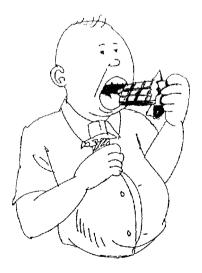
1 Food choices and weight control

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 2004 questionnaire (version 22) contains a checklist of 16 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 19 18 21 17 16 Do you know your height? 6 22a 22b 22c 22d 20

Schoolday breakfast

17% of the Year 10 females have *nothing at all* for breakfast

What did you have for breakfast this morning? (19) (Pri.6)

- 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, particularly for Year 6 pupils (38%), Year 8 males (40%) and Year 10 males (38%).
- 3. Just a drink is reported by 11% Year 8 females and 14% Year 10 females.
- 4. A cooked breakfast is taken by few and mainly the males.

% Something Valid breakfast bread toast/ bread else responses Yr 6 M ☐ Yr6F Yr 8 M ☐ Yr8F ■ Yr 10 M ☐ Yr 10 F

Comments

- Is the percentage of those having nothing at all or just a drink cause for concern?
- 2. 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. Hovever, many programmes show that pupils can be encouraged to eat more healthily by the development of school policies on healthy snacks.
- 3. Data since 1983 reveal an upward trend, for all groups, of those having 'nothing to eat for breakfast' (SHEU, 2003, 'Trends-Young People's Food Choices 1983-2001'). Figures for 2004 are lower than previous years due to questionnaire changes.

Breakfast and lunch: The breakfast question is about this morning, and the lunch question is about vesterday. 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. For example, among Year 10 females: those missing breakfast are nearly twice as likely to have missed lunch the previous day: *Proportion having nothing for breakfast this morning:* 17%

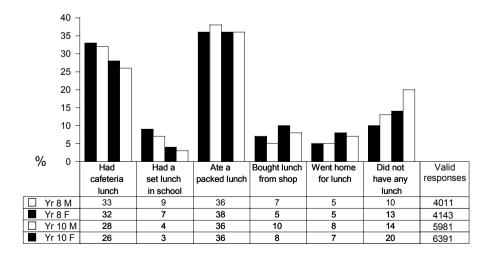
Proportion missing lunch yesterday: 20% Proportion of those having nothing for breakfast this morning who had nothing for lunch yesterday: 29%

Schoolday lunch

20% of the Year 10 females did not have any lunch

What did you do for lunch yesterday? (18)

- 1. A cafeteria lunch was the most popular option including up to 33% of the Year 8 pupils.
- 2. Up to 38% had a packed lunch.
- 3. Figures for a school set lunch are low; up to 9% reported having this type of lunch.
- 4. 20% of the Year 10 females and 14% of the Year 10 males had no lunch.



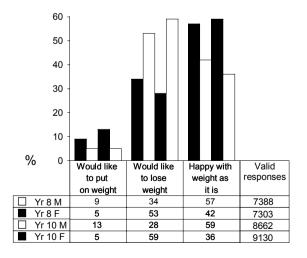
- 1. The 'packed lunchers' form an interesting group. Around 37% of all pupils atre a packed lunch. Basic analysis of data from the 1990s suggested that this group were likely to enjoy a more balanced overall diet than those choosing other lunch options not necessarily because of what was in the lunch 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 eat at lunchtime and throughout the day. Data since 1985 show a fluctuating trend of 'packed lunchers'.
- 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? 28% of the Year 10 males either went home for lunch or bought their lunch from a shop. Why are they chosing this option above the option of lunch at school?
- 3. Data since 1983 reveal an upward trend, for all groups, of those not having schoolday lunch (SHEU, 2005, 'Trends-Young People's Food Choices 1983-2004').
- 4. We have seen on the previous page that there is a relationship between those who missed lunch and those who missed breakfast. For example, 29% Year 10 females had 'nothing for breakfast this morning' and 'nothing for lunch yesterday'. Are there connections between pupils who miss meals and their attitudes to losing weight? [See over]

Attitude to personal weight

59% of Year 10 females and 53% of Year 8 females would like to lose weight

Your weight — which statement describes you best? (21)

- 1. Many more females than males want to lose weight.
- 2. 59% of the Year 10 females and 53% of the Year 8 females would like to lose weight.
- 3. More younger males and older females would like to lose weight when compared with their counterparts.
- 4. Only 36% of the Year 10 females said they were happy with their weight as it is.



Comments

- 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 groups (SHEU, 2005, 'Trends-Young People's Food Choices 1983-2004').
- 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 were more likely to miss breakfast and lunch if they desired to lose weight:

Proportion who had nothing for breakfast today: 17%

Proportion who missed lunch yesterday: 20%

Proportion of those who want to lose weight who missed breakfast: 21% Proportion of those who want to lose weight who missed lunch: 24% In earlier books in this series we also showed that a desire to lose weight could be linked to food choices.

