sugary foods as on fruit and vegetables in 2005 (Table 1.25 and Figure 1.25).

Economic costs

Diseases attributable in some part to a poor diet include cardiovascular disease, diabetes and some cancers. It was estimated that six billion pounds of direct costs to the NHS could be avoided each year if all members of the population consumed a healthy diet (Table 1.26).

1. World Health Organization (2003) *Diet, Nutrition and the prevention of chronic diseases. Report of a Joint AHO/FAO Expert Consultation.* World Health Organization: Geneva.
2. World Health Organization (2004) *Global strategy on diet and physical activity.* World Health Organization: Geneva. See www.who.int/gb/ebwha/pdf_files/WHA57/A57_9-en.pdf
3. Department of Health (1994) *Nutritional Aspects of Cardiovascular Disease. Report of the Cardiovascular Review Group of the Committee on Medical Aspects of Food Policy.* HMSO: London
4. Scientific Advisory Committee on Nutrition (2003) *Salt and Health.* The Stationery Office: London. See www.sacn.gov.uk/pdfs/sacn_salt_final.pdf
5. Department of Health (2005) *Choosing a better diet: a food and health action plan.* Department of Health: London. See www.dh.gov.uk/assetRoot/04/10/57/09/04105709.pdf
6. World Health Organization (2002) *The World Health Report 2002. Reducing Risks, Promoting Healthy Life.* World Health Organization: Geneva.
7. Office of National Statistics (2003) *The National Diet and Nutrition Survey: adults aged 19 to 64 years. Volumes 1–4.* The Stationery Office: London.
8. Office for National Statistics (2006) *Expenditure and Food Survey 2004/05.* The Stationery Office: London.
9. *Extrinsic sugars refer to sugars that are not contained within the cell walls of fruit, vegetables and plants. Non-milk extrinsic sugars refer to such sugars that are not naturally present in milk. Almost all sugar added to processed food consists of non-milk extrinsic sugars, which are more strongly associated with dental caries than all other sugars.*

10. *Food purchase data do not accurately describe food consumption patterns as not all food that is bought is consumed due to wastage. Levels of wastage may be different for different food types, so comparisons across food categories are tricky.*
11. *Office for National Statistics (2000) The National Diet and Nutrition Survey: young people aged 4 to 18 years. HMSO: London.*
12. *Department of Health (2005) Health Survey for England 2004. The Stationary Office: London.*
13. *Parents of children aged 12 years and under answered questions on fruit and vegetable consumption on behalf of the child, those aged 13–15 years answered the questions themselves.*
14. *World Health Organization (2004) Young people's health in context. Health Behaviour in School-aged Children (HBSC) study: international report from the 2001/02 survey. World Health Organization: Geneva.*
15. *Crawley, H. (2005). Nutrient-based standards for school food: A summary of the standards and recommendations of the Caroline Walker Trust and the National Heart Forum. The Caroline Walker Trust: St Austell. See <http://www.cwt.org.uk/pdfs/eatingwell.pdf>*
16. *Nelson M, Nicholas J, Suleiman S, Davies O, Prior G, Hall L, Wreford S, Poulter J (2006) School meals in primary schools in England. Department for Education and Skills: London.*
17. *Nelson M, Bradbury J, Poulter J, McGee A, Msebele S, Jarvis L (2004) School meals in secondary schools in England. Department for Education and Skills: London.*
18. *Department of Health (2003) Health Survey for England 2002: The Health of Children and Young people. The Stationery Office: London.*
19. *World Health Organization (2005) European Health for All database. See <http://www.euro.who.int/hfad>*
20. *The WHO definition of food availability refers to the amount produced nationally plus imports minus exports.*
21. *TNS (2006) Consumer attitudes to food standards 2005. Food Standards Agency: London.*
22. *Ofcom (2006) Television advertising of food and drink products to children: options for new restrictions. Ofcom: London.*
23. *Dibb S (2005) Healthy competition: how supermarkets can affect your chances of a healthy diet. National Consumer Council: London.*

Table 1.1 Selected dietary targets and objectives for the United Kingdom

ENGLAND¹	
Total fat	To maintain the average total intake of fat at 35% of food energy
Saturated fat	To reduce the average total intake of saturated fat to 11% of food energy
Fruit and vegetables	To increase the average consumption of a variety of fruit and vegetables to at least five portions per day
Fibre	To increase the average intake of dietary fibre to 18 grams per day
Sugar	To reduce the average intake of added sugar to 11% of food energy
Salt	To reduce the average intake of salt to 6 grams per day by 2010
SCOTLAND²	
Total fat	To reduce the average percentage of food energy from total fat to no more than 35% by the year 2005
Saturated fat	To reduce the average percentage of food energy from saturated fatty acids to no more than 11% by the year 2005
Fruit and vegetables	To double the average intake of fruit and vegetables to more than 400g per day by the year 2005
Salt	To reduce the average intake of salt from 9.6g to 6g per day by the year 2005
WALES³	
Total fat	35% of food energy
Saturated fat	10% of total energy
Fruit and vegetables	At least five portions per day
Starchy food	37% of total dietary intake
Sugar	Average intake of non-milk extrinsic sugars not to exceed 60g/day
Salt	Reduce average intake to 6 grams per day
NORTHERN IRELAND	
No targets set	

Sources: 1. Department of Health (2005) *Choosing a Better Diet: a food and health action plan*. DH: London.
 2. The Scottish Office (1996) *Eating for Health. A Diet Action Plan for Scotland*. The Scottish Office: Edinburgh.
 3. Food Standards Agency Wales (2003) *Food and well being: reducing inequalities through a nutrition strategy for Wales*. FSA Wales: Cardiff.

Table 1.2 Consumption of selected nutrients and fruit and vegetables by sex and age, adults aged 19-64, 2000/01, Great Britain

	19-24	25-34	35-49	50-64	All	Target	Source
MEN							
Energy (kcal/d)	2,247	2,337	2,361	2,271	2,313	2,550	EAR*
Total fat (g/d)	85.8	87.1	88.3	84.5	86.5		
Total fat (% food energy)	36.0	35.8	35.9	35.6	35.8	35.0	DRV*
Saturated fat (g/d)	32.3	32.2	33.4	32.0	32.5		
Saturated fat (% food energy)	13.5	13.2	13.5	13.4	13.4	11.0	DRV*
Monounsaturated fatty acids (g/d)	29.6	29.9	29.6	27.9	29.1		
Monounsaturated fatty acids (% food energy)	12.4	12.3	12.0	11.8	12.1	13.0	DRV*
Polyunsaturated fatty acids (g/d)	14.7	15.4	15.4	14.9	15.2		
Polyunsaturated fatty acids (% food energy)	6.2	6.4	6.4	6.3	6.4	6.5	DRV*
n-3 fatty acids (g/d)	2.1	2.3	2.3	2.3	2.3		
n-3 fatty acids (% food energy)	0.9	1.0	1.0	1.0	1.0	0.2	DRV individual minimum*
Trans fatty acids (g/d)	3.0	2.9	3.0	2.9	2.9		
Trans fatty acids (% food energy)	1.2	1.2	1.2	1.2	1.2	2.0	DRV*
Protein (g/d)	77.8	90.6	90.1	88.8	88.2	55.5	RNI*
Total carbohydrate (g/d)	273	277	279	269	275		
Total carbohydrate (% food energy)	49.0	47.7	47.5	47.4	47.7	50.0	DRV*
Non-milk extrinsic sugars (g/d)	96	80	78	70	79		
Non-milk extrinsic sugars (% food energy)	17.4	13.9	13.1	12.2	13.6	11.0	DRV*
Non-starch polysaccharide fibre (g/d)	12.3	14.6	15.7	16.4	15.2	18.0	DRV*
Sodium (g/d)	4.4	4.6	4.4	4.2	4.4	2.4	GDA†
Salt (g/d)	11.0	11.4	11.1	10.5	11.0	6.0	GDA†
Calcium (mg/d)	867	1,030	1,049	1,035	1,016	700	RNI*
Iron (mg/d)	11.5	13.9	14.1	15.2	14.0	8.7	RNI*
Folate (µg/d)	305	376	355	373	359	200	RNI*
Fruit and vegetables (portions/d)	1.3	2.2	3.0	3.6	2.7	5.0	5 A DAY benchmark‡
Unweighted base	61	160	303	242	766		
Unweighted base (sodium and salt)	38	120	259	199	616		
WOMEN							
Energy (kcal/d)	1,665	1,570	1,654	1,642	1,632	1,940	EAR*
Total fat (g/d)	63.9	59.8	61.9	61.2	61.4		
Total fat (% food energy)	35.5	35.4	34.7	34.5	34.9	35.0	DRV*
Saturated fat (g/d)	23.5	22.4	23.6	23.7	23.3		
Saturated fat (% food energy)	12.9	13.2	13.2	13.3	13.2	11.0	DRV*
Monounsaturated fatty acids (g/d)	21.8	19.9	20.2	19.7	20.2		
Monounsaturated fatty acids (% food energy)	12.2	11.7	11.3	11.1	11.5	13.0	DRV*
Polyunsaturated fatty acids (g/d)	11.8	11.0	11.2	10.6	11.1		
Polyunsaturated fatty acids (% food energy)	6.6	6.6	6.3	6.1	6.3	6.5	DRV*
n-3 fatty acids (g/d)	1.7	1.6	1.7	1.8	1.7		
n-3 fatty acids (% food energy)	1.0	1.0	1.0	1.1	1.0	0.2	DRV individual minimum*
Trans fatty acids (g/d)	2.0	1.9	2.1	2.1	2.0		
Trans fatty acids (% food energy)	1.1	1.1	1.2	1.2	1.2	2.0	DRV*
Protein (g/d)	59.9	58.7	65.1	67.4	63.7	45.0	RNI*
Total carbohydrate (g/d)	206	196	206	203	203		
Total carbohydrate (% food energy)	49.1	48.7	48.6	48.1	48.5	50.0	DRV*
Non-milk extrinsic sugars (g/d)	60	49	51	48	51		
Non-milk extrinsic sugars (% food energy)	14.2	11.8	11.8	11.0	11.9	11.0	DRV*
Non-starch polysaccharide fibre (g/d)	10.6	11.6	12.8	14.0	12.6	18.0	DRV*
Sodium (g/d)	3.6	3.5	3.2	3.0	3.2	2.4	GDA†
Salt (g/d)	9.1	8.7	8.0	7.5	8.1	6.0	GDA†
Calcium (mg/d)	706	736	814	903	809	700	RNI*
Iron (mg/d)	10.0	9.8	12.9	12.3	11.6	14.8	RNI*
Folate (µg/d)	248	249	280	359	292	200	RNI*
Fruit and vegetables (portions/d)	1.8	2.4	2.9	3.8	2.9	5.0	5 A DAY benchmark‡
Unweighted base	78	211	379	290	958		
Unweighted base (sodium and salt)	57	158	299	228	742		

Notes: Estimates derived from 7-day dietary record, and urine analysis (salt and sodium only). All absolute levels (except sodium, salt and fruit and vegetables) are subject to under-reporting by approximately 25%.

DRV = Dietary Reference Value; EAR = Estimated Average Requirement; RNI = Reference Nutrient Intake; GDA = Guideline Daily Amount

All targets are for populations, unless otherwise stated. Salt = sodium x 2.5. Data are weighted for non-response.

All targets for adults aged 19-64 except energy, protein and iron (women only) which relate to adults aged 19-50.

