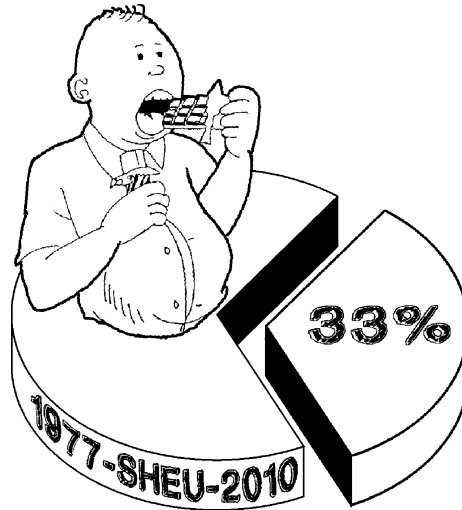


Young People into 2010

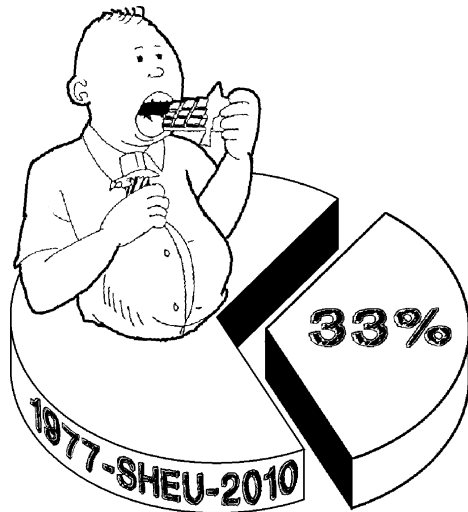
The Health Related Behaviour Questionnaire results for 43,014 young people between the ages of 10 and 15



1. Food choices and weight control

Angela Balding and David Regis

Food choices and weight control



This section of the Health Related Behaviour Questionnaire has passed through more revisions than any other. In earlier versions, attempts were made to derive quality and quantity measurements from the respondents' account of 'yesterday's intake', but the vagueness about amounts and quality made it impossible to do more than note the apparent presence or absence of certain important nutrients. The current versions of the questionnaire contain a checklist of common food items against which the pupils indicate typical levels of consumption. It is hoped that classroom discussion of these results will raise levels of awareness regarding 'healthy' and 'unhealthy' foods. The health-related aspect of diet, as well as attitude to personal weight, is also included in this section.

Question

What did you have for breakfast this morning?.....	2
What did you do for lunch yesterday?.....	3
Your weight — which statement describes you best?.....	4
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Schoolday breakfast

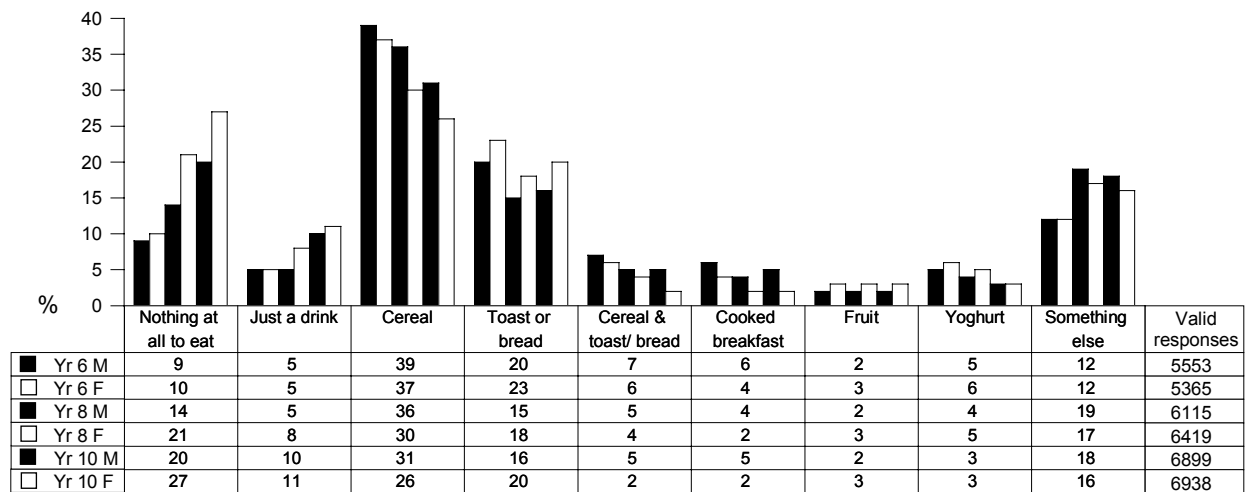
27% of the Year 10 females have *nothing at all* to eat for breakfast

What did you have for breakfast this morning?

Comments

1. Seeking the breakfast 'missers', we find more Year 10s than Year 8s, and more Year 10 females than Year 8 females.
2. *Cereal* is the most commonly reported breakfast item for up to 39% of pupils.
3. *Just a drink* is reported by 8% Year 8 females and 11% Year 10 females.
4. *A cooked breakfast* is taken by few and mainly the males.

