

Exploring food attitudes and behaviours in the UK: Findings from the Food and You Survey 2010

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Exploring food attitudes and behaviours in the UK: Findings from the Food and You Survey 2010

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Summary

This report presents the initial findings from a new survey – Food and You – commissioned by the Food Standards Agency (FSA or the Agency) in 2009. The survey collected robust information on people's attitudes towards and knowledge of food issues such as food safety and healthy eating, as well as their behaviour. The survey is intended to be a time series with future waves being carried out on an annual or biennial basis.

The survey comprised 3,163 interviews with adults aged 16+ (with no upper age limit) across the UK.

The survey was designed to be able to chart who does and who does not follow the Government's advice on food safety and healthy eating and to, over time, understand what influences those who do or do not comply with the advice. Questions were designed to measure current knowledge and awareness of government advice on food safety and healthy eating. The survey also covered topics that may be important in explaining whether the general population comply with government advice (for example, eating and shopping habits and reported cooking behaviours).

Advice on food safety

The majority of respondents reported behaviour that follows recommended practices in cleaning, cross-contamination, chilling and cooking; for example, 84% of respondents reported that they always wash their hands before preparing food. Reported behaviour around washing raw meat or poultry was less frequently in line with the FSA advice; for example, 41% of respondents reported always washing raw meat and poultry and 42% raw fish and seafood.

Respondents' fridges were generally organised so that certain foods are put in certain places (75% of respondents reported storing food in the fridge in this way).

Four out of ten respondents (40%) said that they check the temperature of their fridges, and a further eight per cent that another household member checks. Just under half (46%) correctly stated that the temperature of a fridge should be between 0 and 5 degrees C.

When asked how they can tell whether food is safe to eat, respondents most commonly said they would use the smell (72%) and look (56%) of food. The recommended practice of checking the 'use by' date was mentioned by a quarter (25%).

A majority of respondents agreed with the statements 'Restaurants and catering establishments should pay more attention to food safety and hygiene' (82%

definitely or tended to agree), 'I am unlikely to get food poisoning from food prepared in my own home' (72%), 'A little bit of dirt won't do you any harm' (54%) and 'You are more likely to get food poisoning abroad than in this country' (50%).

Overall, 55% of respondents reported that they had not had food poisoning.

Advice on healthy eating

Respondents were asked to indicate the proportions of different food groups recommended for a healthy diet. About a fifth of respondents (21%) placed all food groups in their recommended proportions on the eatwell plate (a pictorial representation of what a healthy balanced diet should consist of). The food group most likely to be placed in line with recommendations were foods and drinks high in fat and/or sugar (84% placed this in the smallest portion of the eatwell plate); the food groups least likely to be placed in line with recommendations include sources of protein (35%) and starchy foods (36%).

Overall, a high proportion of respondents rated a variety of factors as important (either very important or fairly important) for a healthy lifestyle. These factors included: eating fruit and vegetables (99% thought this was very or fairly important for a healthy lifestyle) eating less salt (94%) and limiting foods high in saturated fat (92%).

In total, 85% of respondents thought that the recommended number of portions of fruit and vegetables a day was five. When asked whether a number of different food items counted towards the daily recommended fruit and vegetable intake, 90% correctly recognised that pure fruit juice would count, 82% thought frozen vegetables would count and 82% that dried fruit would count. However, around two thirds (65%) incorrectly thought that a jacket potato could count

Respondents were asked what they thought was the recommended maximum daily intake of salt that adults should eat each day: nine per cent of respondents stated the recommended amount of 6g, 40% said they 'didn't know'. About half (49%) suggested amounts either above (17%) or below (33%) 6g.

Eating, cooking and shopping

Most respondents agreed with the statements 'I enjoy cooking and preparing food' (68%), and 'I enjoy making new things to eat' (65%). The majority (65%) disagreed with the statement 'For me, food is just fuel to live'. Overall, 40% agreed with 'Cooking is like a hobby for me'.

The most commonly-eaten types of food were fruit and vegetables; bread, rice, pasta, potatoes and other starchy foods; and milk and dairy foods; about seven out of ten respondents reported eating these at least once a day (72% for fruit and vegetables, 71% for starchy foods, and 70% for milk and dairy products).

Almost three-fifths (57%) said they cooked or prepared food for themselves every day, and 37% did so for others.

Women were more likely than men to be responsible for all or at least half of the food shopping in their household (87% compared with 59%).

The vast majority of respondents did their shopping solely in food shops (91%) as opposed to on the internet, and 97% said they did most of their food shopping in supermarkets.

The majority of respondents thought that food prices had increased over the last 12 months (81%).

Eating outside of the home

The majority (79%) of all 'meals', 'light meals' and 'snacks' were eaten at home, 13% were eaten at school, college or work, three per cent at someone else's house, four per cent at a food outlet (for example, a restaurant, café or pub) and three per cent somewhere else.

About two thirds of respondents had eaten out in the last seven days (69%) and the most common location for this was in a restaurant.

Cleanliness and hygiene were important factors to most respondents in choosing where to eat out (63%).

The general appearance of places to eat and buy food was used by most respondents as a sign of standards of hygiene when eating out or buying food (71%).

Eating and health

Nearly all respondents (94%) agreed with the statement 'Even if you don't have a really healthy diet, it's worth making small changes', and there was a high level of agreement with 'What you eat makes a big difference to how healthy you are' (91%) and almost three-quarters disagreed with 'I don't really think about what I eat' (72%).

Opinions about experts were mixed, with nearly half of respondents (47%) agreeing with the statement 'I am fed up with experts telling me what I should eat', and almost three-quarters (73%) agreeing with 'Experts contradict each other over what foods are good for you'.

Over four-fifths of respondents (82%) felt their overall diet was healthy, and a similar proportion (86%) thought that the food they tend to eat at home was healthy.

Almost three-fifths of respondents (58%) felt the food they eat when out was less healthy than at home.

Over half (55%) agreed they do not need to make changes to the food they eat as it is already healthy enough.

Nevertheless, almost three-fifths (57%) reported having made a change to their diet in the previous six months. The most common changes were eating more fruit and vegetables (28%) and eating smaller portions (25%).

The most common reason respondents gave for changing their diet was to lose or maintain weight (mentioned by 33% of respondents who had made changes to their diet) and to be more healthy (18%).

Respondents were asked what difficulties they would have, if any, if they tried to eat more healthily. The main difficulties reported were the cost of eating more healthily (12% of respondents mentioned this) and time constraints (8%). Almost a quarter (23%) said they would not have any difficulties.

Groups of interest

Initial analyses explored the relationships between knowledge, attitudes and behaviour and individual's characteristics and circumstances. The following characteristics were associated with lower levels of knowledge and less likelihood of following government advice in a number of food safety and healthy eating areas: older respondents (aged 60+), men, respondents living in low income households (annual household income of up to £10,400) and non-White respondents.

Future analyses can examine these relationships in more depth and consider the potential health risks for particular groups.

1. Introduction

This report presents the initial findings from a new survey – Food and You – commissioned by the Food Standards Agency (FSA or the Agency) in 2009. The survey collected robust information on people’s attitudes towards and knowledge of food issues such as food safety and healthy eating, as well as their behaviour. The survey is intended to be the first in a time series with future waves being carried out on an annual or biennial basis.

Much of what the Agency does relates to influencing behaviours in terms of what people buy and eat and how they store and prepare it. Food and You was designed to provide the Agency with robust quantitative information about the prevalence of different views and behaviours amongst the general population. The survey will play a vital role in helping the Agency monitor its strategic priorities, as subsequent waves of data will enable the FSA to chart changes in attitudes, knowledge or behaviour over time.

This report is intended as an introduction to the survey, providing a descriptive overview of the key baseline information; findings are not discussed in relation to other data or literature. Once further waves have been completed a wealth of data will allow detailed examination of the numerous and complex influences on attitudes and behaviours in the fields of food safety and healthy eating.

The survey comprised 3,163 interviews with adults aged 16+ (with no upper age limit) across the UK.

This chapter provides background information to the survey including the research and policy context, and outlines the methodology used.

1.1 Background and objectives

In 2008, the FSA’s Social Science Research Committee (SSRC)¹ were asked to review the Agency’s Consumer Attitudes Survey (CAS)², which ran for eight waves from the FSA’s inception in 2000³. The SSRC recommended that a new rigorous regular survey was needed to underpin the FSA’s policies.

In 2009, the FSA commissioned a consortium comprising TNS-BMRB, the Policy Studies Institute (PSI) and the University of Westminster to carry out the first wave of Food and You.

¹ The SSRC is an independent Scientific Advisory Committee set up to provide advice and challenge to the Agency on social science matters; for more information see: <http://ssrc.food.gov.uk/>

² For more information on CAS see: <http://www.food.gov.uk/science/socsci/surveys/foodsafety-nutrition-diet/>

³ The SSRC’s full discussion paper can be found at: <http://www.food.gov.uk/multimedia/pdfs/ssrc0822v1.pdf>

The main aim of the survey was to collect quantitative information about the UK public's attitudes, beliefs and values towards food issues (such as food safety and healthy eating), as well as their behaviour, in order to ensure a sound social science evidence base to support policy making at the FSA and across relevant government departments.

The survey also collected supporting information on lifestyle, such as people's eating habits, shopping and eating outside of the home, all of which may influence food behaviours.

More specifically, the objectives were to collect quantitative information to enable the Agency to:

- Monitor public understanding of, and engagement with, the Agency's aims of improving food safety and promoting healthy eating;
- Assess public attitudes to new developments, such as emerging food technologies;
- Identify the complex influences on knowledge, attitudes and behaviour;
- Assess knowledge of, and response to, messages and interventions aimed at raising awareness and changing behaviour;
- Identify specific target groups for future interventions (e.g. those most at risk or those where there is likely to be the greatest impact);
- Monitor changes over time in attitudes and behaviour; and,
- Broaden the evidence base and develop indicators to assess progress in fulfilling the Agency's strategic plans, aims and targets.

The first wave will form a baseline from which changes over time can be monitored in future waves.