Sources: Office for National Statistics (2002) *The National Diet and Nutrition Survey: adults aged 19 to 64 years. Volume 1.* HMSO: London

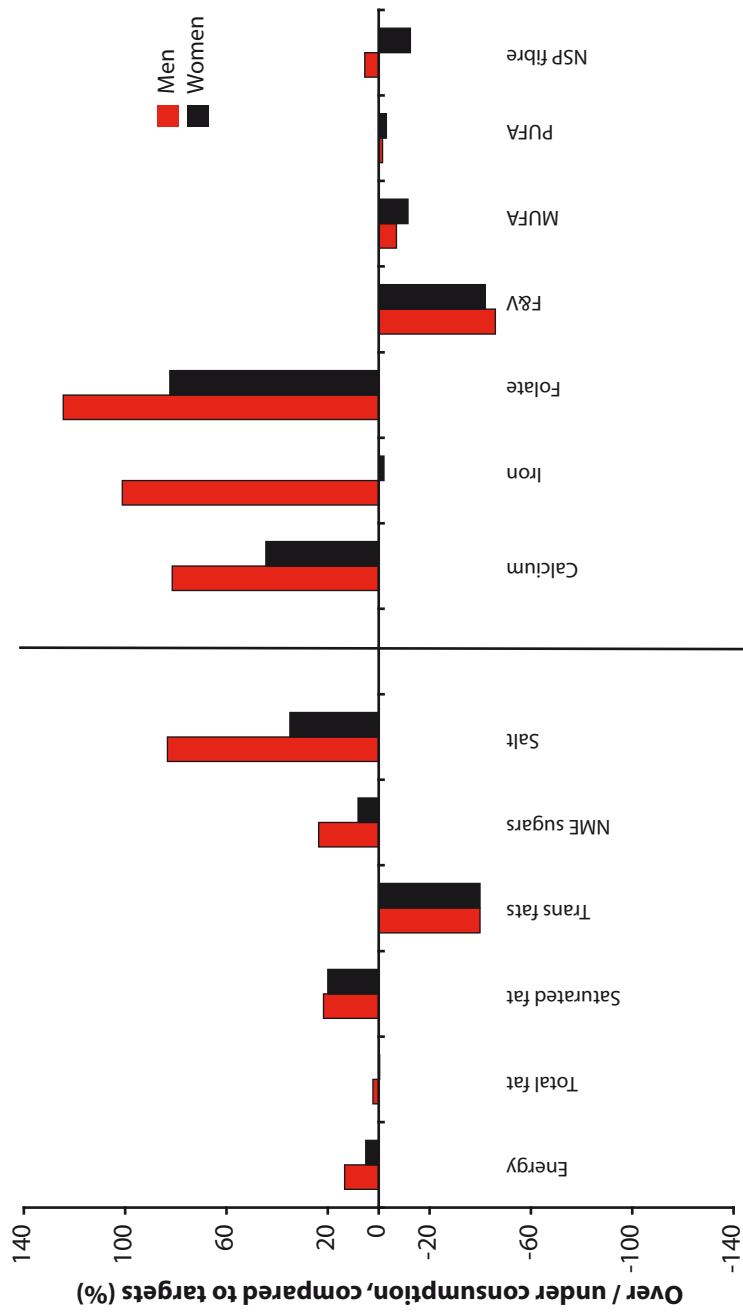
Office for National Statistics (2003) *The National Diet and Nutrition Survey: adults aged 19 to 64 years. Volumes 2 and 3.* HMSO: London

*Department of Health (1991) *Dietary reference values for food energy and nutrients for the United Kingdom.* HMSO: London

† Scientific Advisory Committee on Nutrition (2003) *Salt and health.* HMSO: London

‡ Department of Health (2004) *Choosing health: making healthy choices easier.* DoH: London

Fig 1.2 *Percentage difference between recommended and actual intake by sex and nutrient, adults aged 19-64, 2000/01, Great Britain*



Note: Absolute levels of consumption have been increased by 25% to account for under-reporting (except for salt and fruit and vegetables).

Table 1.3 Consumption of total fat, saturated fat, salt, sugar, fibre and fruit and vegetables, adults aged 16 and over, 1975-2004/05, Great Britain

<i>Consumption per person per day, total diet (i.e. including alcohol)</i>	1975	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001/02	2002/03	2003/04	2004/05
Energy (kcal)	2,489	2,439	2,208	2,058	2,143	2,241	2,168	2,102	2,056	2,152	2,089	2,099	2,077	2,048
Energy (kJ)	10.4	10.3	9.3	8.6	9.0	9.4	9.1	8.8	8.6	9.0	8.8	8.8	8.7	8.6
Fat (g)	111.7	112.0	102.1	93.5	89.1	93.5	89.0	85.9	82.7	86.2	85.7	85.4	84.8	83.4
Fat (% total energy)	40.4	41.3	41.6	40.9	37.4	37.6	36.9	36.8	36.2	36.1	36.9	36.6	36.7	36.7
Saturated fat (g)	53.4	49.1	43.0	37.2	35.5	36.8	35.4	34.3	32.8	34.6	33.9	33.7	33.6	32.9
Saturated fat (% total energy)	19.3	18.1	17.5	16.3	14.9	14.8	14.7	14.7	14.4	14.5	14.6	14.4	14.6	14.5
Total sugars (g)	*	*	*	*	129.0	134.0	130.0	125.0	123.0	131.0	122.3	123.7	124.3	122.5
Non-milk extrinsic sugars (g)	*	*	*	*	87.0	91.0	88.0	84.0	82.0	88.0	80.9	82.0	81.5	80.0
Non-milk extrinsic sugars (% total energy)	*	*	*	*	15.2	15.2	15.2	15.0	15.0	15.3	14.5	14.7	14.7	14.7
Non-starch polysaccharide fibre (g)	*	*	*	*	12.8	13.7	13.6	13.4	13.2	13.9	13.3	13.5	13.1	13.2
Sodium (g)	*	*	2.80	2.73	2.80	2.92	2.88	2.81	2.79	2.90	2.87	2.81	2.75	2.71
Salt (g)	*	*	7.00	6.83	7.00	7.30	7.20	7.03	6.98	7.25	7.17	7.03	6.87	6.77
Purchase per person per week														
Fruit and vegetables (excluding potatoes) (g)	1,818	2,059	2,018	2,164	2,254	2,334	2,369	2,329	2,322	2,381	2,248	2,306	2,269	2,274

Notes: Data pre-1996 are unadjusted National Food Survey data. 2001/02 data onwards are Expenditure and Food Survey data. 1996 to 2000 data are adjusted estimates from the National Food Survey. Because of the discontinuity between datasets, these trends need to be interpreted with caution. Consumption assumed from purchase data.

Sources: Office for National Statistics (2006) Expenditure and Food Survey 2004/05. The Stationery Office. London and previous editions
 Department for Environment, Food and Rural Affairs (2003) National Food Survey 2000. The Stationery Office. London and previous editions.

Fig 1.3a Consumption of total fat, saturated fat and NME sugars, adults aged 16 and over, 1975-2004/05, Great Britain, with "Choosing a Better Diet" targets

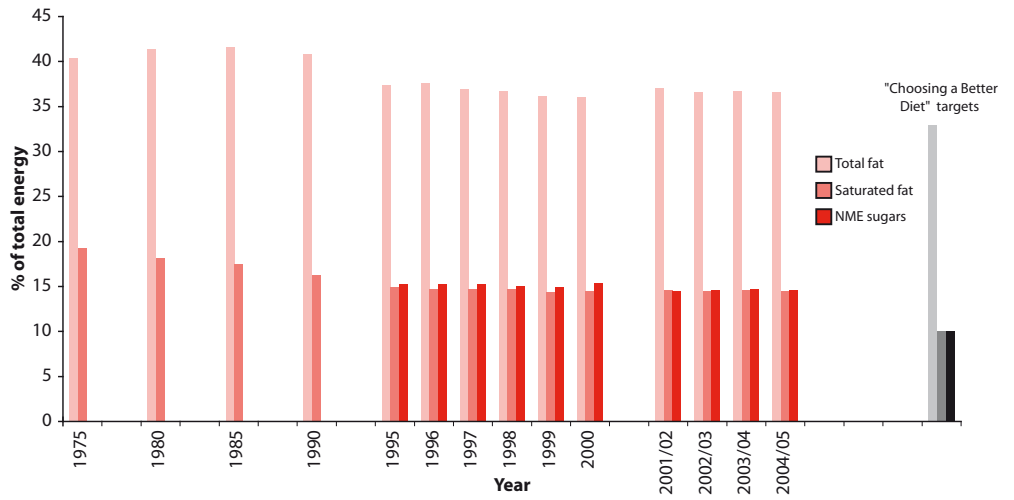


Fig 1.3b Consumption of fibre, adults aged 16 and over, 1975-2004/05, Great Britain, with COMA target

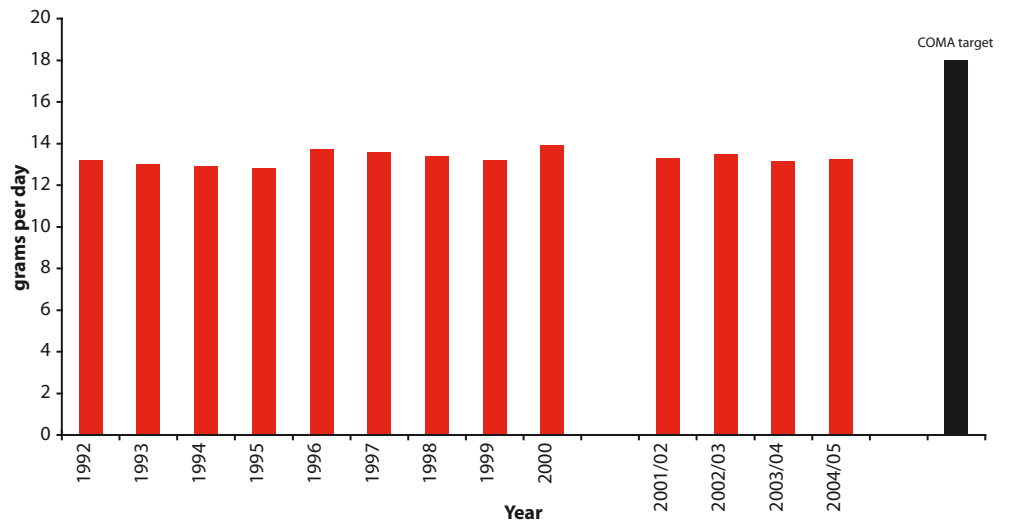


Fig 1.3c *Consumption of fruit and vegetables, adults aged 16 and over, 1975-2004/05, Great Britain, with 5-a-day benchmark*

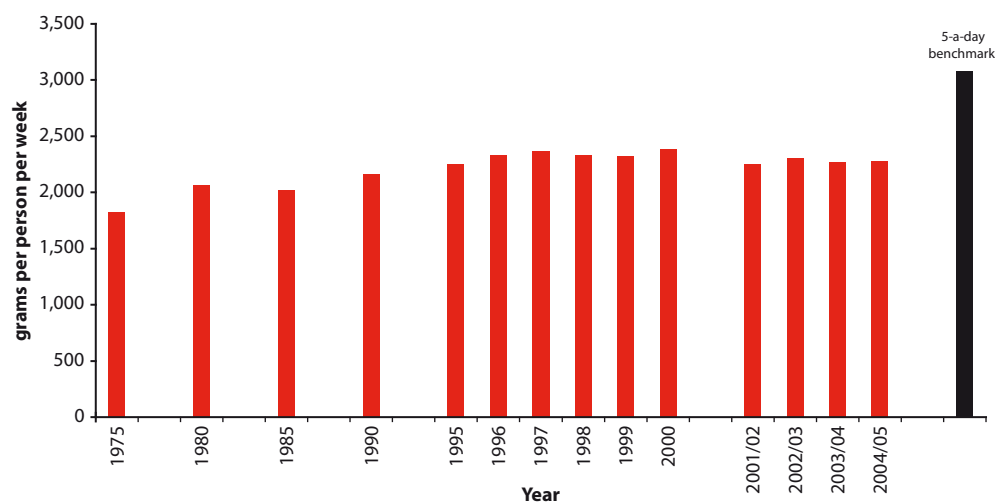


Table 1.4 *Consumption of total fat, saturated fat, salt, sugar and fibre from foods consumed outside of the home, adults aged 16 and over, 2001/02-2004/05, Great Britain*