1. We do not know if missing breakfast is an undesired omission or a deliberate decision to reduce food intake. In 'Young People in 1997', (Balding, 1998a), we found a substantial number of 9-11 year olds were eating shop bought snack-type food before school although it was not related to lack of breakfast. However, many programmes show that pupils can be encouraged to eat more healthily by the development of school policies on healthy snacks.
2. Prior to 2004 the 'Nothing at all' column referred to those that reported nothing to eat or drink for breakfast. Since 2004, this has changed to 'Nothing at all to eat' and resulted in overall lower percentages.

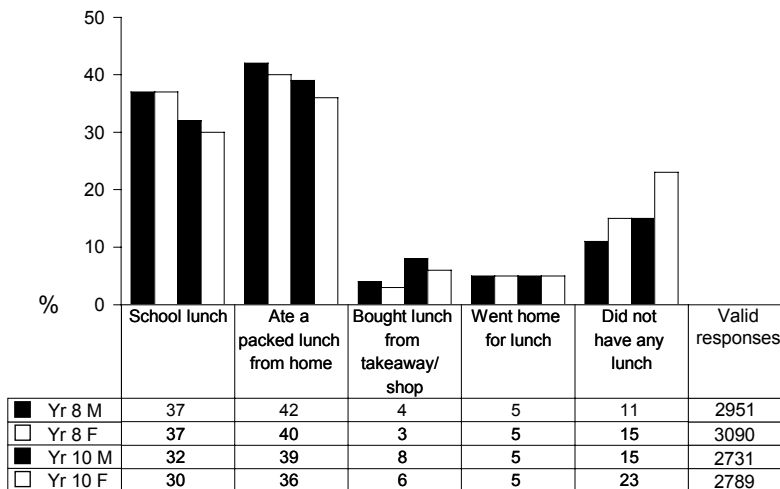


Schoolday lunch

23% of the Year 10 females did not have any lunch

What did you do for lunch yesterday?

1. A 'packed lunch from home' was the most popular option from this sample.
2. Up to 42% had a packed lunch.
3. 37% of the 12-13 year olds had a school lunch.
4. 23% of the Year 10 females and 15% of the Year 8 females had no lunch.



Comments

1. Up to 42% of all pupils ate a packed lunch. Basic analysis of 1990s data suggested that this group were likely to enjoy a more balanced overall diet than those choosing other lunch options – not necessarily because of what was in the lunch box as parents are less likely to put items in the lunch box that their child will not eat. However, those supplying a packed lunch tended to give more thought to what pupils ate.
2. Are those who are buying their lunch from a shop allowed to leave the school premises at lunchtime or are they off-site without permission? 8% of the Year 10 males bought their lunch from a shop. Why are they choosing this option above the option of lunch at school?



Breakfast and lunch: The breakfast question is about this morning, and the lunch question is about yesterday. We cannot demonstrate that any pupil missed both breakfast and lunch on the same day. Nonetheless, we do know that the two options are related. Of the Year 10 females that missed breakfast, 31% reported having nothing for lunch the previous day:

Proportion missing breakfast this morning: 27%

Proportion missing lunch yesterday: 23%

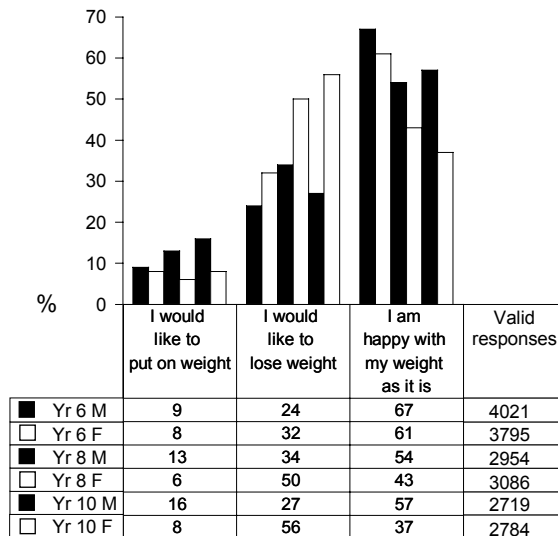
Proportion of those having nothing to eat for breakfast this morning who had nothing for lunch yesterday: 31%

Attitude to personal weight

56% of Year 10 females and 50% of Year 8 females would like to lose weight

Your weight — which statement describes you best?

1. Many more females than males want to lose weight.
2. 56% of the Year 10 females and 50% of the Year 8 females would like to lose weight.
3. 16% of Year 10 males would like to put weight on.
4. Between 37% - 57% of the older females said they were happy with their weight as it is.



Comments

1. It is easy to understand why more females than males want to lose weight, but the age differences are interesting: The slight preponderance of younger males could mean that they feel more self-conscious, or that weight seems more of a disadvantage — it could also be because more are overweight. Conversely, the preponderance of older females suggests the opposite.
2. An analysis of the characteristics of the Year 10 females shows that most of those wanting to lose weight are within the limits of 'healthy' weight, and some are already underweight (see page 6).
3. Data since 1991 reveal an increasing trend of desire for weight loss for all.
4. We have a problem of sending appropriate messages to a population of young people, many of whom are overweight, and yet more seem overanxious about their weight.



Year 10 females who want to lose weight:

Proportion who want to lose weight who had nothing for breakfast: 24%
Proportion who want to lose weight who missed lunch: 23%

In earlier reports in this series we also showed that a desire to lose weight could be linked to food choices.