Weight

Up to 46% were unsure of their weight

Do you know your weight? (17)

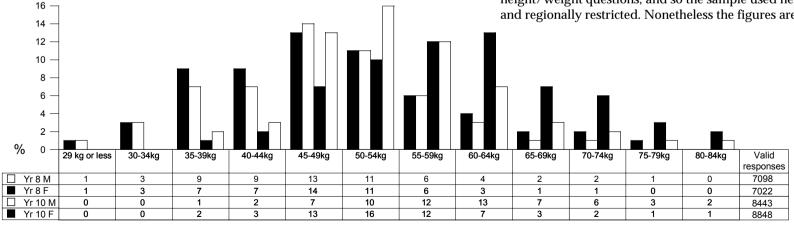
- 1. There are some unsurprising age and sex differences here: older males are the heaviest, which fits well with the data relating to height.
- We do not ask the question in the primary version of the questionnaire because of the work that would be involved for teachers in the collection of accurate 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. The following percentages of missing values provides an indication of those who did not know or were unsure of their weight:

Y8M: 45% Y8F: 46% Y10M: 35% Y10F: 33%

- 3. 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.
- 4. 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.

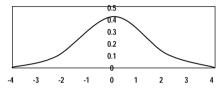


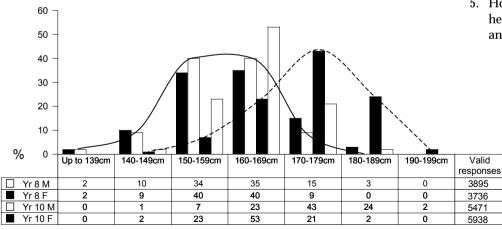
Height

Males start 'growing away' from females in Year 10

Do you know your height? (16)

- 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.





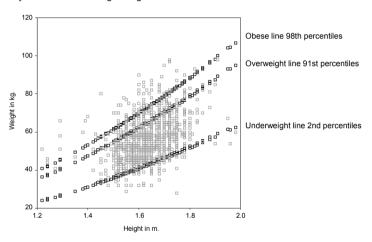
- 1. Many of the comments we made about weight above also apply here.
- 2. A higher proportion of young people are sure of their height than their weight.
- 3. A comment from many primary school teachers is that youngsters, particularly girls, are getting taller at an earlier age. If this is combined 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

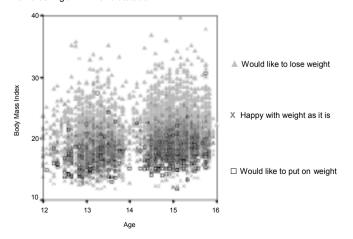
Up to 20% need to lose weight

Derived body mass measurement

15 year-old females: Height/weight chart



Females: Age/B.M.I. and attitude



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, 20% of the males and 16% of the females were 'overweight' according to the Child Growth Foundation charts used in this presentation. This compares with the 28% of all Year 10 males and 59% 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'.
- 2. The second chart shows how females' attitudes to their weight may vary. Females who want to put weight are shown with a black square (□) and these tend to be found in the lower half of the cloud of points. However, they are quite spread out. More striking are the 60% of females who want to lose weight (▲): these can be found throughout the distribution, including some who have a BMI indicating underweight.
- 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	<i>Females</i>
The weight guidelines on this page were	Underweight	3%	3%
derived using a UK-reference group for	Overweight	17%	12%
Body Mass Index adjusted for age	Obese	6%	4%
(Child Growth Foundation).	Valid responses	7716	7516

Protein

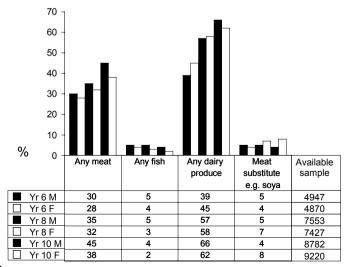
66% of 14-15 year old males have dairy produce *on most days*

Protein items in their diet (22a) (Pri.8)

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. There is a marked age gradient for *meat* and *dairy products*, with older pupils reporting eating them with higher frequencies. In Year 8, 35% of males and 32% of females report eating *meat* on most days but by Year 10, 45% of the males and 38% of the females report the same.



- 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

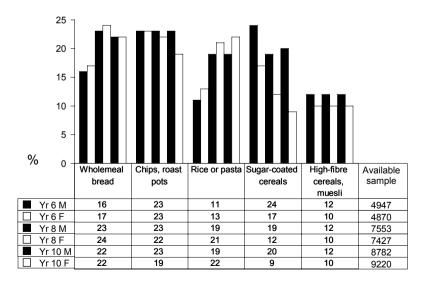
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Starchy items in their diet (22b) (Pri.8)

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. The males 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 sugar-coated cereals and high fibre cereals.
- 3. As they get older, fewer females eat sugary cereals but more eat rice or pasta.