<i>Consumption per person per day</i>	2001/02	2002/03	2003/04	2004/05
Energy (kcal)	212	210	205	191
Energy (kJ)	0.9	0.9	0.9	0.8
Fat (g)	7.9	7.9	7.7	7.2
Fat (% total energy)	33.5	33.9	33.8	33.9
Fat (% food energy)	39.1	39.3	39.4	39.3
Saturated fat (g)	2.8	2.8	2.7	2.5
Saturated fat (% total energy)	11.9	12.0	11.9	11.8
Saturated fat (% food energy)	13.7	13.8	13.8	13.7
Total sugars (g)	12.3	12.1	11.8	10.7
Non-milk extrinsic sugars (g)	10.6	10.5	10.2	9.2
Non-milk extrinsic sugars (% total energy)	18.8	18.8	18.7	18.1
Non-milk extrinsic sugars (% food energy)	21.8	21.6	21.6	20.8
Non-starch polysaccharide fibre (g)	1.0	0.9	0.9	0.9
Sodium (g)	0.22	0.23	0.23	0.21
Salt (g)	0.55	0.58	0.58	0.53

Notes: 'Total energy' implies the complete diet; 'food energy' implies the complete diet minus alcohol.
Sodium does not include sodium from table salt.
Consumption assumed from purchase data.

Source: Office for National Statistics (2006) *Expenditure and Food Survey 2004/05*. The Stationery Office: London

Table 1.5 Consumption of selected foods, 1942-2004/05, United Kingdom

	1942	1945	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000	2004/05
<i>Litres per person per week</i>														
Liquid wholemilk	1.98	2.34	2.72	2.73	2.75	2.76	2.63	2.71	2.37	1.90	1.24	0.82	0.68	0.49
Skimmed milks								0.01	0.02	0.25	0.73	1.12	1.16	1.13
Yoghurt								0.03	0.06	0.08	0.11	0.15	0.16	0.19
Total milk and cream	2.14	2.52	2.94	2.89	2.92	2.95	2.89	2.98	2.68	2.41	2.23	2.24	2.16	1.98
<i>Number per person per week</i>														
Eggs	1.4	3.0	3.5	4.2	4.6	4.8	4.7	3.8	3.4	2.9	2.0	1.7	1.6	1.6
<i>Grams per person per week</i>														
Natural cheese				70	75	81	92	99	103	103	105	98	97	96
Processed cheese				10	11	10	10	8	6	7	9	10	12	14
Total cheese	101	71	72	80	86	91	102	107	110	111	113	108	109	110
Oranges and other citrus fruits		75	93	108	124	122	142	143	153	119	136	136	137	145
Apples and pears			201	190	230	231	234	219	260	235	249	233	235	220
Bananas			37	83	96	101	85	85	91	83	130	184	214	217
Total fresh fruit	197	318	409	457	522	533	543	511	608	540	624	693	765	805
Fruit juice (ml)			7	8	14	19	17	42	97	165	225	272	332	280
Total other fruit			97	156	162	173	163	185	152	120	113	103	92	83
Total fruit	197	318	513	621	698	725	723	738	857	825	962	1,068	1,189	1,168
Fresh green vegetables	438	517	392	415	430	407	372	341	366	287	287	233	246	225
Other fresh vegetables	450	442	433	415	427	406	394	405	466	461	475	486	506	536
Total fresh vegetables (excludes potatoes)	888	959	825	830	857	813	766	746	832	748	762	719	752	761
All processed vegetables (includes frozen & canned)	136	188	214	224	260	304	382	506	554	625	638	697	671	597
Fresh potatoes	1,877	1,863	1,759	1,698	1,588	1,509	1,470	1,257	1,176	1,175	1,008	810	727	570
Bread	1,718	1,752	1,637	1,563	1,289	1,151	1,080	1,029	949	947	859	818	782	695
Flour	181	176	206	243	192	173	161	156	169	121	95	60	69	55
Cakes, buns and pastries			190	158	179	191	161	173	153	141	146	173	187	164
Biscuits (includes crispbreads)	74	82	104	145	161	165	163	211	205	198	199	181	189	165
Breakfast cereals	23	26	40	48	51	56	78	82	94	109	121	127	135	131
Total cereals (excludes breads)	593	672	678	706	711	729	711	649	655	638	692	775	846	827
Bread and cereal products	2,310	2,424	2,315	2,269	2,000	1,880	1,791	1,678	1,604	1,585	1,551	1,593	1,628	1,522
Sugar	238	259	287	500	503	498	480	394	392	294	211	169	130	99
Preserves	140	155	179	116	91	85	73	76	63	58	52	43	37	35
Tea			61	79	79	74	73	66	62	53	46	42	36	31
Coffee			6	10	11	12	16	19	20	21	19	18	16	16
Total beverages	77	100	101	101	98	102	103	99	90	84	74	70	56	
Fresh white fish			89	90	67	64	50	37	32	28	24	20	15	18
Fresh fatty fish			16	11	9	7	6	5	7	7	8	10	14	16
Shell fish			3	3	3	2	1	2	3	4	5	6	6	11
Takeaway fish			29	23	24	28	29	18	20	16	15	14	7	11
Total fish and fish products	187	261	188	169	166	164	152	128	137	140	147	147	144	158
Salt					26	25	28	25	32	27	15	13	9	9
Butter	56	61	129	127	161	173	170	147	106	74	42	34	37	35
Margarine	118	119	112	133	104	86	81	78	115	113	96	43	22	11
Low fat spreads									14	27	27	22	23	
Reduced fat spreads											20	48	50	44
Lard	50	43	56	62	58	60	63	62	57	45	25	14	7	4
Total fats	245	245	329	337	339	336	339	315	324	293	265	227	193	182
Beef and veal	230	179	228	265	248	229	221	215	208	167	134	109	113	123
Mutton and lamb	150	173	154	186	188	167	149	119	128	92	82	54	54	50
Pork	11	40	9	66	57	79	80	79	118	98	84	71	68	56
Bacon and ham	112	100	128	172	175	179	177	137	145	132	115	111	109	113
Poultry			10	14	50	100	143	160	170	177	204	217	235	246
Sausages	113	110	114	99	103	106	106	99	100	92	74	68	66	67
Total meat and meat products	746	746	846	976	1,017	1,066	1,121	1,055	1,160	1,069	999	986	1,014	1,049
Soft drinks, low calorie (ml)												504	516	441
Soft drinks, not low calorie (ml)												1,150	1,184	1,391
Total soft drinks (ml)												1,654	1,699	1,832
Chocolate bars												87	113	90
Confectionery												125	151	131

Notes: Men and women aged 16 and above. Figures differ from actual food and drink consumption for a number of reasons e.g. food may be discarded during food preparation (e.g. vegetable peelings), food may be left on the plate at the end of a meal or food may become inedible before it can be consumed and is therefore thrown away.

Data for 1942 to 1970 from non-adjusted National Food Survey (GB only). Data for 1975 to 1995 from adjusted National Food Survey (GB only). Data for 1996 to 2000 from adjusted National Food Survey (UK). Data for 2004/05 from Expenditure and Food Survey (UK). Because of the discontinuity between datasets, these trends need to be interpreted with caution.

Sources: Office for National Statistics (2006) Expenditure and Food Survey 2004/05. The Stationery Office: London, and previous editions.

Department for Environment, Food and Rural Affairs (2001) National Food Survey 2000. The Stationery Office: London, and previous editions.