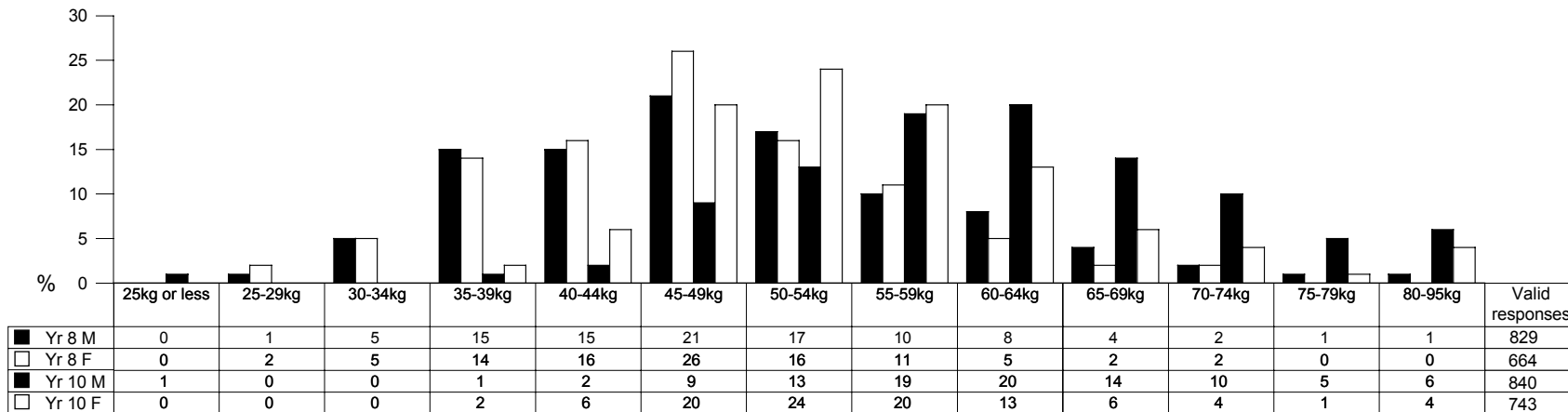
Weight

Do you know your weight?

1. There are some unsurprising age and sex differences here: older males are the heaviest, which fits well with the data relating to height.
2. We do not ask the question in the primary version of the questionnaire because of the work that would be involved for teachers in the collection of accurate data. In the secondary surveys, schools are asked to prompt pupils to check their height and weight before completing the questionnaire.

Comments

1. Unusually high or low responses reported to us may be due to difficulties of converting. [Answers may be given in imperial or metric units, although schools have encouraged use of metric measures for years. We also provide conversion charts in the survey support materials.]
2. There is little evidence in our data that those young people who are unhappy with their weight are significantly less likely to report their weight to us than the rest of the sample. In fact, among Year 10 females, those wanting to lose weight are more likely to report their weight to us.
3. However, not all areas using our survey chose to include the height/weight questions, and so the sample used here is much smaller and regionally restricted. Nonetheless the figures are of interest.

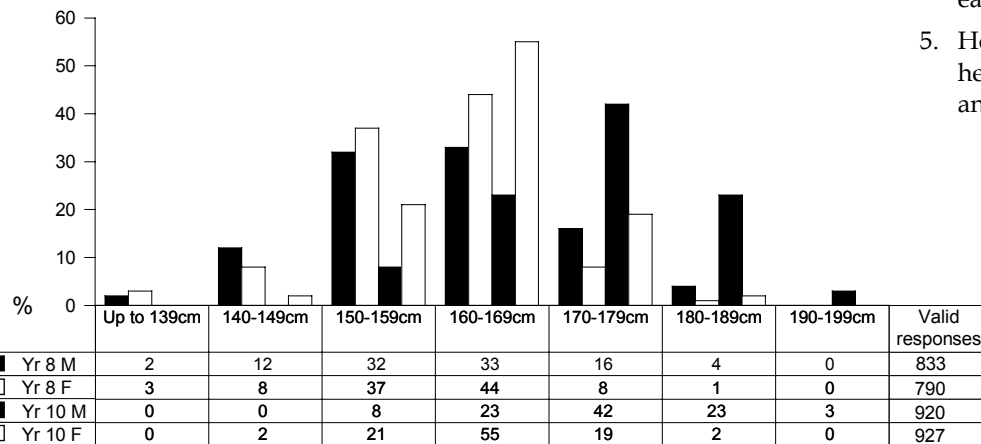
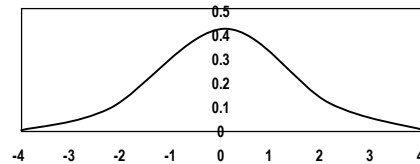


Height

Males start 'growing away' from females in Year 10

Do you know your height?

1. Again, we see that older males are the tallest. Females appear to be taller than the males in Year 8, but by Year 10 the males are clearly taller than the females.
2. Height and weight are 'continuous' measures, which show the classical pattern of a 'bell curve': a heap in the middle with two tapering ends.