1.2 Research and policy context

1.2.1 Role of the FSA

The FSA was created in 2000 as a non-ministerial government department governed by a Board appointed to act in the public interest, with the task of protecting consumers in relation to food. The FSA is a UK-wide body with main offices in London, Aberdeen, Cardiff, Belfast and York. The Agency was set up to:

'Protect public health from risks which may arise in connection with the consumption of food, and otherwise to protect the interests of consumers in relation to food'

At the time Food and You was commissioned, the Agency's Strategic Plan for 2010-15⁴ set out the Agency's strategic direction and defined the FSA purpose of safe food and healthy eating for all. As part of this Strategic Plan, the Agency set out five outcomes to deliver during 2010-2015, which were to ensure:

- food produced or sold in the UK is safe to eat;
- imported food is safe to eat;
- consumers understand about safe food and healthy eating, and have the information they need to make informed choices;
- food products and catering meals are healthier; and,
- regulation is effective, risk-based and proportionate, is clear about the responsibilities of food business operators, and protects consumers and their interests from fraud and other risks.

The Agency's Strategic Plan is being reviewed following the changes outlined in section 1.2.4.

1.2.2 Government advice on food safety

The Food Standards Agency provides guidance on food safety⁵. The key purpose of the advice is to minimise the risk of food poisoning. Advice to the general population centres on four aspects of food hygiene: cleaning, cooking, cross-contamination and chilling (collectively known as the '4 Cs'), with advice given on each aspect. Advice is also given on the use of 'use by' date marks and storage instructions as a means to determine the safety of food eaten at home.

1.2.3 Government advice on nutrition and healthy eating

The Government provides advice on nutrition and healthy eating⁶. The advice centres on the eatwell plate and '8 tips for eating well', including advice on eating at least five portions of fruit and vegetables a day and the recommended maximum daily allowances of salt for adults. There are also guidelines on recommended allowances for fat and calories.

1.2.4 Changes in departmental responsibilities

On 1 September 2010, responsibility for food labelling other than food safety aspects of labelling and nutrition labelling in England transferred to the Department for Environment, Food and Rural Affairs (Defra)⁷. On 1 October 2010, responsibility for nutrition policy (including labelling) transferred to the Department of Health (DH) in England and to the Welsh Assembly Government in Wales. Nutrition policy in Scotland and Northern Ireland remains the

⁴ The FSA's 2010-15 Strategic Plan can be found at:
<http://www.food.gov.uk/multimedia/pdfs/strategy20102015.pdf>

⁵ For more information see:
<http://www.nhs.uk/Livewell/homehygiene/Pages/Homehygienehub.aspx>

⁶ For more information see: <http://www.nhs.uk/Pages/HomePage.aspx>

⁷ For more information see: <http://www.food.gov.uk/news/newsarchive/2010/sep/labelgov>
and <http://www.food.gov.uk/news/newsarchive/2010/sep/nutrition>

responsibility of the Agency. Following these changes, the Agency is in the process of reviewing its Strategic Plan.

A number of topics included in the Food and You survey are related to nutrition and the policy areas to which the findings contribute are now part of DH's remit.

1.2.5 Other relevant surveys

There are a number of Government surveys, which also collect information on food and diet – specifically the National Diet and Nutrition Survey (NDNS)⁸ and the Health Survey for England (HSE)⁹.

Some measures have been included in Food and You to increase the explanatory power of the analyses (i.e. those on reported fruit and vegetable consumption, reported physical activity, physical measurements and consumption of different foods). Other sources, particularly on consumption of various foods, will provide more robust national estimates. Where relevant these have been highlighted throughout the report.

1.3 Methodology

In this section, key details of the survey methodology are highlighted; detailed information can be found in Annex B and in the technical report¹⁰.

1.3.1 Survey fieldwork

The survey sample was a stratified¹¹ random probability sample of private households in the UK, using the Postcode Address File (PAF)¹² as a sampling frame. In each eligible household, one adult aged 16+ (with no upper age limit) was selected for interview, using a random selection procedure in households where there was more than one eligible adult.

The survey comprised 3,163 interviews with adults across the UK, carried out face-to-face in respondents' homes. The samples in Scotland and Northern Ireland were boosted (increasing the sample to around 500 in each country) to enable more detailed analysis at a country level.

The fieldwork for the survey took place between March and August 2010.

⁸ For more information on the NDNS see:

<http://www.food.gov.uk/science/dietarysurveys/ndnsdocuments/>

⁹ For more information on the HSE see:

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

¹⁰ Available at: http://www.foodbase.org.uk/results.php?f_category_id=&f_report_id=641

¹¹ The sample was stratified by Government Office Region (GOR), the percentage of heads of households in a non-manual occupation (NS-SEC groups 1-3), the percentage of households with no car and population density (persons per hectare)

¹² The PAF lists all known UK postcodes and addresses and is the sampling frame commonly used in general population surveys

Interviews took, on average, 60 minutes to complete. A response rate of 52% was achieved.

Corrective weighting was applied at the analysis stage, to ensure the weighted sample was representative of the UK as a whole.

Tables B2 to B5 of Annex B show the profile of the achieved sample of respondents.

1.3.2 Questionnaire development

Prior to commissioning the survey, the FSA undertook a scoping study to review existing research (predominantly quantitative) covering food issues to assess what could be learnt from the existing research, minimise duplication and help inform question development for Food and You¹³.

An Advisory Group was established to help advise the FSA and consortium on key aspects of the survey, including the content and structure of the final questionnaire and the survey outputs. The Advisory Group consisted of experts in the topic area of food and in survey methodology.

Extensive development work was carried out to develop the questionnaire and survey procedures. This included initial qualitative work (focus groups, depth interviews and kitchen explorations), cognitive testing of draft survey questions, and placing a number of draft questions on TNS's Omnibus survey.

A dress-rehearsal pilot was conducted in February 2010 to test the questionnaire and survey procedures.

1.3.3 The final questionnaire

The survey was designed to be able to chart who does and who does not follow the Government's advice on food safety and healthy eating and to understand what influences those who do or do not comply with the advice. The development work helped shape questions about which factors influence food behaviours (for example, people's knowledge, their attitudes and their eating patterns) and these factors have been captured in the survey as pragmatically and robustly as possible within the 60 minute interview.

The final questionnaire covered a number of topics outlined in Table 1.1. In order to cover additional topics, without over-burdening respondents, three sections of the questionnaire (eating patterns, eating out and shopping habits) were rotated, that is, each was asked of a random third of respondents.

¹³ The scoping study report can be found at:
<http://www.food.gov.uk/multimedia/pdfs/foodandyouscoping.pdf>

Table 1.1 Topics covered in Food and You

Food safety topics

- Frequency of self-reported behaviours relating to the 4C's (cleaning, cross-contamination, chilling and cooking)
- Food storage practices
- Knowledge of correct fridge temperature
- Understanding & use of date labelling
- Self-reported use of leftovers
- General attitudes to food safety
- Experience of food poisoning

Healthy eating topics

- Perceptions of diet
- General attitudes towards healthy eating
- Self-reported eating behaviours – patterns and consumption of different foods
- Knowledge of the eatwell plate, '5 a day', recommended maximum daily intakes of fat, salt & calories
- Importance of different foods for a healthy lifestyle
- Changes to diet over the last 6 months and triggers/barriers to change

Cross-cutting topics

- Socio-demographics
- General attitudes to food
- Frequency of cooking/preparing food
- Self-reported level of physical measurements and physical activity
- Eating outside of the home*
- Shopping behaviour*
- Perceptions of food prices* and expenditure
- Recontact

* indicates a rotating section asked of a third of the sample

1.4 Information about this report

1.4.1 Regression analysis

In several sections of this report, regression analysis has been used to provide further descriptive, exploratory analysis. Regression analysis allows statistical associations between a response (e.g. whether or not a respondent reports eating the recommended five portions of fruit and vegetables a day) and a range of predictors (e.g. gender, age, ethnicity) to be explored. The relationship between a predictor and the response is considered whilst holding the effects of other predictors constant.

1.4.2 Use of the findings and data

The findings presented in this report provide a descriptive overview of the key baseline information, and as such, can only be used to describe food attitudes, knowledge and behaviours from the first wave. The first wave provides a rich

source of data and to enable further analysis the dataset is available on the UK Data Archive¹⁴.

Once further waves have been completed a wealth of data will allow detailed examination of the numerous and complex influences on attitudes and behaviours in the fields of food safety and healthy eating.

1.4.3 Self-reported behaviours

The cost and time constraints on this survey limited the collection of data on behaviour to self-reported behaviour. One key issue, which was apparent from the questionnaire development stage, was the effect of social desirability bias when asking respondents about their behaviour. Social desirability has been described as the tendency to respond to self-report items in a manner based on the respondent's subjective perception of what they ought to say, rather than on factual accuracy.

There were a number of topics in the questionnaire, for which respondents might be particularly reluctant to report behaviour which goes against 'best practice' (for example, not washing their hands before cooking or preparing food or not eating the recommended five portions of fruit and vegetables a day). The questionnaire was designed to mitigate this by asking questions about behaviour in specific time periods (e.g. 'yesterday' rather than 'usually'), and by ensuring that behaviours asked about included neutral items as well as recommended and not recommended practices. Several amendments were made to questions during the development and piloting stage to attempt to reduce social desirability bias, including removing some items where the risk of bias was felt to be too high.

1.4.4 Reporting conventions

Only those differences found to be statistically significant at the 95% level are reported. The identification of a difference as statistically significant means that there is less than a five per cent likelihood that an observed difference is due to chance rather than as a result of a true difference in the population. This confidence level is generally seen as acceptable and is used commonly across government social surveys.

As the analysis presented in this report is largely exploratory, statistical tests have not been undertaken to account for the effect of multiple comparisons.

Percentages may not add to 100% due to rounding.

Graphs and tables that are presented within the chapter text are referred to as 'Chart 1.1' or 'Table 1.1' etc. References to 'Table A1' etc are to the detailed tabulations presented in Annex A.

¹⁴ <http://www.data-archive.ac.uk/>

1.4.5 Structure of the report

The report is divided into a number of chapters. Chapters 2 and 3 explore attitudes, behaviours and knowledge of government advice on food safety and healthy eating. The remaining chapters cover topics that may be important in explaining whether the general population comply with government advice.

Chapter 2 presents information about the extent to which respondents were aware of and understood government advice on food safety, including self-reported behaviours relating to the '4C's' (cleaning, cross-contamination, chilling and cooking), use of leftovers and 'use by' date marks, attitudes to food safety and experiences of food poisoning.