Fig 1.5a Consumption of fats, 1942-2004/05, United Kingdom

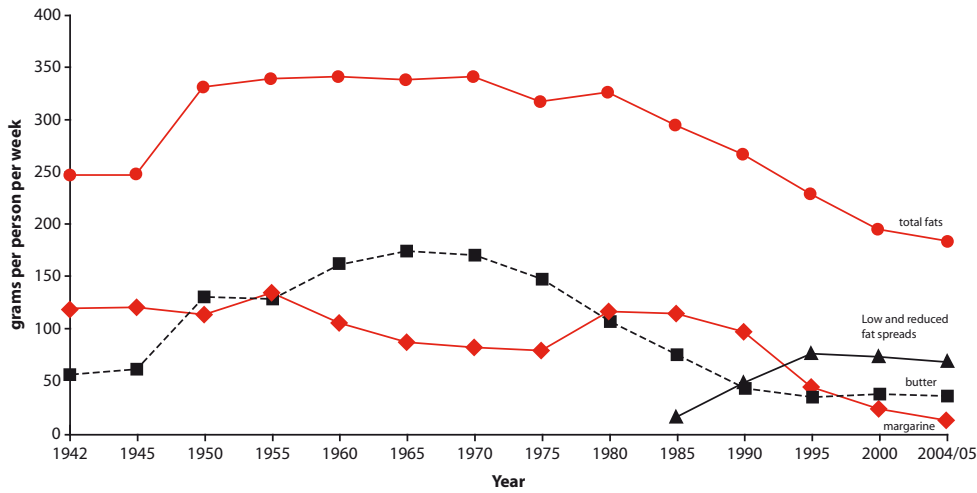


Fig 1.5b Consumption of milk and milk products, 1942-2004/05, United Kingdom

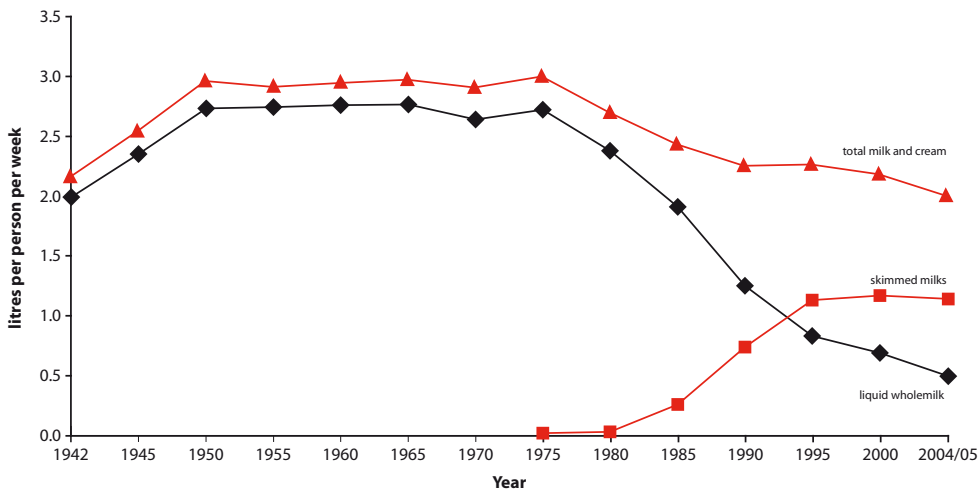


Fig 1.5c Consumption of fresh fruit and vegetables, 1942-2004/05, United Kingdom

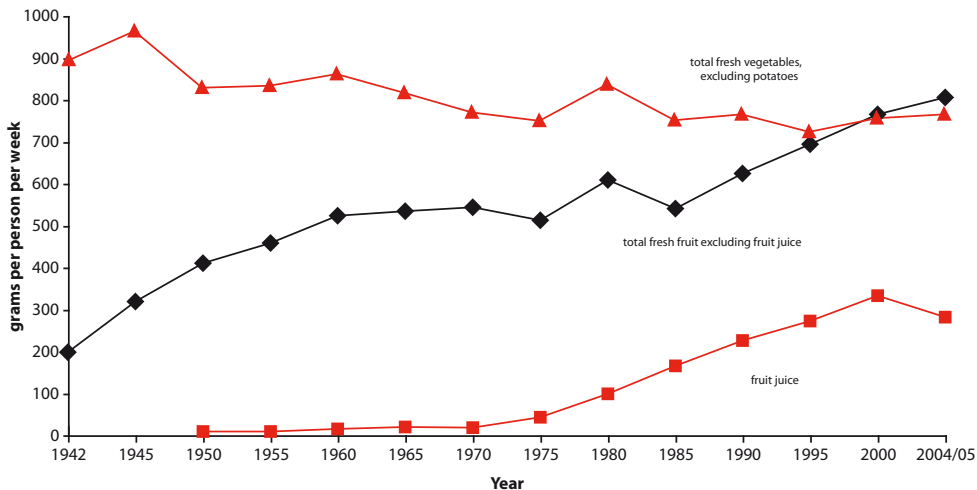


Fig 1.5d Consumption of soft drinks, 1992-2004/05, United Kingdom

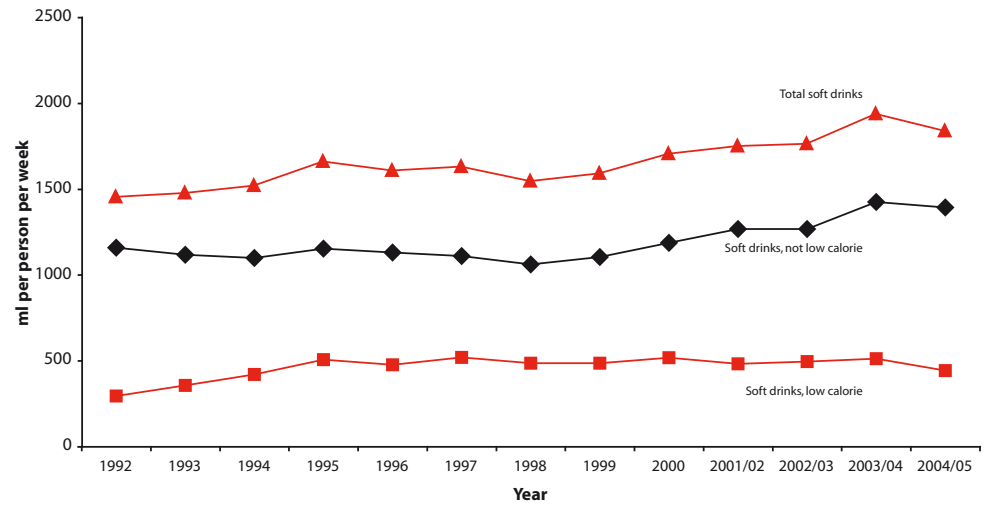


Fig 1.5e Consumption of confectionery, 1992-2004/05, United Kingdom

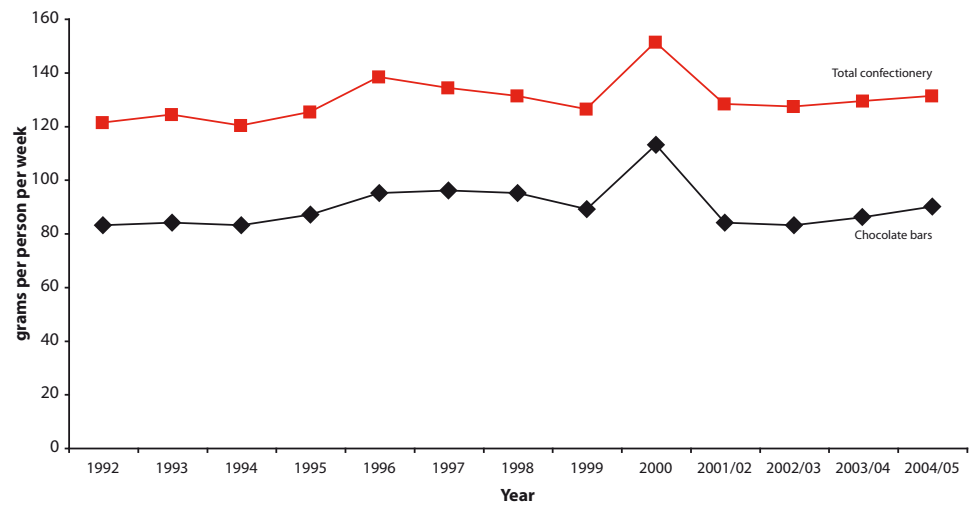


Table 1.6 Consumption of selected nutrients and fruit and vegetables by sex and age, young people aged 4-18, 1997, Great Britain

	4-6	7-10	11-14	15-18	All	Target				Source
						4-6	7-10	11-14	15-18	
BOYS										
Energy (kcal/d)	1,520	1,777	1,968	2,285	1,905	1,715	1,970	2,220	2,755	EAR*
Total fat (g/d)	60.1	69.8	77.2	89.0	74.7					
Total fat (% food energy)	35.5	35.2	35.2	35.9	35.4	35.0	35.0	35.0	35.0	DRV*
Saturated fat (g/d)	25.1	28.3	30.3	34.7	29.8					
Saturated fat (% food energy)	14.8	14.3	13.8	13.9	14.2	11.0	11.0	11.0	11.0	DRV*
Monounsaturated fatty acids (g/d)	19.4	22.8	25.6	29.6	24.6					
Monounsaturated fatty acids (% food energy)	11.5	11.5	11.7	12.0	11.7	13.0	13.0	13.0	13.0	DRV*
Polyunsaturated fatty acids (g/d)	9.3	11.3	13.3	15.5	12.5					
Polyunsaturated fatty acids (% food energy)	5.5	5.7	6.1	6.3	5.9	6.5	6.5	6.5	6.5	DRV*
n-3 fatty acids (g/d)	1.3	1.6	2.0	2.2	1.8					
n-3 fatty acids (% food energy)	0.8	0.8	0.9	0.9	0.8	0.2	0.2	0.2	0.2	DRV individual minimum*
Trans fatty acids (g/d)	2.3	2.7	2.9	3.5	2.9					
Trans fatty acids (% food energy)	1.3	1.4	1.3	1.4	1.4	2.0	2.0	2.0	2.0	DRV*
Protein (g/d)	49.0	54.8	64.0	76.5	61.6	19.7	28.3	42.1	55.2	RNI*
Total carbohydrate (g/d)	209	248	271	301	260					
Total carbohydrate (% food energy)	51.6	52.4	51.7	50.5	51.6	50.0	50.0	50.0	50.0	DRV*
Non-milk extrinsic sugars (g/d)	66	83	90	97	85					
Non-milk extrinsic sugars (% food energy)	16.2	17.5	16.9	15.8	16.7	11.0	11.0	11.0	11.0	DRV*
Non-starch polysaccharide fibre (g/d)	9.1	10.3	11.6	13.3	11.2					
Sodium from food sources only (g/d)	2.1	2.4	2.7	3.3	2.6	1.2	2.0	2.4	2.4	GDA†
Salt from food sources only (g/d)	5.2	6.0	6.7	8.2	6.6	3.0	5.0	6.0	6.0	GDA†
Calcium (mg/d)	706	741	799	878	784	450	550	1,000	1,000	RNI*
Iron (mg/d)	8.3	9.8	10.8	12.6	10.5	6.1	8.7	11.3	11.3	RNI*
Folate (µg/d)	192	213	247	309	242	100	150	200	200	RNI*
Fruit and vegetables (g/d)	123	120	115	137	124	~300	~350	~400	~400	5 A DAY benchmark‡
Unweighted base	184	256	237	179	856					
GIRLS										
Energy (kcal/d)	1,397	1,598	1,672	1,622	1,582	1,545	1,740	1,845	2,110	EAR*
Total fat (g/d)	55.9	63.8	67.2	64.0	63.1					
Total fat (% food energy)	35.9	35.9	36.1	35.9	35.9	35.0	35.0	35.0	35.0	DRV*
Saturated fat (g/d)	23.8	25.7	26.2	24.7	25.2					
Saturated fat (% food energy)	15.3	14.5	14.0	13.8	14.3	11.0	11.0	11.0	11.0	DRV*
Monounsaturated fatty acids (g/d)	17.8	20.9	22.4	20.9	20.6					
Monounsaturated fatty acids (% food energy)	11.5	11.8	12.0	11.7	11.8	13.0	13.0	13.0	13.0	DRV*
Polyunsaturated fatty acids (g/d)	8.4	10.5	11.8	11.8	10.7					
Polyunsaturated fatty acids (% food energy)	5.4	5.9	6.4	6.7	6.1	6.5	6.5	6.5	6.5	DRV*
n-3 fatty acids (g/d)	1.2	1.4	1.7	1.6	1.5					
n-3 fatty acids (% food energy)	0.7	0.8	0.9	0.9	0.8	0.2	0.2	0.2	0.2	DRV individual minimum*
Trans fatty acids (g/d)	2.1	2.5	2.5	2.3	2.4					
Trans fatty acids (% food energy)	1.3	1.4	1.3	1.3	1.3	2.0	2.0	2.0	2.0	DRV*
Protein (g/d)	44.5	51.2	52.9	54.8	51.2	19.7	28.3	41.2	55.2	RNI*
Total carbohydrate (g/d)	191	218	228	214	214					
Total carbohydrate (% food energy)	51.4	51.3	51.2	50.6	51.1	50.0	50.0	50.0	50.0	DRV*
Non-milk extrinsic sugars (g/d)	66	72	73	66	69					
Non-milk extrinsic sugars (% food energy)	17.6	16.7	16.2	15.3	16.4	11.0	11.0	11.0	11.0	DRV*
Non-starch polysaccharide fibre (g/d)	8.0	9.8	10.2	10.6	9.7					
Sodium from food sources only (g/d)	1.9	2.2	2.3	2.3	2.2	1.2	2.0	2.4	2.4	GDA†
Salt from food sources only (g/d)	4.6	5.4	5.7	5.7	5.4	3.0	5.0	6.0	6.0	GDA†
Calcium (mg/d)	657	656	641	653	652	450	550	800	800	RNI*
Iron (mg/d)	7.4	8.5	9.1	8.9	8.5	6.1	8.7	14.8	14.8	RNI*
Folate (µg/d)	171	190	210	215	197	100	150	200	200	RNI*
Fruit and vegetables (g/d)	123	137	117	154	134	~300	~350	~400	~400	5 A DAY benchmark‡
Unweighted base	172	225	238	210	845					

Notes: Estimates derived from 7-day dietary record. All absolute levels are subject to under-reporting, although the exact level of under-reporting is not clear. Sodium and salt levels do not include salt added during cooking or at the table. Salt = sodium x 2.5. Data are weighted for non-response. DRV = Dietary Reference Value; EAR = Estimated Average Requirement; RNI = Reference Nutrient Intake; GDA = Guideline Daily Amount. All targets are for populations, unless otherwise stated. Targets that are relative to energy intake are for an adult diet, which is recommended to begin between the ages of 2 and 5 years. There are no specific recommendations for NSP fibre intake for young people. However, COMA recommend that NSP fibre intake should be proportionate to body weight, and that the adult population target is 18g/day. Young people are recommended to eat five portions of fruit and vegetables a day. One portion for an adult is approximately 80g - this amount has been lowered in line with reduced energy requirements to produce estimated targets.