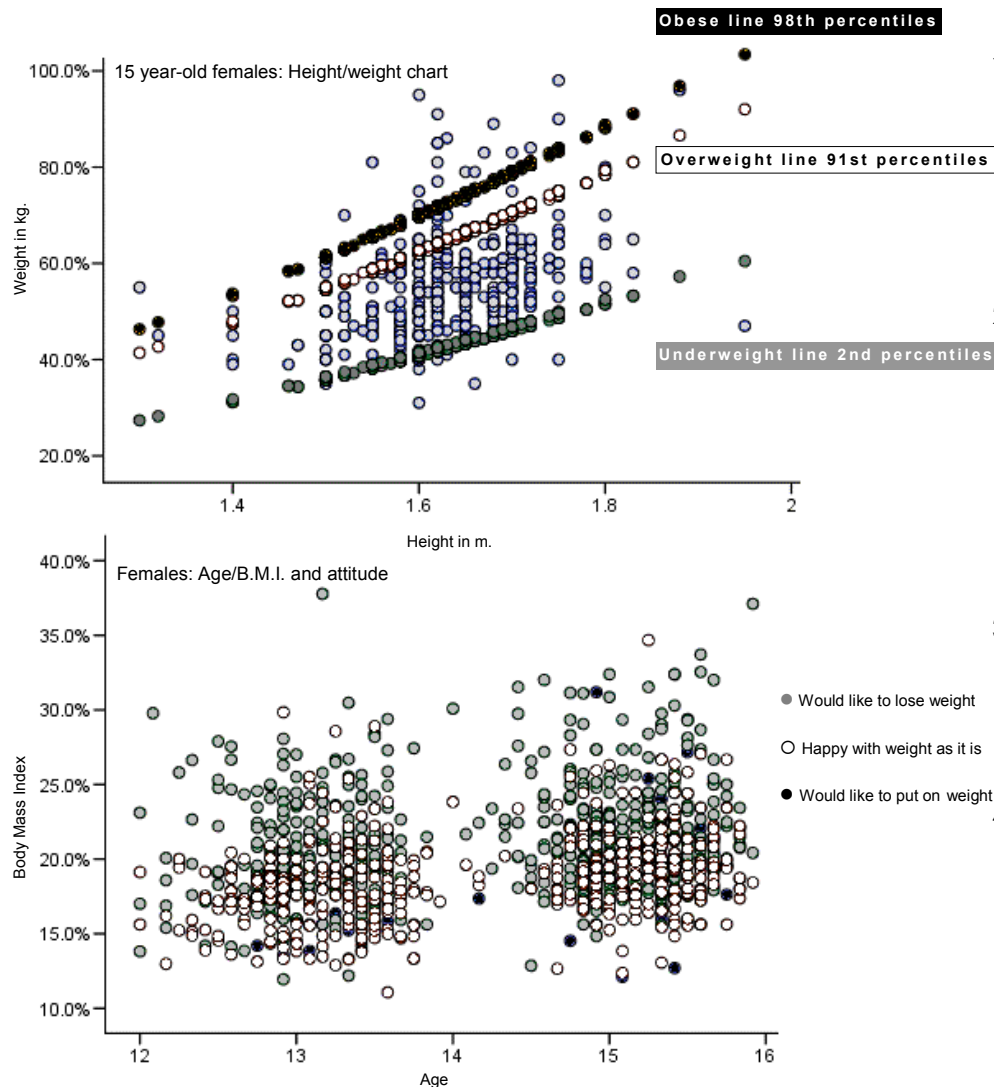
Comments

1. Many of the comments we made about weight above also apply here.
2. A higher proportion of young people are sure of their height than their weight.
3. A comment from many primary school teachers is that youngsters, particularly girls, are getting taller at an earlier age. If this is combined with theories about better diet and lack of exercise producing taller individuals then it will be interesting to see if the average heights observed increase in our data in the years to come.
4. Is height a health issue? In fact, poverty and poor diet may still contribute to a failure to grow as well as possible. But beyond this, it may have more subtle effects. For example, taller young people may find it easier to purchase age-restricted material.
5. However, not all areas using our survey chose to include the height/weight questions, and so the sample used here is much smaller and regionally restricted. Nonetheless the figures are of interest.

Weight analysis

Up to 14% need to lose weight

Derived body mass measurement



The Overweight group

1. The Year 10 group of respondents contained 14-year-olds and 15-year-olds. In order to relate their recorded weight to published guidelines regarding 'desirable' weight, we separated the children of different ages. This is because the Body Mass Index (BMI) formula for young people takes their age as well as their height into account. BMI is calculated as weight in kg divided by the square of height in metres, which gives a figure between 10 and 40. In adults, a BMI above 25 may indicate some level of overweight, and above 30, serious overweight or obesity.
2. Of this sample, 14% of the males and 11% of the females were 'overweight' according to the Child Growth Foundation charts used in this presentation. This compares with the 27% of all Year 10 males and 56% of all Year 10 females in the survey that would have liked to lose some weight. The first chart illustrates how the calculation was made. For each age group, we can identify for pupils of each height, a weight at which they would be considered worthy of attention or even concern because it was outside the normal range. The females on the chart opposite who are above the top line are considered 'obese', above the middle line 'overweight', and below the lowest line 'underweight'.
3. The second chart shows how females' attitudes to their weight may vary. Females who want to put on weight are shown with the darker circle (●) and tend to be found in the lower half of the cloud of points. 56% of females who want to lose weight can be found throughout the distribution, including some who have a BMI indicating underweight at the lower half of the chart.
4. As noted on previous pages, the sample size for this analysis is much smaller than in previous because not all the regions using the survey chose to include these questions.