Chapter 3 presents information about the extent to which respondents were aware of and understood the messages included in the Government's advice on healthy eating including the eatwell plate, the '8 tips', recommended daily consumption of fruit and vegetables and recommended maximum daily intakes of salt, fat and calories.

Chapter 4 focuses on attitudes and behaviours around eating, cooking and shopping and covers general eating patterns, attitudes towards food in general, self-reported consumption of different types of foods, cooking, and shopping behaviour.

Chapter 5 presents information about eating outside of the home and covers: patterns of, and views towards, eating outside the home, eating out behaviour, characteristics associated with eating out, factors important when deciding where to eat out, views on where information should be provided on healthy food options in out of home settings, and awareness of hygiene standards.

Chapter 6 links to Chapter 3 in that it covers issues which could impact on a respondent's propensity to follow healthy eating messages, for example their attitudes to healthy eating, perceptions of their own diets, any changes made to their diets and the barriers and motivations to change, and self-reported levels of physical activity, weight and height.

Finally, Chapter 7 discusses the characteristics which were associated with lower levels of knowledge and less likelihood of following government advice in a number of food safety and healthy eating areas.

Annex A includes crosstabulations of key questions by demographic sub-groups.

Annex B includes a more detailed description of the survey methodology.

2. Advice on food safety

Summary

- The majority of respondents reported behaviour that follows recommended practices in cleaning, cross-contamination, chilling and cooking; for example, 84% of respondents reported that they always wash their hands before preparing food. Reported behaviour around washing raw meat or poultry was less frequently in line with the FSA advice; for example, 41% of respondents reported always washing raw meat and poultry and 42% raw fish and seafood.
- Four out of ten respondents (40%) said that they check the temperature of their fridges, and a further eight per cent that another household member checks. Just under half (46%) correctly stated that the temperature of a fridge should be between 0 and 5 degrees C.
- When asked how they can tell whether food is safe to eat, respondents most commonly said they would use the smell (72%) and look (56%). The correct answer of the 'use by' date was mentioned by a quarter (25%).
- The majority agreed with statements 'Restaurants and catering establishments should pay more attention to food safety and hygiene' (82%), 'I am unlikely to get food poisoning from food prepared in my own home' (72%), 'A little bit of dirt won't do you any harm' (54%) and 'You are more likely to get food poisoning abroad than in this country' (50%).
- Overall, 55% of respondents reported that they had not had food poisoning.

The FSA provides guidance on food safety. The key purpose of the advice is to minimise the risk of food poisoning in the home. Advice to the general public centres on four aspects of food hygiene: cleaning, cooking, cross-contamination and chilling (collectively known as the '4 Cs'), with advice given on each aspect. For example, guidance covers the correct temperature at which fridges should be kept to ensure that food is stored safely. Advice is also given on the use of 'use by' date marks and storage instructions as a means to determine the safety of food eaten at home.

This chapter focuses on food safety, including attitudes, understanding and self-reported behaviour. This information will provide a baseline on how far respondents' behaviour fits with the guidance. Section 2.1 covers behaviour

relating to cleaning including handwashing. Section 2.2 discusses cross-contamination. Section 2.3 focuses on chilling including defrosting and checking fridge temperatures. Section 2.4 presents findings on cooking and section 2.5 on leftovers. Section 2.6 covers use of storage information and how respondents decide whether a food is safe to eat. Section 2.7 looks at attitudes to food safety, while section 2.8 covers experiences of food poisoning.

2.1 Reported behaviours relating to the '4 Cs' - Cleaning

2.1.1 Wiping surfaces, cleaning sinks and changing tea towels and dishcloths

The FSA advises that worktops be washed before and after preparing food, particularly after they have been touched by raw meat, including poultry or raw eggs. Dishcloths and tea towels should also be washed regularly and dried before being used again as dirty, damp cloths are the perfect place for bacteria to breed.

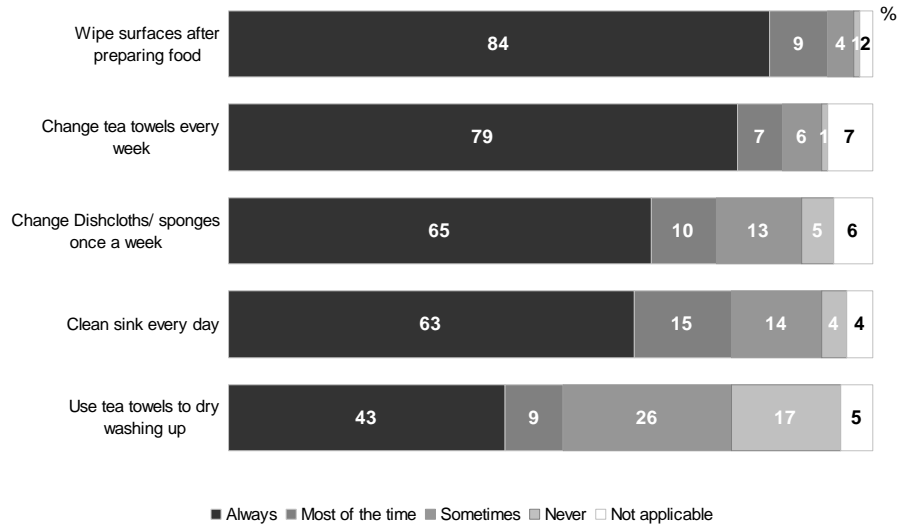
Respondents were asked to say how frequently (on a scale from 'Never' to 'Always') they wipe down surfaces after preparing food, change tea towels at least every week, change dishcloths/sponges at least once a week, clean sink and draining board thoroughly every day, and use tea towels to dry washing up.

As chart 2.1 shows the majority of respondents reported that they always wipe surfaces after preparing food (84% reported doing so) and change both tea towels (79%). Around two-thirds of respondents reported always changing dishcloths and sponges every week (65%) and cleaning their sinks thoroughly every day (63%).

For each of these behaviours there was a group of between five per cent and 18% of respondents who reported doing them either never or sometimes (although someone else in the household, other than the respondent, may do these behaviours).

Women were more likely than men to say they always undertake these activities. For example on wiping down surfaces after preparing food, 92% of women said they always do this, compared with 76% of men. Those aged 16-24 said they did these activities least frequently, compared with other age groups. Table A1 shows the full breakdown of response by key demographic factors.

Chart 2.1 *Cleaning practices in the kitchen*



Source: Q4.1
Base (unweighted): All respondents (3163)

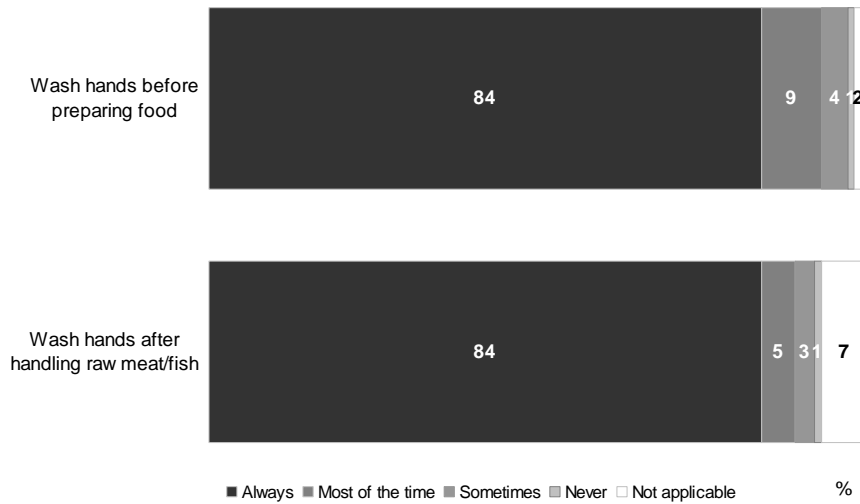
2.1.2 Hand washing

The FSA advises that hands be washed thoroughly with soap and warm water before starting to prepare food, after touching raw meat (including poultry) and after going to the toilet, touching the bin or touching pets in order to avoid spreading germs.

Respondents were asked how frequently they wash their hands before they start preparing or cooking food, and wash hands immediately after handling raw meat, poultry or fish.

Overall, 84% of respondents reported that they always wash their hands before preparing food, and the same proportion said they do so after handling raw meat or fish. The majority of the remainder reported washing their hands most of the time (9% before preparing food and 5% after handling raw meat or fish). One per cent reported never washing their hands before preparing food or handling raw meat or fish. In both cases, men and those aged 16-24 were the least likely groups to say they always wash their hands before preparing food (Chart 2.2).

Chart 2.2 Cleaning – hand washing



Source: Q4.1, 4.6
 Base (unweighted): All respondents (3163)

When asked about how hands were washed, almost two-thirds (62%) used hot water, with six per cent using cold water. In total, 60% mentioned a soap product, with respondents aged over 50 years being more likely than other age groups to use soap.

When asked about how hands were dried after being washed, almost two-thirds (64%) dry their hands using a hand towel, with a further 13% using kitchen roll for this. A quarter (25%) dry their hands using a tea towel, three per cent shake their hands dry and one per cent use their clothes or apron to dry their hands. Over 50's are the most likely age group to use a hand towel (77% reported doing so), while 35% of under 40's use tea towels for hand drying.

Further details are given in Table A2.

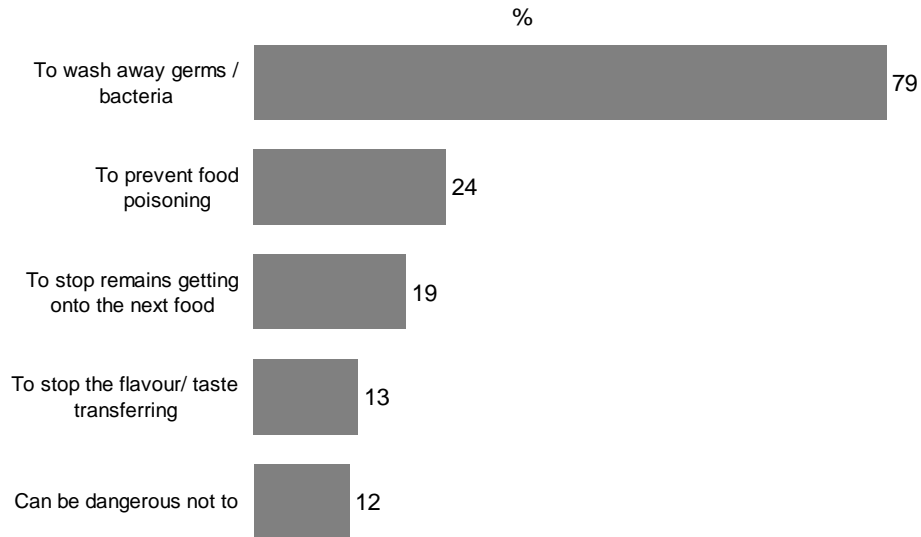
2.2 Reported behaviours relating to the 4 Cs - Cross-contamination

2.2.1 Chopping boards

The FSA advises that chopping boards be washed thoroughly with hot water and washing-up liquid before and after cooking as they are sources of germ cross-contamination.