Sources: Office for National Statistics (2000) The National Diet and Nutrition Survey: young people aged 4 to 18 years. HMSO: London
 * Department of Health (1991) Dietary reference values for food energy and nutrients for the United Kingdom. HMSO: London
 † Scientific Advisory Committee on Nutrition (2003) Salt and health. HMSO: London
 ‡ Department of Health (2004) Choosing health: making healthy choices easier. DoH: London

Table 1.7 Consumption of fruit and vegetables by sex and age, young people aged 5-15, 2001-2004, England

MALES	AGE (YEARS)	5	6	7	8	9	10	11	12	13	14	15	All ages	
<i>Mean number of portions per day</i>	2001	2.4	2.5	2.1	2.3	2.3	2.4	2.5	2.1	2.3	2.9	2.7	2.4	
	2002	2.6	2.4	2.5	2.4	2.4	2.4	2.5	2.7	2.5	2.7	2.5	2.5	
	2003	2.7	2.2	2.4	2.2	2.6	2.6	2.3	2.3	2.2	2.4	2.3	2.4	
	2004	2.8	2.7	2.4	2.7	2.9	2.5	2.8	2.9	2.4	2.7	3.2	2.7	
<i>% consuming 5 or more portions per day</i>	2001	9	11	9	8	11	13	12	7	13	15	18	11	
	2002	12	10	10	10	9	10	12	15	12	15	14	12	
	2003	9	4	11	6	11	14	10	10	9	11	11	10	
	2004	9	10	8	7	14	10	13	20	19	8	23	13	
<i>Unweighted base</i>	2001	139	137	128	138	143	127	143	144	144	124	131	1,498	
	2002	287	304	336	317	296	331	322	299	290	309	275	3,367	
	2003	105	130	122	119	110	128	110	128	117	116	116	1,301	
	2004	56	63	52	61	63	61	43	61	59	52	50	621	
FEMALES	AGE (YEARS)	5	6	7	8	9	10	11	12	13	14	15	All ages	
	<i>Mean number of portions per day</i>	2001	2.4	2.4	2.2	2.7	2.4	2.6	2.8	2.9	2.9	2.6	2.8	2.6
		2002	2.6	2.5	2.7	2.5	2.6	2.6	2.7	2.6	2.5	2.9	2.8	2.6
		2003	2.5	2.6	2.4	2.6	2.2	2.3	2.5	2.9	2.6	2.9	2.7	2.6
2004		2.8	2.9	2.1	3.1	2.7	2.6	2.6	3.0	3.0	2.5	2.4	2.7	
<i>% consuming 5 or more portions per day</i>	2001	8	8	7	12	9	12	14	13	12	9	13	11	
	2002	11	9	13	11	10	11	13	13	11	15	14	12	
	2003	13	11	6	14	5	6	12	16	12	19	15	12	
	2004	10	9	2	18	9	19	6	19	19	6	12	12	
<i>Unweighted base</i>	2001	147	125	146	154	146	160	149	128	132	131	142	1,560	
	2002	301	296	298	300	300	281	310	304	296	280	270	3,236	
	2003	123	112	118	118	126	128	122	128	128	127	112	1,342	
	2004	39	48	44	66	35	52	45	57	53	56	56	552	

Notes: Data is weighted for child selection, but not for non-response. Comparisons over time should be made with caution, due to the relatively low sample size for the 2004 results.

Source: Department of Health (2005) Health Survey for England 2004. The Stationery Office: London.

Table 1.8 Consumption of fruit, vegetables, sweets, soft drinks, crisps and chips by sex, age and country, school children aged 11-15, 2001/02, Great Britain

	BOYS			GIRLS		
	11 years old	13 years old	15 years old	11 years old	13 years old	15 years old
ENGLAND						
<i>Consume at least once a day</i>	%	%	%	%	%	%
Fruit	29	24	21	31	28	28
Vegetables	26	27	26	30	32	33
Sweets	30	33	33	30	32	33
Soft drinks	36	40	45	37	35	36
Crisps	NA	NA	NA	NA	NA	NA
Chips	NA	NA	NA	NA	NA	NA
<i>Unweighted base</i>	1,101	1,002	795	1,104	1,051	963
SCOTLAND						
<i>Consume at least once a day</i>	%	%	%	%	%	%
Fruit	37	31	25	45	33	29
Vegetables	29	33	30	39	38	30
Sweets	46	49	46	42	49	39
Soft drinks	47	51	54	41	45	45
Crisps	43	40	37	45	39	36
Chips	22	23	21	19	17	13
<i>Unweighted base</i>	924	731	577	809	773	571
WALES						
<i>Consume at least once a day</i>	%	%	%	%	%	%
Fruit	23	18	19	31	24	24
Vegetables	19	18	22	22	21	26
Sweets	24	27	29	25	28	29
Soft drinks	33	39	41	32	39	35
Crisps	NA	NA	NA	NA	NA	NA
Chips	NA	NA	NA	NA	NA	NA
<i>Unweighted base</i>	669	713	601	670	647	559

Notes: Bases given are for consumption of soft drinks; other bases are very similar.
NA: Data not available.

Source: World Health Organization (2004). *Young people's health in context. Health Behaviour in School-aged Children (HBSC) study: international report from the 2001/02 survey*. WHO: Geneva.
http://www.euro.who.int/epriase/main/who/informationresources/publications/catalogue/20040518_1
<http://www.hbsc.org>

Table 1.9 Consumption of energy, fat, saturated fat, sugar, sodium and fibre from school meals in primary and secondary schools, by sex, children aged 4-18 years, 2003 and 2005, England

Nutrient per meal	CHILDREN (AGED 4-12 YEARS)		BOYS (AGED 11-18 YEARS)		GIRLS (AGED 11-18 YEARS)	
	Mean	CWT guideline	Mean	CWT guideline	Mean	CWT guideline
Energy (kcal)	469	489	678	705	596	574
Fat (g)	18.8		32.1		27.9	
<i>Fat (% energy)</i>	35.2	<35.0	41.5	<35.0	40.8	<35.0
Saturated fat (g)	6.6		10.5		9.4	
<i>Saturated fat (% energy)</i>	12.3	<11.0	13.4	<11.0	13.7	<11.0
Non-milk extrinsic sugars (g)	14.1		23.4		21.2	
<i>Non-milk extrinsic sugars (% energy)</i>	11.1	<11.0	13.4	<11.0	13.6	<11.0
Sodium (mg)	699	n/a	1059	n/a	906	n/a
Non-starch polysaccharide fibre (g)	4.1	3.9	4.0	5.6	3.7	4.6
<i>Unweighted base</i>	3,035		2,534		3,161	

Notes: CWT guidelines refer to the Caroline Walker Trust guidelines for school meals. The guidelines provide figures for the recommended nutrient content of an average school meal provided for children over a one-week period. Data comes from a nationally representative sample of 151 primary schools (2005) and 79 secondary schools (2003) in England.

Sources: Nelson M, Nicholas J, Suleiman S, Davies O, Prior G, Hall L, Wreford S, Poulter J (2006). *School meals in primary schools in England*. Department for Education and Skills: London
Nelson M, Bradbury J, Poulter J, McGee A, Msebele S, Jarvis L (2004). *School meals in secondary schools in England*. Department for Education and Skills: London

Table 1.10 *Primary and secondary school pupils' lunch choices and availability of foods in school canteens on 4 or 5 days per week, selected food categories, 2003 and 2005, England*

PRIMARY SCHOOLS	% of all foods chosen by children	% of schools offering foods on 4 or 5 days per week	% of schools not offering foods at any time
<i>Food categories</i>			
Vegetables and salads	14	99	1
Pasta, rice, bread, other cereals	10	80	1
Desserts, cakes, biscuits, ice cream	19	99	0
Fruit	3	97	0
Milk and milk products	5	87	3
Higher fat main dishes	10	70	1
Potatoes not cooked in oil or fat	5	48	4
Water	6	90	3
Lower fat main dishes	6	64	1
Soft drinks	7	52	33
Chips and other potatoes cooked in oil or fat	10	42	3
Fruit juice	1	19	58
Baked beans	3	9	13
Butter, margarine	0	14	66
Eggs and egg dishes	0	1	55
Savoury snacks, nuts and seeds	0	4	90
Sugar, preserves, confectionery	0	1	76
Sandwiches	1	36	46
<i>Unweighted base</i>	<i>36,131</i>	<i>151</i>	<i>151</i>
SECONDARY SCHOOLS			
<i>Food categories</i>			
Vegetables and salads	2	70	0
Potatoes (not fried), plain bread and other starches	6	91	0
Desserts	3	70	6
Cakes and muffins	9	95	0
Fruit (fresh, tinned, dried)	1	91	3
Milk (including flavoured)	2	73	18
Main dishes (high fat)	18	86	0
Main dishes (lower fat)	6	61	0
Soft drinks	17	92	4
Chips and potatoes cooked in oil	18	76	1
Fruit juice	1	58	28
Baked beans	4	81	5
Crisps and savoury snacks	4	75	16
Sweets and chocolates	3	65	22
Sandwiches, filled rolls and baguettes	5	92	1
<i>Unweighted base</i>	<i>17,523</i>	<i>79</i>	<i>79</i>

Notes: Main dishes (high fat) refer to meals where 50% of energy or more is derived from fat (e.g. burgers, pizza, sausages, chicken nuggets). Main dishes (lower fat) refer to meals where less than 50% of energy is derived from fat (e.g. pasta dishes, beef stew, chicken curry). Data comes from a nationally representative sample of 151 primary schools (2005) and 79 secondary schools (2003) in England.