Comments

- 1. Slightly more males more than females are inclined to choose chips, does this reflect the increased diet-consciousness of the females? The agerelated drop in the responses of females suggests that this is the case.
- 2. Data since 1990 reveal an overall increase of those choosing chips/roast potatoes 'on most days'. Figures for chips are slightly lower than last year's data (SHEU, 2005, 'Trends-Young People's Food Choices 1983-2004').
- 3. The avoidance by older females of sugar-coated cereals may be part of a general avoidance of calorific foods, but there may be some specific attitudes at play here perhaps a greater sensitivity to dental risks than the older males, or that fewer females eat breakfast by comparison.
- 4. The slight excess of males over females eating high-fibre cereals is interesting and remains counter to expectations. More females than males skip breakfast (page 2) but when we select only for those pupils having breakfast the difference persists.



In earlier books in this series we showed that the frequency of eating chips could be linked to the type of lunch eaten e.g. those eating a packed lunch were less ikely to eat chips.

Fruit and vegetables

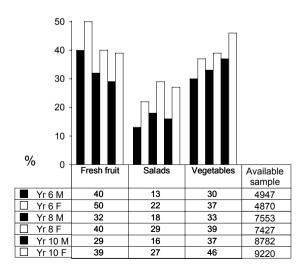
Less fresh fruit but more vegetables eaten as pupils get older

Fruit and vegetables in their diet (22c) (Pri.8)

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 but more vegetables eaten as pupils get older. More females than males prefer salads
- 2. 50% of 10-11 year olds females report eating fresh fruit 'on most days' but this has dropped to 39% by the time they are 14 years old.
- 3. By contrast, 37% of 10-11 year olds females report eating vegetables 'on most days' which has increased to 46% by the time they are 14 years old.



- 1. Gender differences are most marked in this section: we may speculate about differences in health and diet consciousness.
- 2. Up to 29% of the females in secondary school eat salad and from 37%-46% of them eat vegetables on most days. Is this because they are keen to have a balanced diet or are they choosing food items that have lower calorific content?
- 3. There is an increase with age in the consumption of vegetables for both genders. Perhaps this is a sign of youngsters approaching adult tastes rather than the juvenile abhorrence of certain vegetables.
- 4. Data from 1990-1998 reveal a downward trend of pupils eating fresh fruit 'on most days' From 1999-2001 there was a reversal of this decline which may be associated with changes to the questionnaire (SHEU, 2005, 'Trends-Young People's Food Choices 1983-2004'). This year's figures suggest a downward trend similar to 2003.
- There are Government initiatives to promote consumption of fruit and vegetables in young people's diet. We find that the young people who report eating fresh fruit are more likely to eat other healthy items like fish, wholemeal bread and vegetables.

Drinks and snacks

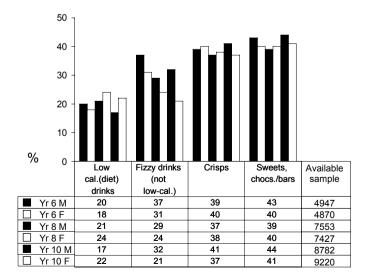
40% of the Year 6 females eat crisps and sweets 'on most days'

Drinks and snacks they enjoy (22d) (Pri.8)

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.

- Males have a taste for fizzy drinks, and older females for low-calorie drinks.
- 2. There is little gender and age difference in the appeal of sweets and crisps and 40% of the Year 6 females eat crisps and sweets 'on most days.'
- 3. Many of these high-calorie foods show high values in Year 6.



- 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 generally show an upward trend since 1995 in those eating packed lunches, and this year the figures remain similar across groups (see page 3).
- 3. Figures from 1987 suggest a slightly downward trend in the popularity of crisps with secondary pupils (SHEU, 2005, 'Trends-Young People's Food Choices 1983-2004'). However, up to 41% of this age group report eating crisps 'on most days'. Young people aged 10-11 years show a slightly higher percentage liking crisps, compared with the older pupils. Younger females have consistently remained higher than the males but since 1999 the trend is downward:

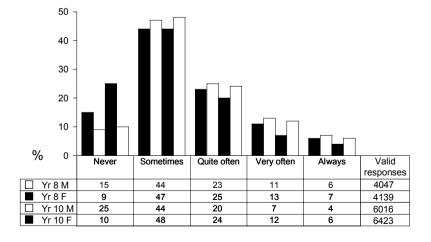
Eating crisps on most days	Males (10-11 yrs.) %	Females (10-11 yrs.)
1999	54	57
2000	51	54
2001	47	50
2002	48	51
2003	45	47
2004	39	40
		•

Dietary decisions

25% of the Year 10 males never consider their health when choosing food

When choosing what to eat, do you consider your health? (20)

- 1. Most of the young people respond at least sometimes.
- 2. More females than males respond to all categories other than never
- 3. With respect to age, more of the older males respond *never*; the females show 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 (SHEU, 2005, 'Trends-Young People's Food Choices 1983-2004').
- 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? Evidence from 'Education and Health' suggests that the first years of secondary school may be crucial for implementing healthy eating initiatives and, in particular, influencing boys attitudes to food (Hackett et al., 2003).
- 3. Other figures support the view about the implementation of healthy eating intitiatives in the first years of secondary school. Data show that around 37% of 12-13 year olds found 'Healthy eating' lessons useful compared with around 26% of 14-15 year olds (see page 102).



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.