Respondents were asked to say, in their own words, why they thought people might wash a chopping board after preparing raw meat, fish or poultry and before preparing other food. Almost eight out of ten (79%) correctly mentioned that it would be to wash away germs or bacteria, with no significant differences across demographic groups. Chart 2.3 shows the breakdown of responses.

Chart 2.3 Cross contamination – reasons for washing chopping board after preparing raw meat, poultry or fish



Source: Q4.3
Base (unweighted): All respondents (3163)

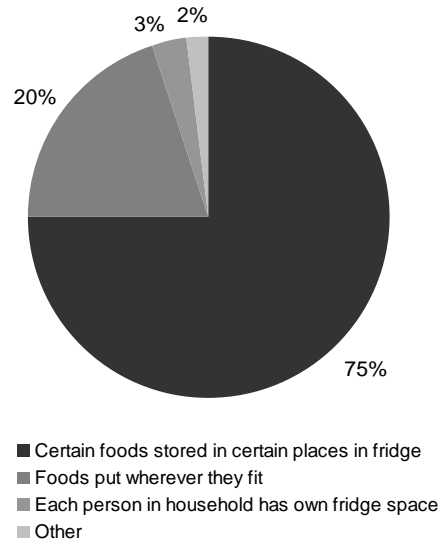
2.2.2 Food storage in the fridge

The FSA recommends that raw meat be kept away from ready-to-eat foods such as salad, fruit and bread. This is because these foods will not be cooked before they are eaten and so any bacteria that gets on to the foods will not be killed by being cooked. The FSA advises that raw meat be covered and stored on the bottom shelf of the fridge where it can not touch other foods or drip on to them.

Three-quarters of respondents (75%) reported that their household’s fridge is organised so that certain foods are stored in certain places within it and a fifth (20%) said they do not have any system but instead put foods wherever they fit. The remaining five per cent of respondents either lived in households where each person had their own fridge space (3%) or had another way of storing food in the fridge (2%).

This practice was more common among the younger and older age groups, for example, 26% of those aged 16-24 and 27% of over 75’s said they put foods wherever they fit, compared with 18% of 35-44’s and 16% of 45-54’s. (Chart 2.4).

Chart 2.4 Cross contamination – food storage



Source: Q4.13
Base (unweighted): All respondents (3163)

Overall, about six out of ten (62%) reported that they store raw meat and poultry at the bottom of the fridge, 23% keep it at the top, seven per cent in the middle of the fridge and nine per cent anywhere/wherever there is space.

In terms of how raw meat and poultry are stored, almost all respondents who stored it in their fridge, reported that they kept it either in its packaging (53%), or else covered with film or foil (35%) or in a covered container (28%).

Cooked meat and poultry, whether bought cooked, or cooked at home then refrigerated is stored by a third (33%) on the top shelf with a further 30% keeping it on the middle shelf; 14% reported that they stored cooked meat away from raw food, but did not specify a particular location within the fridge. Again cooked meat was generally stored in foil or film (by 49%), in a covered container (42%) or in the original packaging (31%).

Four per cent of respondents reported that they store both raw and cooked meat 'anywhere' in the fridge with a further two per cent answering 'wherever there is space'.

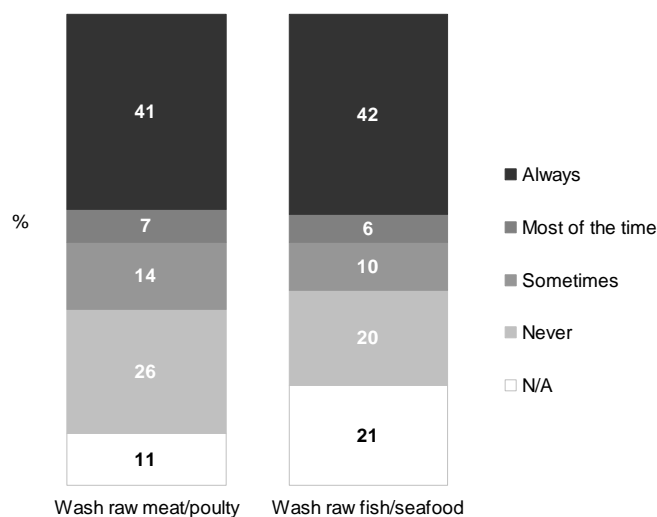
2.2.3 Washing raw meat and fish

The FSA advises against washing raw meat or fish prior to cooking in order to avoid spreading germs.

Respondents were asked to say how frequently (on a scale from 'Never' to 'Always') they wash raw meat or poultry, or wash raw fish or seafood, before they cook it.

Approximately four out of ten respondents (42%) said they always wash raw fish or seafood, and (41%) that they always wash raw meat and poultry before cooking, which is contrary to the FSA advice. Almost a quarter of respondents (26%) said they never wash raw meat and poultry, and 20% that they never wash raw fish or seafood. A minority said they wash meat or fish either sometimes (14% for raw meat or poultry, 10% for raw fish or seafood) or most of the time (7% for raw meat or poultry, 6% for raw fish or seafood) (Chart 6.5).

Chart 2.5 Cross contamination – washing raw meat and fish



Source: Q4.1
Base (unweighted): All respondents (3163)

Women (46%) were more likely than men (37%) to say they always wash raw meat and poultry, and it was a more common behaviour among older respondents. The proportion saying they always wash raw meat and poultry increased with age, for example, among those aged 16-24, 30% said they always do this, which increased to 47% of those aged 75+. Washing meat was also a more common behaviour among respondents belonging to non-White ethnic groups, 63% of whom said they always did it, compared with 38% of White respondents.

Patterns across the different groups for washing raw fish and seafood were similar.

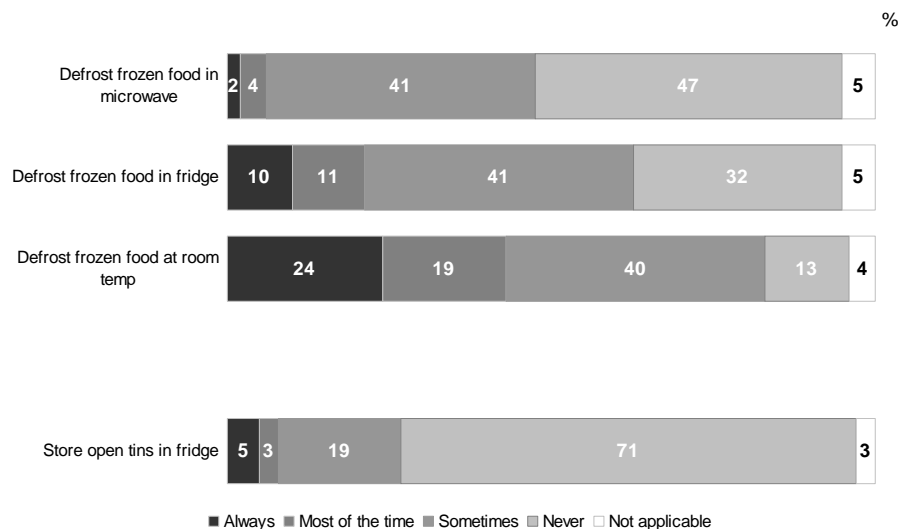
2.3 Reported behaviours relating to the 4 Cs - Chilling

2.3.1 Chilling and defrosting

The FSA advises against putting open cans in the fridge as the metal of the can may transfer to the contents; they recommend instead transferring the contents into a storage container or covered bowl. The FSA advises that frozen meat and fish should be defrosted thoroughly before cooking, either in the fridge, to thaw to avoid it getting too warm, or in a microwave if cooking straightaway.

Respondents were asked to say how frequently (on a scale from 'Never' to 'Always') they store open tins in the fridge, defrost frozen food at room temperature (e.g. on the worktop whether on a plate, in a container or in its packaging), defrost frozen food in the fridge, and defrost frozen food in the microwave. Responses are shown in Chart 2.6.

Chart 2.6 Chilling and defrosting behaviours



Source Q4.1
Base (unweighted): All respondents (3136)

Seven out of ten respondents (71%) said they never store open tins in their fridges. A quarter (26%) of respondents said they did this either sometimes, most of the time or always. Storing open tins in the fridge was most common among men (32%), and those aged under 30 (39%).

How respondents reported defrosting food varied; defrosting food at room temperature (e.g. on the worktop whether on a plate, in a container or in its packaging) was done at least sometimes by 82% of respondents, with 24% saying they always defrost food in this way, whereas 13% that they never do so.

Defrosting food in the fridge was less common. Approximately a third of respondents (32%) said they never do this, while one in ten (10%) always defrosts food in the fridge and 63% do so at least sometimes. One in ten respondents always defrosts food in the fridge. Defrosting food in the fridge was more commonly reported by women (69%) than men (57%), and least commonly reported by those aged 16-24 (48%) compared with other age groups.

Use of the microwave was the least common method of defrosting food. Almost half of respondents (47%) said they never defrost food in the microwave, and the same proportion that they do so at least sometimes. A small minority of two per cent said they always defrost this way. Respondents in households with an annual income of more than £26,000 per year were more likely to defrost food using a microwave (52%) than those with lower incomes (42%).