Sources: Nelson M, Nicholas J, Suleiman S, Davies O, Prior G, Hall L, Wreford S, Poulter J (2006). *School meals in primary schools in England*. Department for Education and Skills: London
Nelson M, Bradbury J, Poulter J, McGee A, Msebele S, Jarvis L (2004). *School meals in secondary schools in England*. Department for Education and Skills: London

Fig 1.10a Primary school pupils' lunch choices, selected food categories, 2005, England

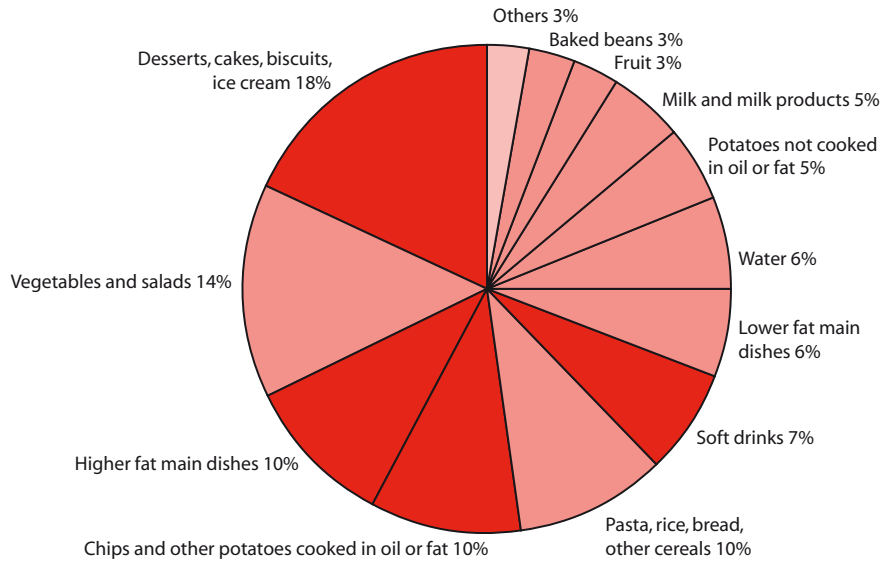


Fig 1.10b Secondary school pupils' lunch choices, selected food categories, 2003, England

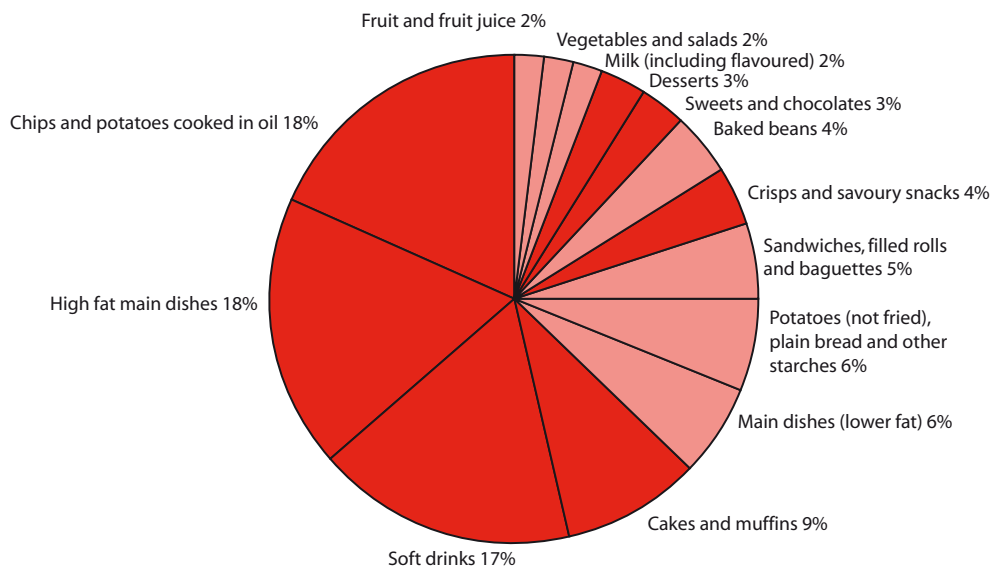


Table 1.11 Consumption of energy, fat, saturated fat, sugar, salt, fibre and fruit and vegetables, by country of the United Kingdom, and by Government Office Region in England, 2002 - 2005, United Kingdom

Consumption per person per day	UK country		Government Office Region in England										South West
	ENGLAND	SCOTLAND	WALES	NORTHERN IRELAND	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	
Energy (kcal/day)	2,320	2,179	2,326	2,258	2,372	2,445	2,262	2,361	2,266	2,309	2,092	2,274	2,369
Energy (MJ/day)	9.8	9.2	9.8	9.5	10.0	10.3	9.5	9.9	9.5	9.7	8.8	9.6	10.0
Total fat (g)	94.0	87.0	96.0	91.0	97	99	91	95	91	94	84	93	97
Total fat (% food energy)	37.6	37.3	38.3	37.4	38.2	37.9	37.7	37.5	37.6	37.9	37.3	38.2	38.0
Saturated fat (g)	36.7	34.4	37.6	36.2	38.5	38.3	35.8	37.5	35.6	36.9	31.2	36.6	38.3
Saturated fat (% food energy)	14.7	14.7	15.0	14.8	15.1	14.6	14.8	14.8	14.6	14.8	13.9	15.0	15.1
Total sugars (g)	138	130	138	132	140	137	134	142	133	140	120	136	143
Non-milk extrinsic sugars (g)	93	89	95	89	98	93	91	96	91	94	79	90	94
Non-milk extrinsic sugars (% food energy)	15.5	15.8	15.9	15.2	16.0	14.8	15.7	15.8	15.6	15.7	14.6	15.4	15.4
Non-starch polysaccharide fibre (g)	14.5	13.3	14.1	14.1	14.0	14.8	14.0	14.7	14.1	14.8	13.5	14.5	15.3
Sodium (g/day)	3.1	2.7	3.2	3.0	3.2	3.2	3.0	3.1	2.9	3.0	2.5	3.0	3.1
Salt (g/day)	7.7	6.8	7.9	7.6	8.0	8.2	7.4	7.9	7.4	7.6	6.4	7.6	7.7
Fruit (g/day)	174	151	151	133	138	156	158	169	152	194	183	194	194
Vegetables - excluding potatoes (g/day)	161	128	152	119	143	142	150	165	160	171	162	170	176

Notes: Sodium intake does not include sodium from table salt. Salt intake = sodium x 2.52. Consumption assumed from purchase data.

Source: Office for National Statistics (2006) Expenditure and Food Survey 2004/05. The Stationery Office: London.

Table 1.12 Consumption of energy, fat, saturated fat, sugar, salt, fibre and fruit and vegetables, by social class, 2002 - 2005, United Kingdom

	Large employer, higher managerial & professional & professional	Small employer & own account worker	Higher professional	Intermediate	Lower professional, managerial, higher technical	Lower supervisory & technical occupations & supervisory	Never worked & long term unemployed	Routine	Semi-routine
<i>Consumption per person per day</i>									
Energy (kcal/day)	2,217	2,262	2,224	2,147	2,212	2,312	1,987	2,258	2,246
Energy (MJ/day)	9.3	9.5	9.4	9.0	9.3	9.7	8.3	9.5	9.4
Total fat (g)	88	93	88	85	89	94	83	92	91
Total fat (% food energy)	37.5	38.3	37.1	37.1	37.5	37.9	38.4	37.8	37.6
Saturated fat (g)	34.9	36.5	34.7	33.1	34.5	36.3	30.3	35.2	35.2
Saturated fat (% food energy)	14.8	15.1	14.7	14.4	14.6	14.7	14.1	14.5	14.5
Total sugars (g)	130	131	131	128	129	134	114	133	132
Non-milk extrinsic sugars (g)	85	89	84	87	86	93	82	93	93
Non-milk extrinsic sugars (% food energy)	15.1	15.3	14.9	15.7	15.2	15.7	15.9	16.0	15.9
Non-starch polysaccharide fibre (g)	14.3	13.7	14.8	13.3	14.2	13.9	10.9	13.4	13.2
Sodium (g/day)	3.0	3.0	2.9	2.9	3.0	3.1	2.5	3.0	2.9
Salt (g/day)	7.5	7.4	7.4	7.3	7.5	7.9	6.2	7.6	7.4
Fruit (g/day)	200	153	218	153	183	130	103	121	126
Vegetables - excluding potatoes (g/day)	161	152	171	144	159	144	111	138	134

Notes: Sodium intake does not include sodium from table salt. Salt intake = sodium x 2.52. Consumption assumed from purchase data. Social class categorisation is dependent upon the occupation of the Household Reference Person.

Source: Office for National Statistics (2006) Expenditure and Food Survey 2004/05. The Stationery Office: London.

Table 1.13 Consumption of energy, fat, saturated fat, sugar, salt, fibre and fruit and vegetables, by income quintile, 2002 - 2005, United Kingdom

<i>Consumption per person per day</i>	Quintile 1 (Lowest income)	Quintile 2	Quintile 3	Quintile 4	Quintile 5 (Highest income)
Energy (kcal/day)	2,270	2,337	2,256	2,237	2,245
Energy (MJ/day)	9.5	9.8	9.5	9.4	9.4
Total fat (g)	94	96	92	90	90
Total fat (% food energy)	38.1	38.1	37.8	37.7	37.8
Saturated fat (g)	37.1	37.8	35.9	35.1	35.4
Saturated fat (% food energy)	15.1	15.0	14.8	14.7	14.8
Total sugars (g)	138	142	135	132	131
Non-milk extrinsic sugars (g)	93	96	92	90	87
Non-milk extrinsic sugars (% food energy)	15.8	15.9	15.8	15.6	15.2
Non-starch polysaccharide fibre (g)	13.7	14.4	13.8	13.9	14.3
Sodium (g/day)	2.9	3.0	3.0	3.0	3.0
Salt (g/day)	7.4	7.5	7.5	7.5	7.6
Fruit (g/day)	156	167	159	163	193
Vegetables - excluding potatoes (g/day)	152	162	152	152	163

Notes: Sodium intake does not include sodium from table salt. Salt intake = sodium x 2.52. Consumption assumed from purchase data.

Source: Office for National Statistics (2006) *Expenditure and Food Survey 2004/05*. The Stationery Office : London.

Table 1.14 Consumption of energy, fat, saturated fat, sugar, salt, fibre and fruit and vegetables, by ethnic group, 2002 - 2005, United Kingdom

<i>Consumption per person per day</i>	Asian /Asian British	Black /Black British	Chinese and others	Mixed	White
Energy (kcal/day)	2,132	1,930	1,909	2,063	2,295
Energy (MJ/day)	9.0	8.1	8.0	8.7	9.6
Total fat (g)	85	76	74	84	93
<i>Total fat (% food energy)</i>	36.3	35.9	35.3	37.4	37.8
Saturated fat (g)	28.0	24.7	25.2	30.6	36.8
<i>Saturated fat (% food energy)</i>	11.9	11.7	12.0	13.7	15.0
Total sugars (g)	111	113	97	131	137
Non-milk extrinsic sugars (g)	71	79	64	92	93
<i>Non-milk extrinsic sugars (% food energy)</i>	12.7	15.6	12.7	17.1	15.7
Non-starch polysaccharide fibre (g)	13.1	11.9	12.2	12.4	14.3
Sodium (g/day)	1.7	2.0	2.0	2.4	3.1
Salt (g/day)	4.4	4.9	5.0	6.1	7.7
Fruit (g/day)	171	178	156	193	171
Vegetables - excluding potatoes (g/day)	162	146	162	156	157

Notes: Sodium intake does not include sodium from table salt. Salt intake = sodium x 2.52.
Consumption assumed from purchase data.

Source: Office for National Statistics (2006) *Expenditure and Food Survey 2004/05*. The Stationery Office : London.

Table 1.15 Total energy available from fat and availability of fruit and vegetables by country, 2003, selected European countries

	% energy from fat	fruit and veg per person per year (kg)		% energy from fat	fruit and veg per person per year (kg)
Albania	27.1	264.4	Lithuania	27.9	168.5
Armenia	19.6	237.6	Luxembourg	40.3	199.5
Austria	38.8	227.6	FYR Macedonia	29.6	235.7
Azerbaijan	14.0	192.0	Malta	28.1	243.1
Belarus	29.5	155.0	Netherlands	36.0	255.5
Belgium	40.3	199.5	Norway	37.2	190.7
Bosnia and Herzegovina	18.0	225.3	Poland	29.8	147.9
Bulgaria	30.1	190.1	Portugal	34.2	297.2
Croatia	28.7	199.8	Republic of Moldova	18.4	153.9
Cyprus	36.3	278.5	Romania	26.3	244.3
Czech Republic	31.2	151.4	Russia	24.7	144.8
Denmark	35.9	248.7	Serbia	39.5	224.2
Estonia	27.4	174.4	Slovakia	33.5	129.7
Finland	36.2	162.6	Slovenia	32.4	215.4
France	41.8	238.4	Spain	41.2	256.0
Georgia	18.1	142.4	Sweden	35.5	193.6
Germany	36.7	203.7	Switzerland	40.1	201.1
Greece	35.6	422.7	Tajikistan	19.1	84.5
Hungary *	38.0	176.3	Turkey	24.7	338.1
Iceland *	36.2	167.7	Turkmenistan	23.0	136.1
Ireland *	32.6	182.9	Ukraine	24.1	152.4
Israel *	34.1	336.4	United Kingdom	35.1	207.4
Italy	38.2	309.3	Uzbekistan	25.0	146.4
Kazakhstan	25.9	146.8	Europe average	31.9	233.2
Kyrgyzstan	15.6	158.4	EU-15 average	37.9	242.5
Latvia	33.1	153.2	EU-25 average	36.9	232.6

Notes: * data for these countries are for 2002. Fruit and vegetables do not include potatoes. Amount available refers to fruit and vegetables produced nationally, plus imports, minus exports.