	Year 10	Males	Females
The weight guidelines on this page were derived using a UK-reference group for Body Mass Index adjusted for age (Child Growth Foundation).	Underweight	2%	3%
	Overweight	14%	11%
	Obese	4%	4%
	Valid responses	965	871

Protein

59% of 14-15 year old males have dairy produce *on most days*

Protein items in their diet

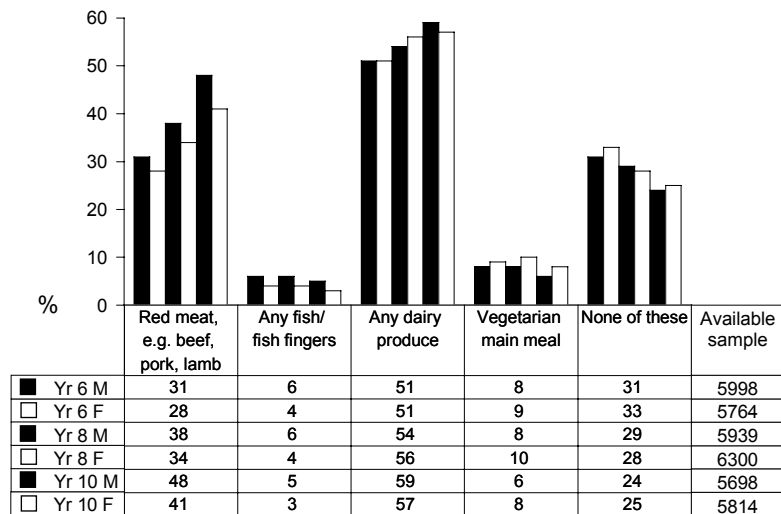
Comments

Responses to eaten 'on most days'.

Please note that all the 'diet' items are offered as a single list, and are not subdivided by content as we have done here.

1. *Meat* is more popular with males than females.
2. *Dairy products* are more frequently eaten than *meat* and *fish*.
3. More females than males have a vegetarian main meal.
4. There is a marked age gradient for *meat* and *dairy products*, with older pupils reporting eating them with higher frequencies.

1. The age differences are interesting: is it that the older age groups are better at recognising when a food item is present? For example, do primary school pupils recognise that 'cottage pie' is a meat dish? Of course, the differences may well be genuine. Is this a deliberate plan by older pupils to increase intake of protein, either by the young people or their parents, or is it a reflection of personal preference and enhanced spending power that comes with age and opportunities e.g. to eat burgers?
2. The small sex differences also demand an explanation. It may be that more girls than boys avoid meat products, either because they are uncomfortable with the way animals are raised, or because these high-protein foods may also be rich in fats.
3. Foods that are not normally thought of as being high in protein, like cereals and pulses, also contribute significantly to the amount of protein eaten.



Starchy foods

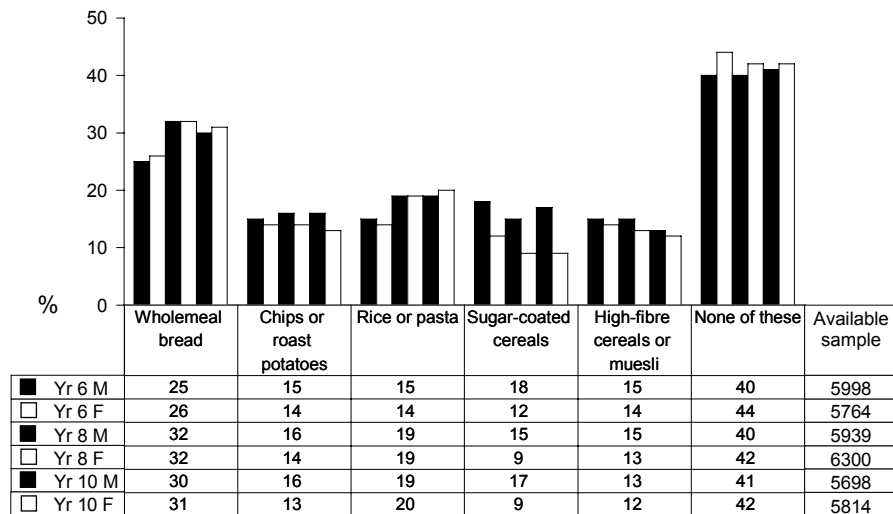
As they get older,
fewer females eat sugar-coated cereals

Starchy items in their diet

Responses to eaten 'on most days'.