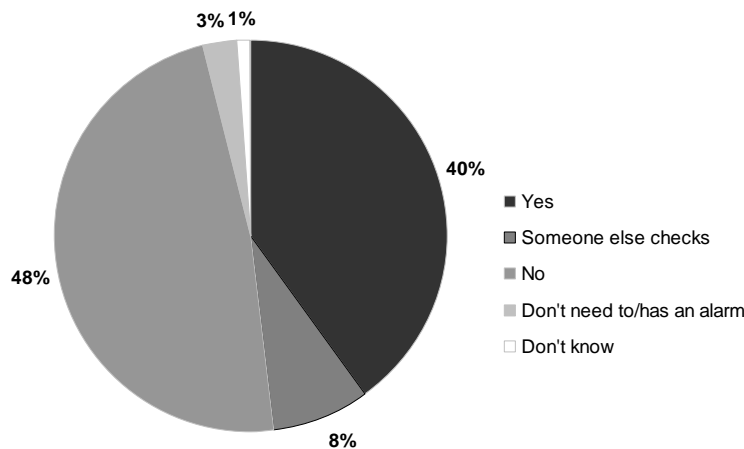
Further details are given in Table A3.

2.3.2 Checking fridge temperatures

The FSA recommends that fridge temperatures be maintained between 0C and 5C to ensure food is kept cold and to stop the growth of food poisoning germs.

Four out of ten respondents (40%) said they do check the temperature of their fridge, whereas almost half (48%) do not. A further eight per cent reported that another member of the household checks. Respondents with children aged under 16 in the household (46%) were the group most likely to say they check the temperature of their fridge (Chart 2.7).

Chart 2.7 Chilling – whether respondent or another household member checks fridge temperature



Source: Q4.9
Base (unweighted): All Respondents (3136)

Among those households where either the respondent or another household member does check the temperature of their fridge, 19% reported that it is done on a daily basis, nine per cent two or three times per week, and 22% once a week. A further 26% check it monthly or several times a month and 15% said the temperature is checked four times a year or less.

When asked to say in their own words how fridge temperatures are checked, the most common response was checking the temperature display/ built-in thermometer in the fridge, which was reported by 37% of respondents who said that they, or another household member, checked the temperature. A similar proportion (36%) said the setting or gauge of the fridge was checked, while 16% put a thermometer into the fridge to check the actual temperature. Other methods included feeling food to see if it is cold (done by 10%), and looking inside and checking for ice or condensation (mentioned by 7%).

All respondents were asked what they thought the temperature inside the fridge should be. Just under half (46%) correctly stated that the fridge temperature should be between 0 and 5 degrees C; 38% said they 'didn't know', and 16% answered incorrectly, with five per cent saying it should be lower than 0 degrees C, and ten per cent that it should be 5 degrees C (a further 1% gave a vague or unspecific answer). Older respondents were less likely than younger groups to give the correct answer. There was no difference between respondents with children under 16 in the household and those without.

Table 2.1 shows the proportion giving the correct answer and saying ‘don’t know’ by demographic groups.

Table 2.1 What respondents thought the temperature inside their fridge should be

	Between 0 and 5 degrees C (correct answer)	Don't know
Total	46	38
Gender		
Men	50	32
Women	41	44
Age group		
16-24	50	31
25-34	53	29
35-44	53	33
45-54	48	37
55-64	38	48
65-74	38	42
75+	28	56
Children under 16 in household		
Yes	48	38
No	45	38

Source: Q4.12

Base (unweighted): 3163

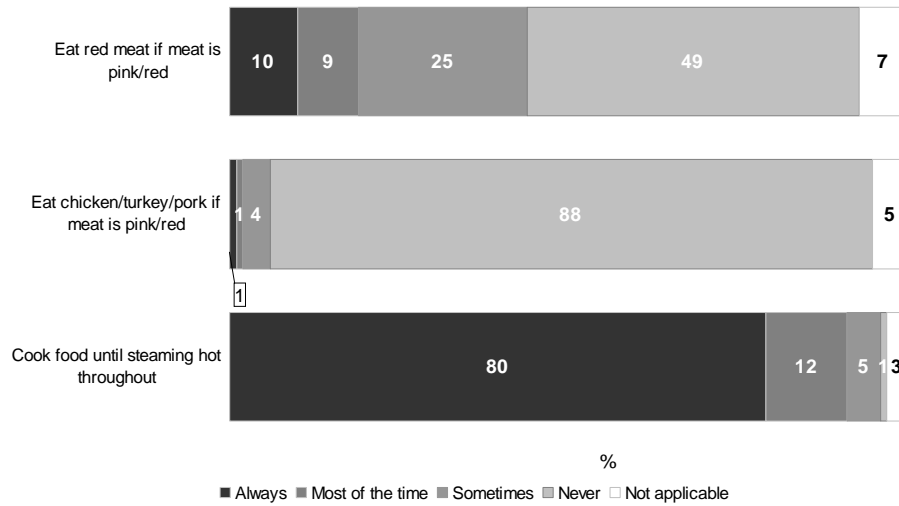
2.4 Reported behaviours relating to the 4 Cs - Cooking

The FSA advises that food be cooked thoroughly and checked before eating that it is piping hot all the way through. When cooking poultry, pork, burgers, sausages and kebabs these should be cooked until steaming hot with no pink meat inside.

Respondents were asked to say how frequently (on a scale from ‘Never’ to ‘Always’) they cook food until it is steaming hot throughout, eat chicken or turkey if the meat is pink or has pink or red juices, or eat red meat (e.g. beef or lamb, steak or roast meat, but not mince) if it is pink or has pink or red juices.

As Chart 2.8 shows, eight out of ten (80%) respondents reported always cooking food until it is steaming hot throughout, 12% said they did this most of the time, five per cent sometimes and one per cent never.

Chart 2.8 Cooking behaviours



Source: Q4.1
 Base (unweighted): All respondents (3163)

Women (86%) were more likely than men (73%) to say that they always cook food until steaming hot. The age group which was least likely to say they cook food until steaming hot was those aged 16-24, where 71% said they always do this.

While the majority (88%) stated that they never eat poultry or pork when it is pink or has pink juices, four per cent reported doing this sometimes, one per cent most of the time and one per cent always, which is not in line with FSA advice on cooking these types of meat.

The groups which were most likely to say they ever eat poultry or pork if the meat is pink or has pink juices were those aged 16-24 (10%) and those from non-White ethnic groups (14%).

Further details are shown in Table A4.

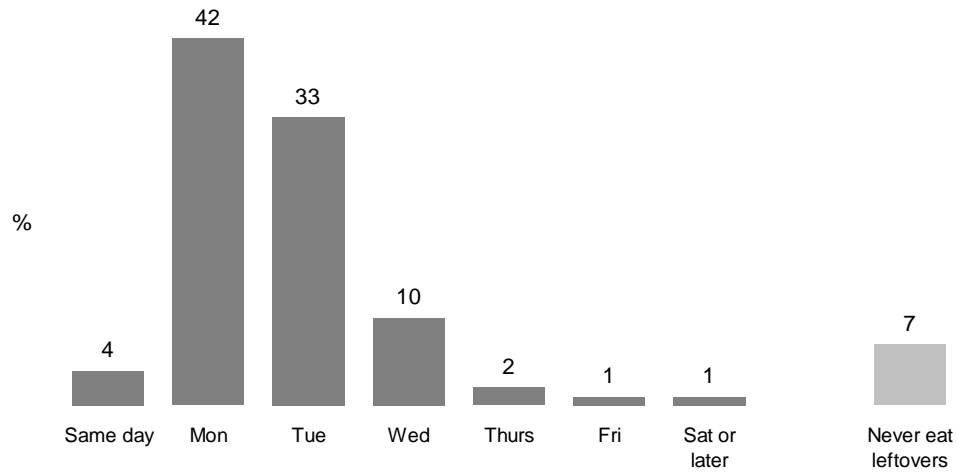
2.5 Leftovers

The FSA advises that leftovers should be steaming hot all the way through before being eaten and that they should not be reheated more than once. The FSA also recommends that leftovers be used within 48 hours.

Respondents were asked if they made a meal on Sunday what would be the last day that they would consider eating leftovers. The most common response was Monday (one day later), which was given by 42%, followed by Tuesday (two days

after), mentioned by a third (33%). Seven per cent reported that they never eat leftovers and four per cent would only eat them on the same day as the meal was made. A further 14% would consider eating the leftovers on Wednesday or later (Chart 2.9).

Chart 2.9 When respondents would eat leftover food



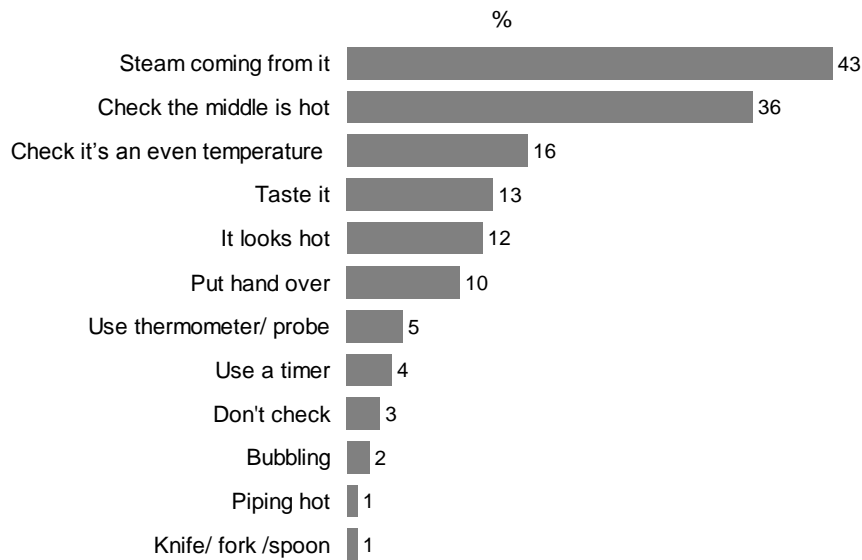
Source: Q4.24
Base (unweighted): All respondents (3163)

Those respondents who said they ever eat leftovers were asked how many times they would consider reheating food after it was cooked for the first time.

More than eight out of ten (82%) of those who eat leftovers said they would only reheat them once and 11% that they would not reheat at all. The remaining eight per cent reported that they would reheat twice or more. Those in non-White ethnic groups were most likely to reheat leftovers more than once: 24% said they would reheat twice or more, including four per cent who would do so three times or more.

Those respondents who said that they would ever reheat leftover food were asked to say in their own words how they would usually tell whether food has been reheated properly. The most common method given was to check that there is steam coming off the food, which was mentioned by 43% of this group. Chart 2.10 shows the full breakdown of responses.