Source: World Health Organization (2005) *European Health for All statistical database*.
<http://www.euro.who.int/bfad> (11 July 2006)

Fig 1.15a Percentage of total energy available from fat by country, 2003, selected European countries

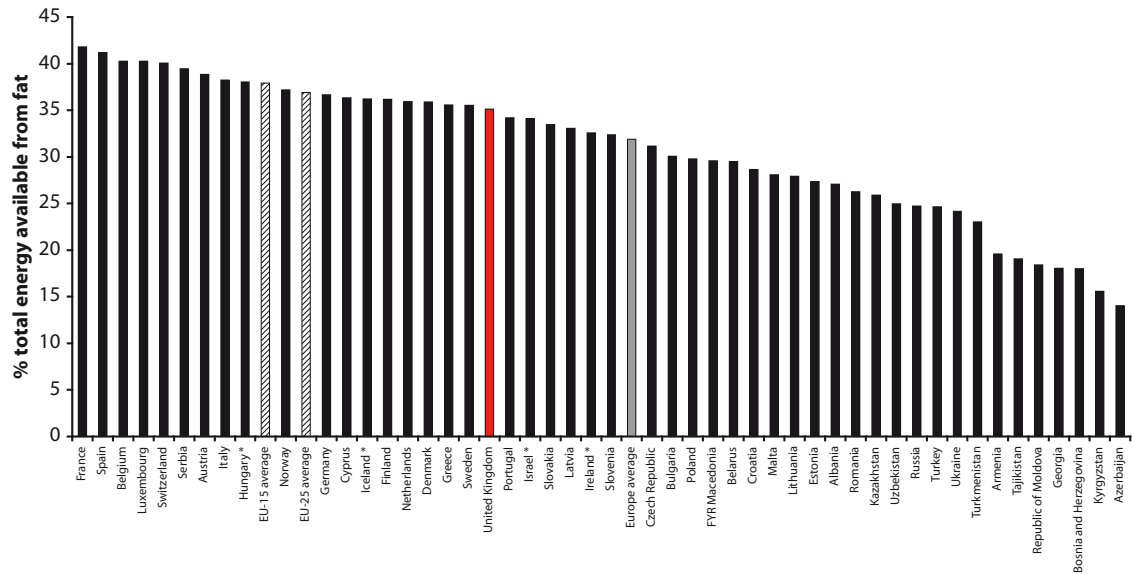
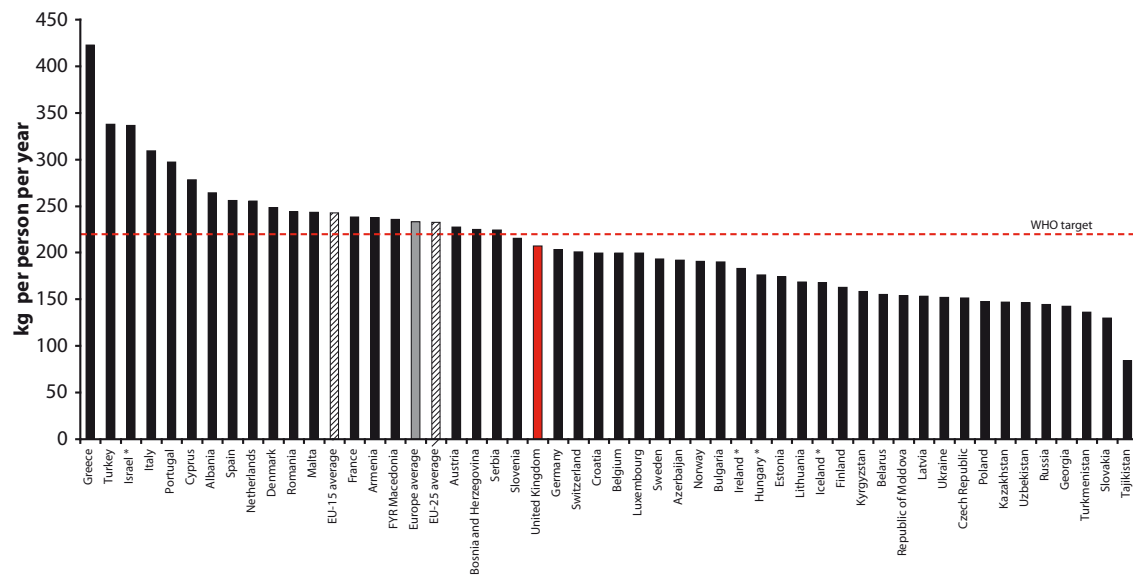


Fig 1.15b Availability of fruit and vegetables, 2003, selected European countries, with WHO target



Notes: WHO international target is 400g fruit and vegetable consumption per person per day. Target of 219 kg of available fruit and vegetables per person per year has been adjusted for wastage (see source for method).

Table 1.16 Frequency of preparing meals from raw or fresh ingredients, and sitting down for main meal at home with all household members, adults aged 16 and over, 2005, United Kingdom

<i>Frequency of behaviour</i>	Preparing meals from raw or fresh ingredients %	Sitting down for main meal with all household members %
Two or more times a day	8	14
Once a day	46	57
Two to three times a week	27	15
About once a week	7	6
Two or three times a month	1	1
About once a month	2	1
Less often	3	3
Never	6	3
<i>Unweighted base</i>	3,143	2,510

Source: TNS (2006). *Consumer attitudes to food standards 2005*. Food Standards Agency: London.

Table 1.17 Declared frequency of using labelling information, adults aged 16 and over, 2000-2005, United Kingdom

<i>Frequency of behaviour</i>	2000 %	2001 %	2002 %	2003 %	2004 %	2005 %
Always	33	29	28	31	21	27
Usually	26	30	28	26	28	25
Occasionally	20	22	22	21	22	22
Rarely	11	10	10	12	13	12
Never	9	8	11	10	13	12
<i>Unweighted base</i>	3,152	3,120	3,173	3,121	3,229	3,143

Notes: Figures may not add to 100% due to rounding.

Source: TNS (2006). *Consumer attitudes to food standards 2005*. Food Standards Agency: London, and previous editions.

Table 1.18 *Information usually looked for on food labels and concerns about the accuracy of health claims, adults aged 16 and over, 2005, United Kingdom*

	Proportion of people (%)
Nutritional information	
The amount of fat	60
The amount of salt (sodium)	53
The amount of sugar	48
Calories	28
Vitamins	15
Ingredients information	
Additives (e.g. colours and preservatives)	41
Quantity of the main ingredients	17
The list of ingredients for special dietary reasons (medical, religious or dieting)	14
The list of ingredients for allergy reasons	11
The list of ingredients for other reasons	11
General information	
The best before / use by date	49
Cooking / storage instructions	27
Country of origin	22
Whether the product is of GM / non-GM origin	16
Production methods / ethical information	15
The name of the food	12
Whether the products are organic	8
Suitability for a vegetarian diet	7
Health claims	
Health claims such as 'low fat', or 'good for your heart'	18
Respondents concerned about the accuracy of food labelling	41
Respondents concerned about the accuracy of health claims	54
Of those concerned with the accuracy of health claims:	
Very concerned	24
Fairly concerned	54
Slightly concerned	21
<i>Unweighted base (information looked for on food labels)</i>	2,649
<i>Unweighted base (accuracy of food labelling / health claims)</i>	3,143
<i>Unweighted base (level of concern over accuracy of health claims)</i>	1,640

Notes: Respondents could respond to more than one answer, so percentages do not add to 100%.

Source: TNS (2006). *Consumer attitudes to food standards 2005*. Food Standards Agency: London.

Table 1.19 *Awareness of healthy eating patterns, adults aged 16 and over, 2005, United Kingdom*

<i>Food categories</i>	Believe people should eat less than they currently do	Believe people should eat more than they currently do
	%	%
Vegetables / Salad	0	86
Fruit	0	85
Fish	1	48
Bread / cereals / pasta / rice / potatoes	4	30
Nuts / beans / chickpeas / lentils	3	26
Milk / dairy products	9	18
Meat	30	9
Foods containing fat	68	1
Foods or drinks containing sugar	65	0
Salt in your food	58	0
<i>Unweighted base</i>	3,143	3,143

Source: TNS (2006). *Consumer attitudes to food standards 2005*. Food Standards Agency: London.

Table 1.20 Awareness of recommended daily portions of fruit and vegetables, adults aged 16 and over, 2005, United Kingdom

<i>Number of portions of fruit and vegetables</i>	Believe people should eat every day %
None	0
1	2
2	7
3	7
4	6
5	63
6	3
7 to 9	1
10+	1
5 or more	67
<i>Unweighted base</i>	3,143

Notes: Figures do not add to 100%, as respondents could choose not to answer.

Source: TNS (2006). *Consumer attitudes to food standards 2005*. Food Standards Agency: London.

Table 1.21 *Average expenditure on all foods, and on selected food categories, by income quintile, adults aged 16 and over, 2002-2005, Great Britain*

<i>Household expenditure (pence per person per week)</i>	Quintile 1 (Lowest income)	Quintile 2	Quintile 3	Quintile 4	Quintile 5 (Highest income)
Milk and cream	159	157	151	147	153
Cheese	48	50	55	57	74
Meat and meat products	431	462	462	492	539
Fish	93	96	86	89	109
Eggs	21	18	17	16	18
Fats and oils	42	42	36	32	35
Sugar and preserves	22	20	16	14	14
Fresh and processed potatoes	95	102	103	105	98
Vegetables excluding potatoes	147	159	159	172	221
Fruit	142	154	149	150	202
Total cereals	332	350	352	374	411
Confectionery	72	83	78	82	84
All other foods	100	108	111	121	141
Beverages	47	47	40	38	40
Soft drinks	63	70	79	85	88
Alcoholic drinks	164	207	240	265	350
Total food and drink	1,979	2,125	2,135	2,240	2,577
<i>Eating out expenditure (pence per person per week)</i>					
Food and drink exc. alcohol	346	483	641	794	1,129
Alcoholic drinks	179	232	323	412	519
Total food and drink	525	715	964	1,206	1,648

Source: Office for National Statistics (2006) *Expenditure and Food Survey 2004/05*. The Stationery Office : London.