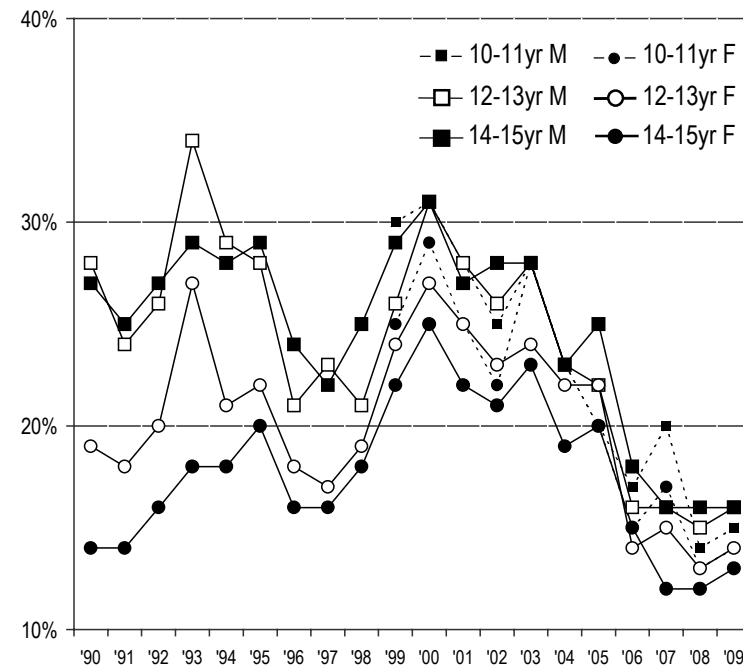
Please note that all the 'diet' items are offered as a single list, and are not subdivided by content as we have done here.

1. Pupils show no age-related rise in the consumption of chips/roast potatoes and more females than males prefer rice or pasta.
2. Where sex differences are found, the males are usually ahead of the females, especially chips and sugar-coated cereals.
3. As they get older, fewer females eat sugary cereals but more eat rice or pasta.



Comments

1. Data since 1990 reveal a general decline, (from around 2000), in those choosing chips/roast potatoes 'on most days'.



Fruit and vegetables

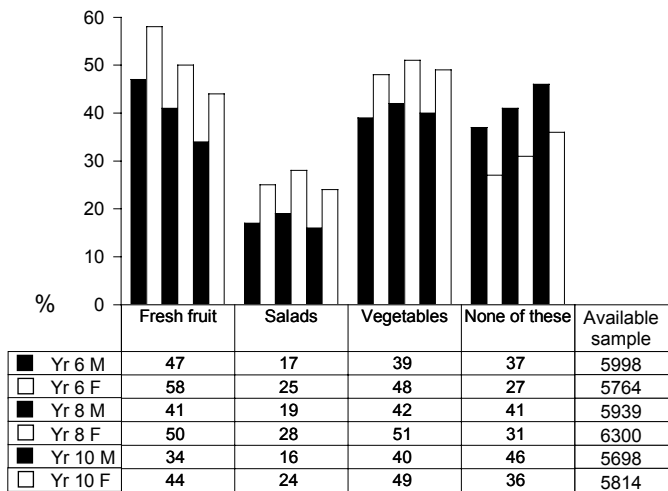
Less fresh fruit and vegetables eaten as pupils get older

Fruit and vegetables in their diet

Responses to eaten 'on most days'.

Please note that all the 'diet' items are offered as a single list, and are not subdivided by content as we have done here.

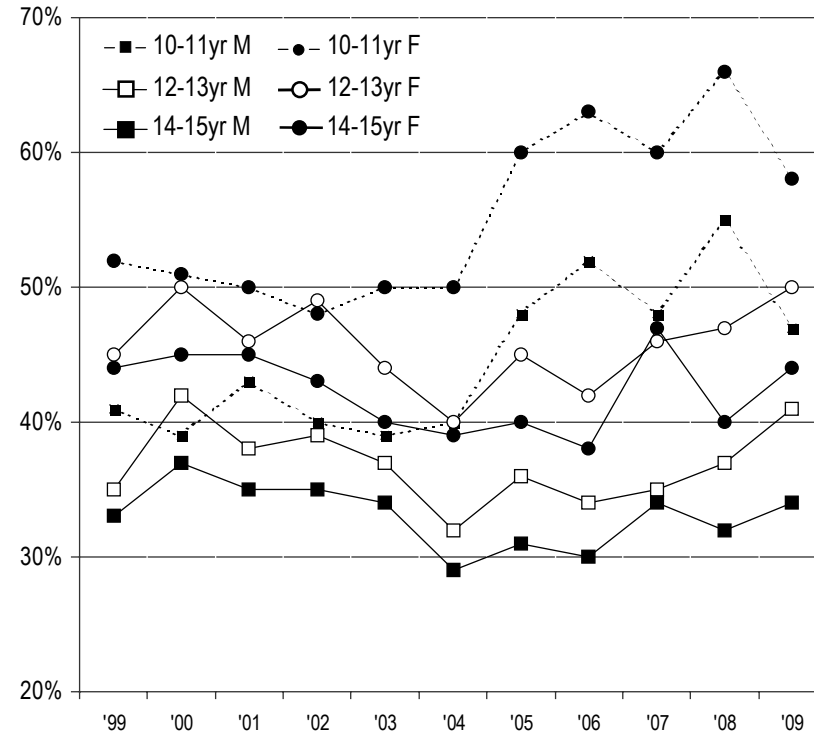
1. Less fresh fruit and vegetables eaten as pupils get older. More females than males prefer salads
2. 58% of 10-11 year olds females report eating fresh fruit 'on most days' but this has dropped to 44% as reported by 14-15 year old females.
3. 48% of 10-11 year olds females report eating vegetables 'on most days' which has increased slightly to 49% as reported by 14-15 year old females.