Chart 2.10 Methods used to check leftover food is correctly heated



Source: Q4.26
 Base (unweighted): Respondents who eat leftovers and reheat (2686)

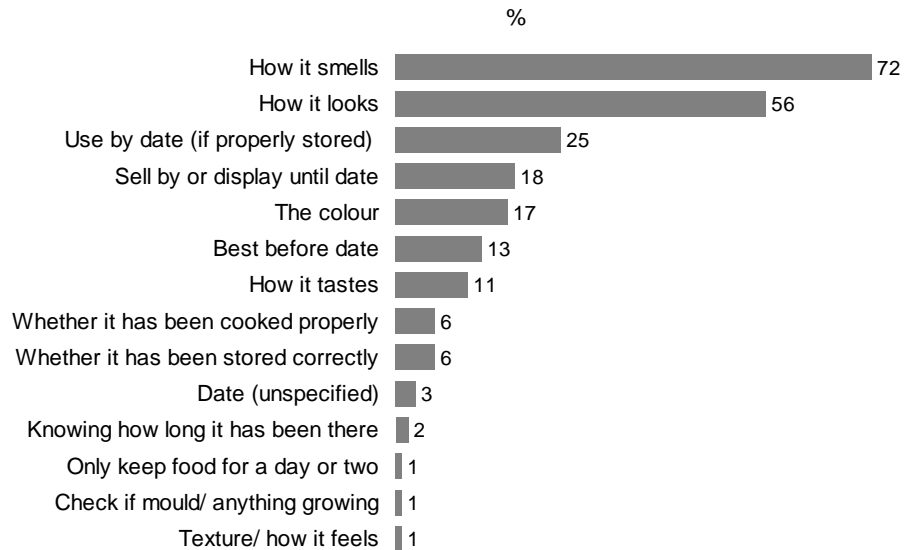
2.6 Use of storage information on food packaging

All respondents were asked whether they follow storage information provided on products. In total, 40% of respondents reported that they always follow storage information provided on products, a further 22% said they would follow the advice depending on the food type. A further 21% said they follow the advice sometimes, and two per cent when a food is bought for the first time. A small proportion (3%) reported never having noticed storage information on products and 11% said that they never follow the information. Men were more likely to say they never follow the storage information (14%) as were those aged 16-24 (17%). Non-White respondents were more likely to say they follow the instructions (51% always and 3% never) than those classified as White (38% always and 12% never).

Respondents were asked to say, in their own words, how they can tell whether food is safe to eat. Chart 2.11 shows the methods respondents reported using. The most common answers given were 'how food smells', which was mentioned by 72% and 'how it looks', given by more than half (56%). 'How food smells' was more likely to be mentioned by women (75%) than by men (69%), and by those in White ethnic groups (73%) as opposed to non-White groups (64%). Respondents aged 16-24 (60%) and 75+ (66%) were less likely than those in other age groups to mention 'how food smells'. 'How it looks' was also more likely to be mentioned by White respondents (57%) than those in Non-White ethnic groups (48%). Respondents aged 75+ (48%) were less likely than those in other age groups to mention 'how it looks'.

The recommended practice of checking the ‘use by’ date was mentioned by a quarter of respondents (25%).

Chart 2.11 How respondents say they can tell whether food is safe to eat

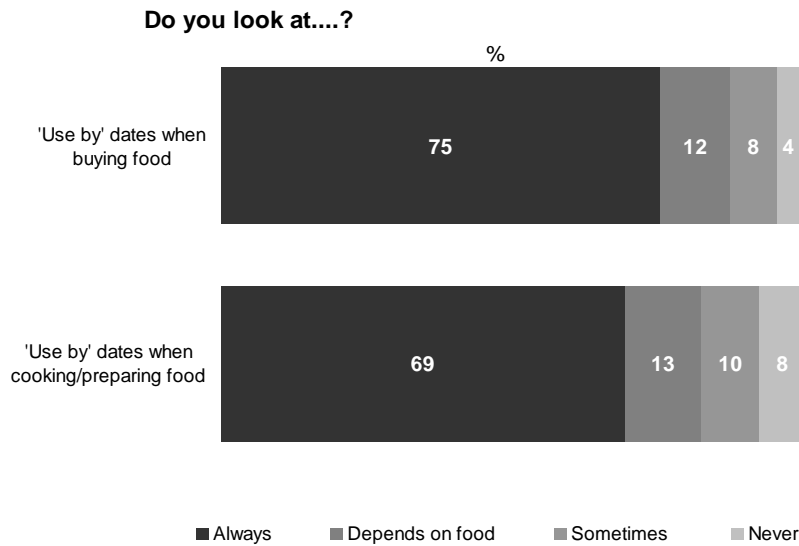


Source: Q4.18
Base (unweighted): All respondents (3163)

All respondents were then asked specifically about different types of date marks – the ‘use by’ date, ‘best before’ date, ‘sell by’ date and ‘display until’ date. They were shown the list of date mark types and asked which indicates whether food is safe to eat (respondents were able to select more than one type of date mark). Overall, 62% correctly identified the ‘use by’ date, but many selected other date mark types. Almost a third of the total (31%) chose the ‘best before’ date, nine per cent the ‘sell by’ date and four per cent the ‘display until’ date. Respondents frequently selected more than one of the options: 44% chose only the correct answer of the ‘use by’ date.

The majority of respondents reported that they do check ‘use by’ dates both when buying food and when cooking or preparing it. Overall, 75% said they always check ‘use by’ dates when buying food, and 69% that they always check ‘use by’ dates before cooking or preparing food (see Chart 2.12).

Chart 2.12 Use of 'use by' date marks



Source: Q4.21, 4.22
 Base (unweighted): All respondents (3136)

2.7 Attitudes towards food safety

All respondents were asked how much they agree or disagree with a range of statements about food safety. Responses are shown in Chart 2.13.

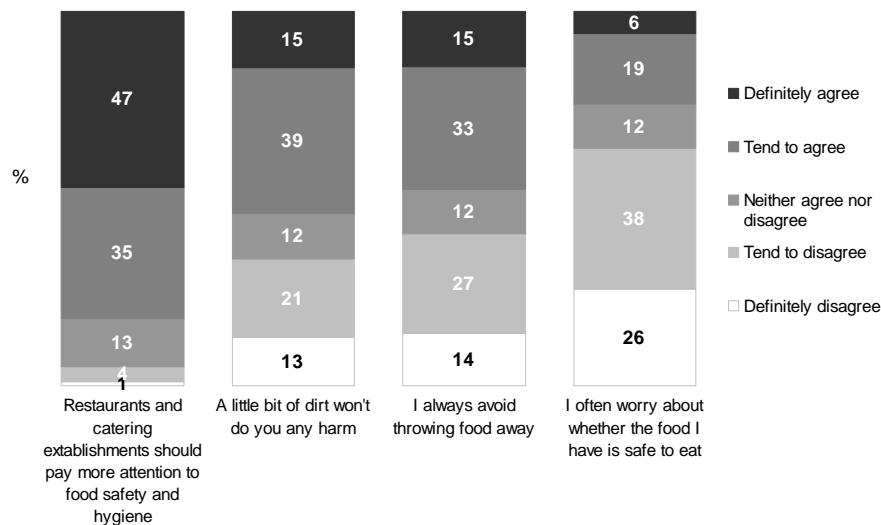
Overall there was strong agreement that 'Restaurants and catering establishments should pay more attention to food safety and hygiene' with 82% agreeing, of which 47% definitely agreed. Agreement with this statement was highest among those aged over 65 (86% agreed) and among those in households with a lower income (decreases steadily from 86% agreement from those in households with an annual income of up to £10,399 to 76% from those in households with an income of more than £52,000). There were also higher levels of agreement among those who have not had food poisoning (84%) than among those who have (79%), and among non-White respondents (89%) as opposed to White respondents (81%).

'A little bit of dirt won't do you any harm' was agreed with by 54% overall (15% definitely agree and 39% tend to agree). There was some differentiation by demographic groups – older respondents were significantly more likely to agree with this statement – for example 21% of those aged 65-74 and 22% of those aged 75+ definitely agreed, compared with 15% of those aged 55-64, and decreasing to six per cent of 16-24's. White respondents were more likely to agree (58%) than non-White respondents (27%).

Almost half of all respondents (48%) agreed with the statement 'I always avoid throwing food away'. The groups which were most likely to agree were the over 75's (25% definitely agreed), those in low income (less than £10,400) households (21% definitely agreed), and those from non-White ethnic groups (26% definitely agreed).

About a quarter (24%) agreed with the statement 'I often worry about whether the food I have is safe to eat'. Those in households with children under 16 were more likely to agree (27%) than those without (23%). Respondents from lower income households (below £26,000) were more likely to agree with the statement (29%), compared with 22% of those with a household income of £26,000 to £51,999 and 15% of those with an income in excess of £52,000. Those from non-White ethnic groups were more likely to agree (39%) than White respondents (22%).

Chart 2.13 Attitudes towards food safety



Source: Q4.27
Base (unweighted): All respondents (3163)

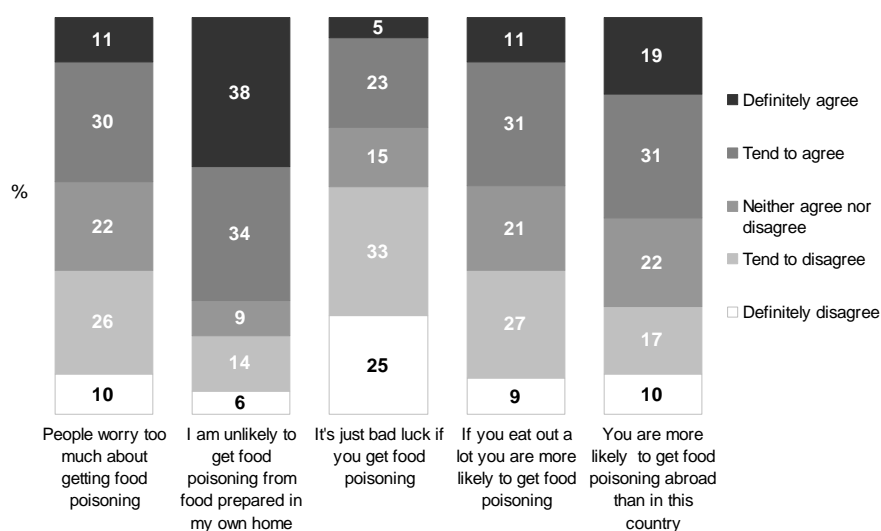
Chart 2.14 shows responses to statements about food poisoning and how respondents perceive the risks and likely source. Almost three-quarters (72%) agreed with the statement 'I am unlikely to get food poisoning from food prepared in my home' with higher levels of agreement among women (75%) and those aged 75+ (86%).