Fig 1.21 *Percentage of household food expenditure on fruit and vegetables and confectionery by income quintile, adults aged 16 and over, 2002-2005, Great Britain*

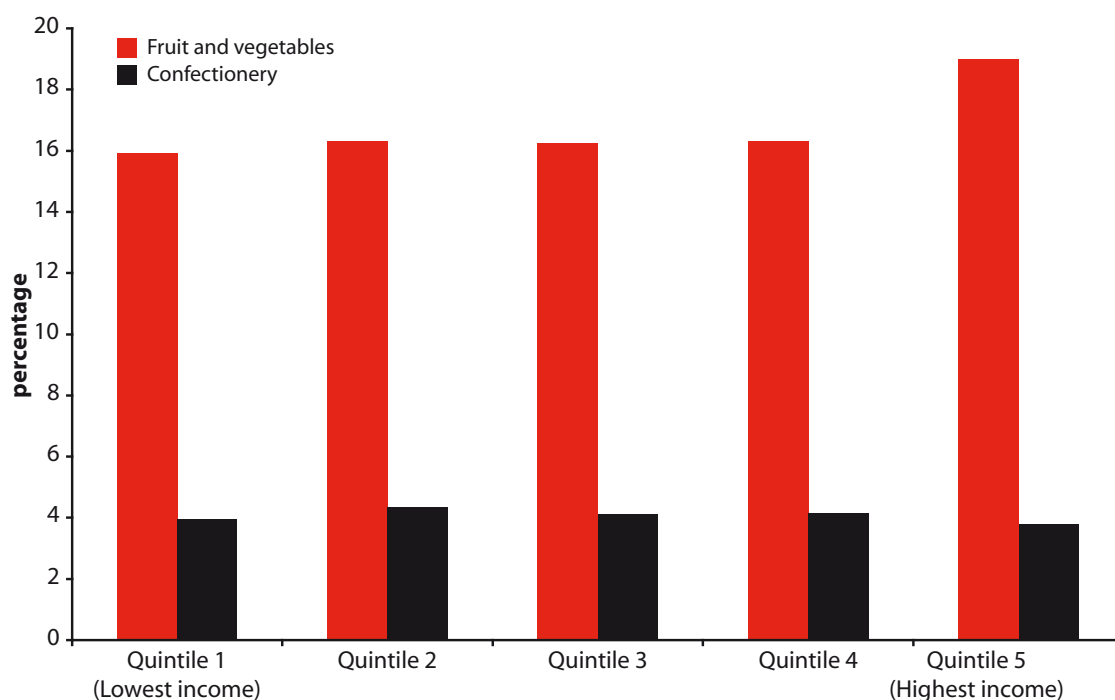


Table 1.22 Average expenditure on total household food and drink, fruit and vegetables, adults aged 16 and over, 1975-2004/05, Great Britain

	1975	1985	1995	2000	2001/02	2002/03	2003/04	2004/05
<i>Pence per person per week</i>								
Total household food and drink exc. alcohol (current prices)	403	991	1,664	1,844	1,908	1,942	2,002	2,039
Food Price Index	100	253	364	381	397	396	404	405
Total household food and drink exc. alcohol (2004/05 prices)	1,632	1,586	1,851	1,960	1,946	1,986	2,007	2,039
Fruit (current prices)	25	66	118	146	150	159	163	167
Fruit Price Index	100	236	291	310	342	339	346	332
Fruit (2004/05 prices)	84	93	134	156	145	156	156	167
Vegetables exc. potatoes (current prices)	41	111	214	232	235	238	247	250
Vegetable Price Index	100	245	303	280	325	309	335	326
Vegetables exc. potatoes (2004/05 prices)	133	148	230	270	236	251	241	250

Notes: Total household food expenditure for 1975 and 1985 does not include confectionery and soft drinks. 2004/05 prices have been calculated by multiplying current prices by the ratio of 2004/05 price index to the current year price index.

Sources: Office of National Statistics (2006) *Expenditure and Food Survey 2004/05*. The Stationery Office: London, and previous editions. Department for Environment, Food and Rural Affairs (2001) *National Food Survey 2000*. The Stationery Office: London, and previous editions.

Table 1.23 Total impact of advertising during dedicated children's airtime, selected categories, 2004 and 2005, United Kingdom

Impacts (billions)	2004	2005
Leisure equipment	12.2	13.4
Food	6.5	5.0
Chain restaurants	1.1	1.0
Soft drinks	0.5	0.4
Confectionery	1.5	1.1
Cereals	1.8	1.2
Savoury snacks	0.2	0.1
All other prepared & convenience foods	0.1	0.2
All other foods	1.2	1.3
Entertainment and the media	2.4	2.5
Finance	1.8	1.8
All other categories	5.6	5.9
Total	28.5	28.6

Notes: 'Impacts' are a measure of how much advertising is seen by different groups. One impact is equivalent to one member of the target audience viewing one commercial spot. Numbers may not add exactly due to rounding.

Source: Ofcom (2006). *Television advertising of food and drink products to children: options for new restrictions*. Ofcom: London

Table 1.24 Food adverts during dedicated children's airtime, selected food categories, 2005, United Kingdom

Food category	All food advertising %
Bakery goods	2
Chain restaurants	12
Confectionery	20
Cooking products	4
Dairy products	17
Drinks & beverages	3
Fruit, vegetables & pasta	3
Meat, fish & poultry	4
Prepared & convenience foods	26
Organic foods	0
Soft drinks	9
Total	100

Notes: Data collection was from four terrestrial channels (ITV1, GMTV, Channel 4, Five) and four dedicated children's channels (Boomerang, Cartoon Network, Nickelodeon, Trouble). Data were collected for one week for content during scheduled children's airtime and between 17.00 and 21.00 for terrestrial channels, and for all broadcast of dedicated children's channels.

In total, data on 12,839 adverts were collected, 2,561 of which were for food products.

Source: Ofcom (2006). Television advertising of food and drink products to children: options for new restrictions. Ofcom: London

Fig 1.24 Food adverts during dedicated children's airtime, selected food categories, 2005, United Kingdom

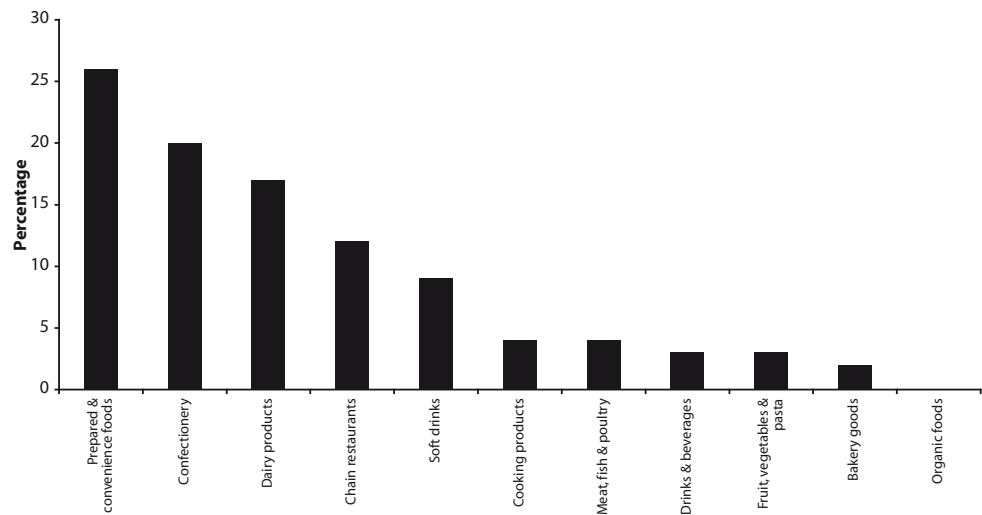


Table 1.25 Price promotions for fruit and vegetables, fatty and sugary and other foods at supermarkets, 2005, England

Food categories	Price promotions by supermarket								
	Asda	Co-op	Iceland	Marks & Spencer	Morrisons	Sainsbury's	Somerfield	Tesco	Waitrose
Fruit and vegetables	12	17	15	27	9	16	7	14	22
Fatty and sugary foods	27	37	35	27	29	33	31	35	32
Other foods	62	46	50	46	62	52	62	51	47

Notes: Data taken from only one store of each supermarket chain, from different locations in England. Numbers may not add up to 100 due to rounding.

Source: Dibb S (2005). *Healthy competition: how supermarkets can affect your chances of a healthy diet*. National Consumer Council: London.

Fig 1.25 Price promotions for fruit and vegetables, fatty and sugary and other foods at supermarkets, 2005, England

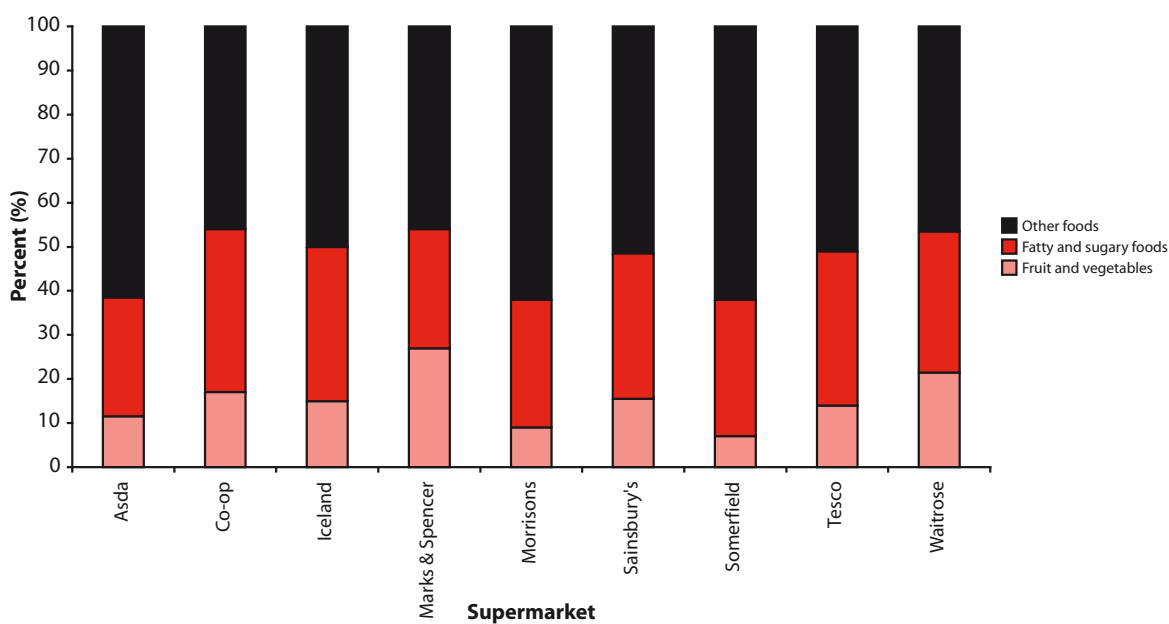


Table 1.26 Cost of food-related ill health to the NHS, 2002

	Cost to NHS (£ billions)	Costs attributed to poor diet (£ billions)
<i>Disease categories</i>		
<i>Diet-related diseases</i>	18.3	6.0
Cardiovascular disease	8.4	2.8
Diabetes, and other diseases of the hormonal and immune systems	1.4	0.5
Cancer	2.8	0.9
Dental caries, and other diseases of the digestive system	5.6	1.9
<i>Non-diet related diseases</i>	52.7	
Infectious diseases	0.7	
Neuropsychiatric disorders, and diseases of the nervous system	17.6	
Injuries	2.8	
Other	31.6	
Total	70.2	

Notes: Figures may not add due to rounding. NHS costs for diseases for 2002 are extrapolated from 1992/93 costs.

Source: Rayner M, Scarborough P (2005). The burden of food-related ill health. *Journal of Epidemiology and Community Health*; 59: 1054-57.