Comments

1. Gender differences are most marked in this section: we may speculate about differences in health and diet consciousness.
2. We find that the young people who report eating fresh fruit are more likely to eat other healthy items like fish and wholemeal bread.
3. The noticeable decline in consumption of fresh fruit, as they get older, has been a consistent trend for the past ten years (see below).

Chart: 10-15 year olds who report eating fresh fruit on most days 1999-2009



Portions of fruit

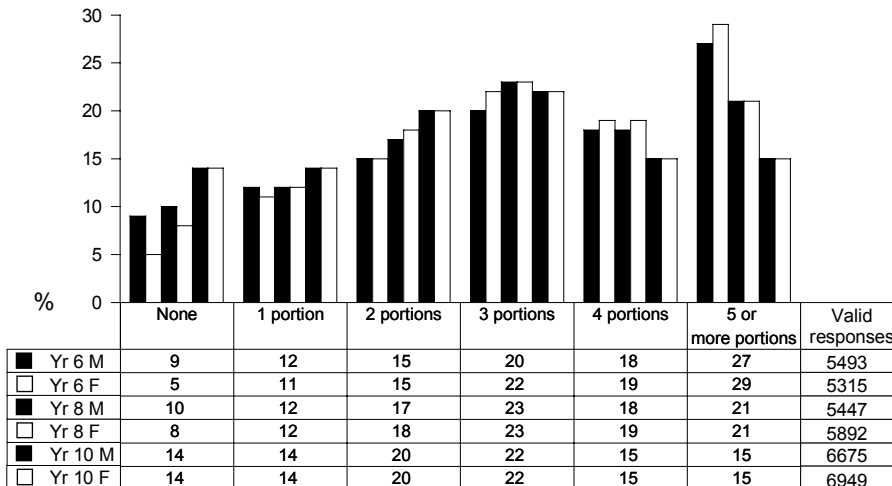
Up to 23% report eating 3 portions of fruit and vegetables 'yesterday'

Portions of fruit and vegetables in their diet

Comments

1. Most 10-15 year olds (up to 23%) report eating 3 portions of fruit and vegetables.
2. Females, more than males, report higher percentages across the 3 - 5+ portions eaten 'yesterday'.
3. As they get older, fewer pupils report eating 5 or more portions.

1. This was a new question in 2006. Pupils were asked, "How many portions of fruit and vegetables did you eat yesterday?" They are given eight options and asked to circle one option. We offer a brief guidance as to what a 'portion' is following Government '5-a-day' guidelines.
2. 15% (Year 10) and 28% (Year 6) ate 5 or more portions 'yesterday'.



Drinks and snacks

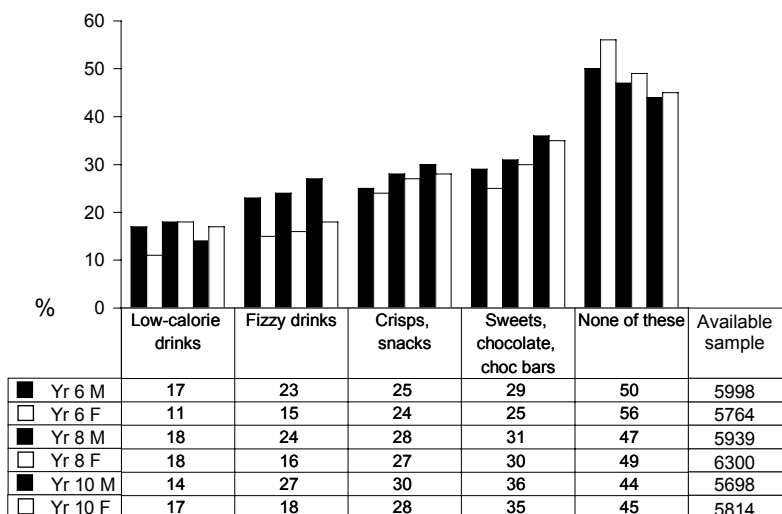
Over 1/3rd of the Year 10 males eat crisps and sweets 'on most days'

Drinks and snacks they enjoy

Responses to eaten 'on most days'.

Please note that all the 'diet' items are offered as a single list, and are not subdivided by content as we have done here.

1. Males have a taste for fizzy drinks.
2. More 14-15 year old males, than other groups report eating sweets and crisps. Between 30%- 36% eat crisps and sweets 'on most days.'
3. Many of these high-calorie foods show high values in Year 6.