About four in ten respondents (42%) agreed with the statement 'If you eat out a lot you are more likely to get food poisoning'. The groups with the highest levels of agreement were non-White respondents (62%), over 75's (62%), respondents not in work (48%), and men (46%).

Half of respondents (50%) agreed that ‘You are more likely to get food poisoning abroad than in this country’. Agreement was higher among those aged 60+ (64%), those not in work (54%) and those in White ethnic groups (52%, compared with 39% of those in non-White ethnic groups).

In total, 41% of respondents agreed with the statement ‘People worry too much about getting food poisoning’. There was higher agreement with this statement among those with a household income of below £26,000 (45% agreed compared with 38% with a higher income) and among those from non-White ethnic groups (51% agreed compared with 39% of those from White ethnic groups).

Chart 2.14 Agreement with statements about food poisoning



Source: Q4.27
Base (unweighted): All respondents (3136)

2.8 Experiences of food poisoning

Respondents were asked if they personally have ever had food poisoning. Overall, 55% reported that they have not had food poisoning, 23% said they have had it once, while 16% have had it more than once. Five per cent reported that they thought they had food poisoning but were not sure whether it actually was (Table 2.2).

Table 2.2 Whether respondent has personally ever had food poisoning

	Yes	No	Don't know
Total	39	55	5
Gender			
Men	41	52	6
Women	37	58	5
Age group			
16-24	33	60	7
25-34	44	49	7
35-44	42	54	4
45-54	49	46	5
55-64	37	56	6
65-74	30	65	5
75+	27	70	4
Children under 16 in household			
Yes	42	53	5
No	38	56	6

Source: Q4.28

Base (unweighted):3163

Those in households with an annual income of more than £52,000 were the most likely group to report they have had food poisoning – 52% of respondents in this group reported having had it at least once.

Those who report washing meat and poultry were less likely to report having had food poisoning (56% of those who always wash meat and poultry said they had never experienced food poisoning, compared with 51% of those who never wash it).

Whether or not respondents reported having had food poisoning was compared to reported food behaviours to see if any links could be identified. There was not a significant difference in reporting food poisoning associated with defrosting food at room temperature. Those who always wipe down surfaces after preparing food were more likely to say they have never had food poisoning (56%) than those who do this less frequently (47%).

3. Advice on healthy eating

Summary

- Respondents were asked to indicate the proportions of different food groups recommended for a healthy diet. About a fifth of respondents (21%) placed all food groups in their recommended proportions on the eatwell plate (a pictorial representation of what a healthy balanced diet should consist of). The food group most likely to be placed in line with recommendations were foods and drinks high in fat and/or sugar (84% placed this in the smallest portion of the eatwell plate); the food groups least likely to be placed in line with recommendations include sources of protein (35%) and starchy foods (36%).
- Overall, a high proportion of respondents rated a variety of factors as important (either very important or fairly important) for a healthy lifestyle. These factors included: eating fruit and vegetables (99% thought this was very or fairly important for a healthy lifestyle) eating less salt (94%) and limiting foods high in saturated fat (92%).
- Respondents were asked what they thought was the recommended maximum daily intake of salt that adults should eat each day: nine per cent of respondents stated the recommended maximum amount of 6g, 40% said they 'didn't know'. About half (51%) suggested amounts either above (17%) or below (32%) 6g.

The Government provides advice on nutrition and healthy eating via NHS Choices¹⁵. The advice centres on the eatwell plate and '8 tips for eating well', including advice on eating at least five portions of fruit and vegetables a day and the recommended maximum daily intake of salt for adults. There are also guidelines on recommended maximum intakes for fat and calories.

This chapter presents information on the extent that respondents were aware of and understood the messages included in the advice. This information will help identify what factors are associated with awareness and understanding of the messages, which will help targeting of messages.

Section 3.1 covers the eatwell plate, section 3.2 the '8 tips' and the importance of different foods for a healthy lifestyle, section 3.3 recommended daily consumption of fruit and vegetables and maximum daily intakes of salt, fat and calories.

¹⁵ The NHS Choices website can be found at: <http://www.nhs.uk/Pages/HomePage.aspx>

3.1 The eatwell plate

The eatwell plate illustrates the types and proportions of foods needed for a healthy balanced diet. It shows how much of a recommended diet should come from each food group. This includes: plenty of fruit and vegetables; plenty of bread, rice, potatoes, pasta and other starchy foods; some milk and dairy foods; some meat, fish, eggs, beans and other non-dairy sources of protein and just a small amount of foods and drinks high in fat and/or sugar. The eatwell plate is shown in Chart 3.1.

Respondents were shown a blank plate with the eatwell plate sections marked but not labelled, and were asked to place cards showing each of the food groups in the correct place on the plate to represent what they thought was the recommended balanced diet.

Chart 3.1 The eatwell plate

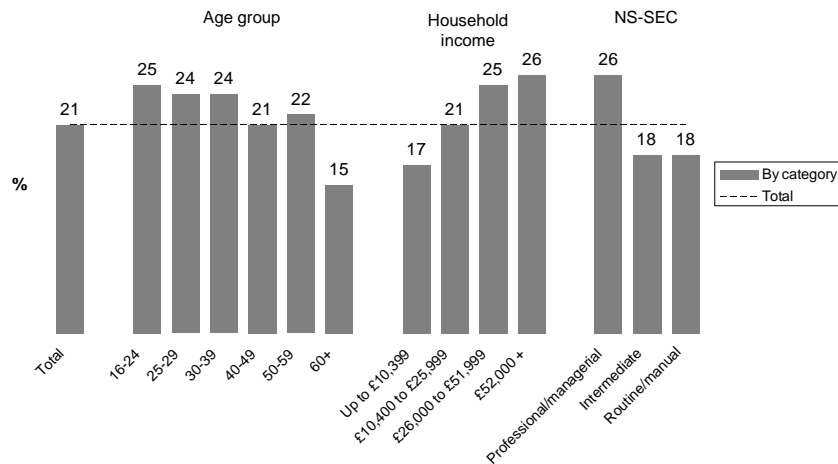


Source: Department of Health

Overall, 21% of respondents placed all the food groups in the correct proportions on the plate, 64% placed three food groups correctly, and five per cent two food groups. Only one food group was placed in the correct place by eight per cent, and two per cent were not able to place any food groups correctly.

Respondents aged 60+ were less likely than younger groups to place all foods correctly (15% of those aged 60+ placed all foods correctly compared with 25% of those aged 16-24, and 24% of those aged 25-39). Respondents in households with the highest incomes, and in professional/managerial households, were most likely to do so (both 26%) (Chart 3.2).

Chart 3.2 The eatwell plate – proportion placing all food groups correctly



Source: Q 2.17
 Base (unweighted): Total (3163), 16-24 (284), 25-29 (237), 30-39 (558), 40-49 (516), 50-59 (475), 60+ (1093); Up to £10,399 (529), £10,400 to £25,999 (844), £26,000 to £51,999 (624), £52,000+ (380); Professional/managerial (944), Intermediate (537), Routine/manual (1106)

The food group most likely to be placed correctly was foods and drinks high in fat and/or sugar, which 84% of respondents correctly placed as the smallest portion on the plate. At least eight out of ten also correctly placed fruit and vegetables as one of the largest sections (82%), and milk and dairy foods as one of the medium sections (80%).

The food groups least likely to be correctly placed were meat, fish and other sources of protein – 35% correctly placed this in a medium section; and starchy foods – 36% correctly placed this in a large section. The most common misconceptions were that starchy foods should be in a medium sized section, and protein sources in a large section.

3.2 Foods for a healthy lifestyle

3.2.1 The '8 tips for eating well'

The Government's '8 tips for eating well' are shown in Table 3.1.

Table 3.1 The '8 tips for eating well'

	The tip	Detail of advice
1.	Base your meals on starchy foods	Most of us should eat more starchy foods - try to include at least one starchy food with each of your main meals.
2.	Eat lots of fruit and veg	Try to eat at least 5 portions of a variety of fruit and veg every day. It might be easier than you think.
3.	Eat more fish	Aim for at least two portions of fish a week, including a portion of oily fish.
4.	Cut down on saturated fat and sugar	Try to choose more foods that are low in fat and cut down on foods that are high in fat. We should all be trying to eat fewer foods with added sugars, e.g. sweets, cakes & biscuits, and drinking fewer sugary soft & fizzy drinks.
5.	Try to eat less salt	No more than 6g a day for adults.
6.	Get active and try to be a healthy weight	Only eat as much food as you need. Make healthy choices - it's a good idea to choose low-fat & low-sugar varieties, eat plenty of fruit & veg & whole grains. Get more active.
7.	Drink plenty of water	Should be drinking about 6 to 8 glasses (1.2 litres) of water per day.
8.	Don't skip breakfast	

A number of measures were included in the survey to explore whether respondents were aware of, and follow, the '8 tips' advice. The headline survey findings relating to the '8 tips' are as follows:

Base your meals on starchy foods

- 71% of respondents reported eating starchy foods at least once a day, although eight per cent reported eating them once or twice a week or less often
- 27% thought that eating starchy foods was very important for a healthy lifestyle, and a further 55% that it was fairly important

Eat lots of fruit and veg

- 72% of respondents reported that they ate fruit and vegetables at least once a day, although eight per cent said once or twice a week or less often
- 86% said that eating fruit and vegetables was very important for a healthy lifestyle
- 47% reported eating five or more portions of fruit and vegetables on the day before the interview

Eat more fish

- 53% reported eating oily fish, and 58% other fish, at least once a week
- 52% thought that eating fish was very important for a healthy lifestyle, and a further 36% that it was fairly important