Comments

1. The greater health-consciousness of the females is reflected in their choice of drinks, but not in other highly calorific or dentally-doubtful snacks.
2. Are the high figures here related to items that youngsters find in their packed lunches? Do more primary school pupils than secondary school pupils have a packed lunch? Figures from secondary pupils eating packed lunches generally show an upward trend since 1995 (see page 3).
3. Figures from 1987 suggest a slightly downward trend in the popularity of crisps with secondary pupils and recent figures show up to 30% of this age group report eating crisps 'on most days'.
4. 10-11 year old females used to report higher percentages than males for eating crisps but this trend appears to be changing and the overall trend is downward:

Eating crisps on most days	Males (10-11 yrs.) %	Females (10-11 yrs.) %
1999	54	57
2003	45	47
2009	25	24

Water

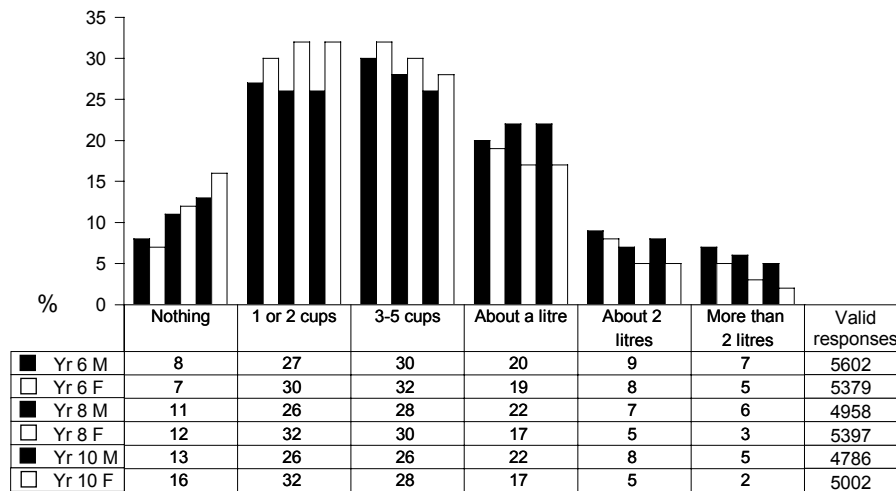
Up to 62% report drinking less than 1 litre – ‘yesterday’

How much water did you drink yesterday?

Comments

1. Most 10-15 year olds (from 51% to 66%) report drinking between 1-5 cups of water ‘yesterday’.
2. Up to 22% say they drink ‘about a litre’.
3. As they get older, more males than females report drinking more than 1 litre of water in one day.

1. This was a new question in 2006. Pupils were asked, “How much water did you drink yesterday? They are asked only to count plain water, not juice, tea etc. They are given 5 options.
2. Up to 16% claim to have had no plain water to drink.
3. Guidelines suggest that water intake can come from many sources including food, tea, fruit squashes etc., but organisations we work with are particularly interested in water.
4. Assuming ‘yesterday’ was a normal day should we be concerned that 76% of 14-15 year old females report drinking less than one litre of water in a day? Generally it is advised that water, obtained from drinks per day, should be around 1.6 – 2.8 litres for the 9-18 year olds. (For details visit: www.water.org.uk/home/water-for-health/medical-facts/children.)
5. As female pupils get older they drink less water:
 3-5 cups 32% (10 years old) 28% (15 years old)
 About 1 litre 19% (10 years old) 17% (15 years old)

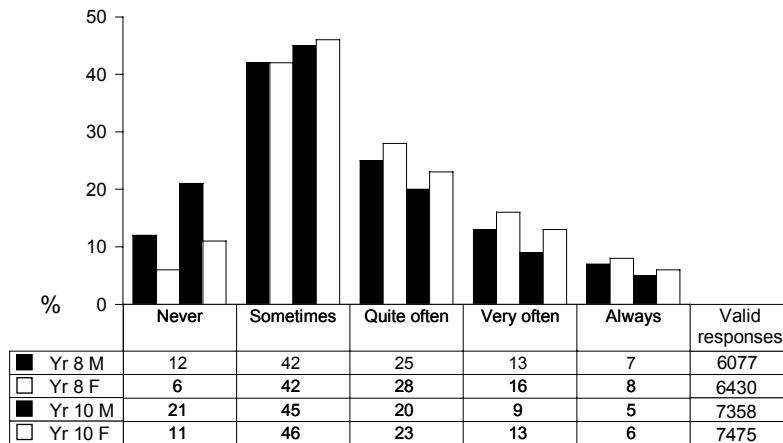


Dietary decisions

21% of the Year 10 males never consider their health when choosing food

When choosing what to eat, do you consider your health?

1. Most of the young people respond at least *sometimes*.
2. More females than males respond to the higher categories.
3. With respect to age, more of the older males respond *never*; the females show slightly less change.



Comments

1. More than half of this sample 'never' or only 'sometimes' evaluate their diet from a health point of view. Figures from 1991 suggest a slightly increasing trend in those 12-15 year olds who do not 'consider their health' when eating pupils.
2. The table bears out the evidence of the previous pages that the females are more health-conscious about food than the males. Has 'scare fatigue' particularly affected the Year 10 males?.
3. Other figures support the view about the implementation of healthy eating initiatives in the first years of secondary school. Data show that around 49% of 12-13 year olds found 'Healthy eating' lessons useful compared with around 33% of 14-15 year olds (see page 97).



Are they 'really' considering their health or just saying so? We looked in the dataset for correlations between positive responses to this question and more healthy dietary choices. We found that they are clearly present: the older males and females who say they often think about their health when choosing food are more likely to: eat salads, fruit, vegetables, fish and drink low-calorie drinks on most days than their peers, and they are less likely to eat chips, sweets, sugary cereals or drink sugary fizzy drinks on most days. This tells us that these global attitudes to food may be important, not being vague opinions but having a real effect on behaviour.