Cut down on saturated fat and sugar

- 66% said limiting food and drinks high in sugar was very important for a healthy lifestyle
- 67% said limiting foods high in saturated fat was very important, and 61% said this for total fat
- 27% reported eating biscuits, pastries and cakes at least once a day, 24% reported eating processed meats at least three or four times a week, and 15% reported eating fried chips or roast potatoes at least three or four times a week
- Two per cent of respondents stated the correct recommended maximum daily intake of total fats (90g for men and 75g for women)

Try to eat less salt

- 66% said eating less salt was very important for a healthy lifestyle
- Nine per cent stated the correct recommended maximum daily intake of salt for adults (6g)

Get active and try to be a healthy weight

- 73% said that doing physical activities was very important for a healthy lifestyle
- 37% said they took part in physical activities of at least moderate intensity, for at least 30 minutes a time, five or more times in the last week
- 63% said keeping to a healthy weight was very important for a healthy lifestyle
- 34% said that eating the right amount of calories each day was very important for a healthy lifestyle
- 27% gave the correct recommended maximum daily intake of calories (2000 calories a day for women, 2500 calories a day for men)

Drink plenty of water

- 77% of respondents said that this was very important for a healthy lifestyle

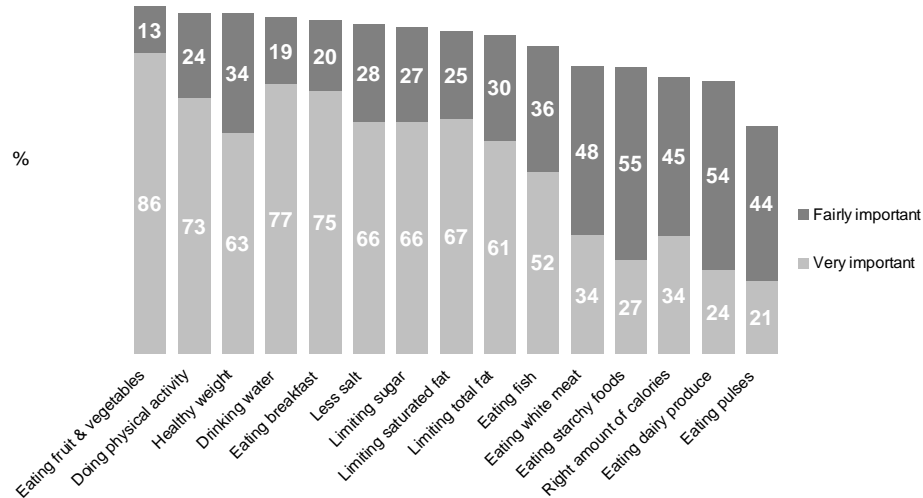
Don't skip breakfast

- 75% of respondents said that it was very important for a healthy lifestyle to eat breakfast every day.

3.2.2 Importance of different factors for a healthy lifestyle

All respondents were asked to say how important they thought a variety of factors was for a healthy lifestyle. These covered eating different foods such as fruit and vegetables, as well as other lifestyle factors like keeping to a healthy weight and taking part in physical activities such as sports, exercise and walking. The proportion of respondents rating each of the food and eating habit factors as 'very important' or 'fairly important' is shown in Chart 3.3.

Chart 3.3 Importance of factors for a healthy lifestyle



Source: Q2.18
Base (unweighted): 3163

Overall, a high proportion of respondents rated these factors as important (either very important or fairly important). More than 90% thought that the following were important for a healthy lifestyle:

- Eating fruit and vegetables (99%)
- Eating less salt (94%)
- Limiting food and drinks high in sugar (93%)
- Limiting foods high in saturated fat (92%)
- Limiting foods high in total fat (91%).

Eating fruit and vegetables was also the most likely factor to be considered very important - indeed 86% of respondents said that this was very important.

3.3 Knowledge, awareness and understanding of recommended daily amounts

3.3.1 Fruit and vegetables

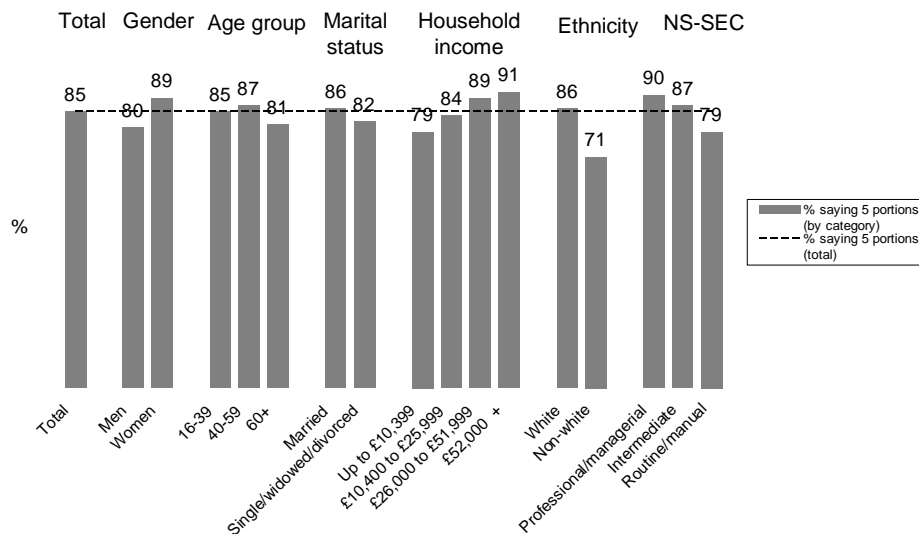
Awareness and consumption

Respondents were asked how many portions of fruit and vegetables they thought that health experts recommend people should eat every day¹⁶.

Overall, 85% of respondents gave the correct answer of five portions, with one per cent thinking it was higher than this, eight per cent that it was lower, and five per cent not able to give an answer.

The groups most likely to state that the recommended number of fruit and vegetable portions per day was five were women (89% gave the correct answer), those aged younger than 60 years (85% of 16-39s, 87% of 40-59s), those who were married/living as married (86%), those in higher income households (91% of the highest income category of £52,000 and above), White respondents (86%), and those from professional/managerial households (90%) (Chart 3.4).

Chart 3.4 Knowledge of recommended fruit and vegetable portions per day



Source: Q 2.9
 Base (unweighted): Total (3163), 16-39 (1079), 40-59 (991), 60+ (1093), Married (1629), Single/widowed/divorced (1531), Up to £10,399 (529), £10,400 to £25,999 (844), £26,000 to £51,999 (624), £52,000+ (380), White (2922), Non-white (236), Professional (944), Intermediate (537), Routine/manual (1106)

¹⁶ In the questionnaire these questions were asked *after* the questions about knowledge and consumption, in order to avoid influencing respondents' answers.

Respondents were asked, for a list of different food items, whether they thought they could be counted towards the daily recommended fruit and vegetable intake. The items asked about, whether they do in fact count towards the '5 a day' recommendation, and the proportion of respondents who thought that each would count towards the fruit and vegetable recommendation, are shown in Table 3.2.

Table 3.2 Foods that can count towards '5 a day'

Foods that count as a portion of fruit and vegetables	% who thought this could count
Pure fruit juice	90
Frozen vegetables	82
Dried fruit	82
Fruit smoothies	78
Tinned fruit or vegetables	76
Pulses	60
Baked beans	53
Foods that do not count as a portion of fruit and vegetables	
Jacket potato	65
Rice	24
Jam	17

Source: Q2.10

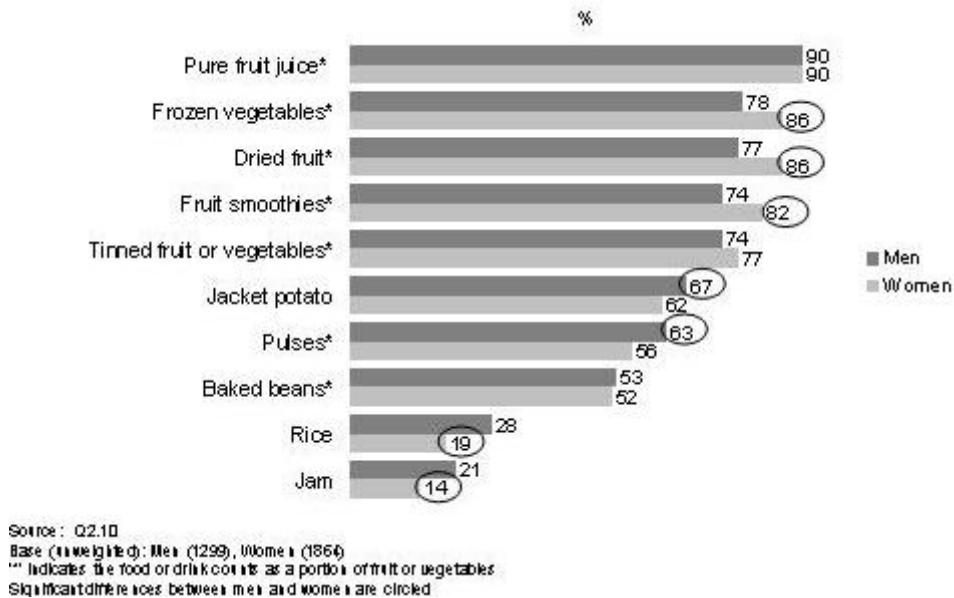
Base (unweighted): 3157

More than three-quarters of respondents correctly recognised that pure fruit juice (90%), frozen vegetables (82%), dried fruit (82%), fruit smoothies (78%), and tinned fruit or vegetables (76%) could count towards '5 a day'.

Around two-thirds of respondents (65%) incorrectly stated that a jacket potato would count, higher than the proportions which recognised that pulses (60%) or baked beans (53%) would count. Significant minorities also thought that rice (24%) and jam (17%) would count towards the recommended daily intake.

As Chart 3.5 shows, men were generally less likely than women to give the correct answer to these questions (significant differences by gender are circled in Chart 3.5). Types of food or drink which are actually counted as a portion of fruit or vegetables are identified by a '*' next to the item.

Chart 3.5 Proportions of men and women who thought different foods count towards '5 a day'



Although women were more likely than men to give the correct answer for frozen vegetables (86% compared with 78%), dried fruit (86% compared with 77%) and fruit smoothies (82% compared with 74%), men (63%) were more likely than women (56%) to recognise that pulses can count towards the daily intakes. Men were, however, also more likely than women to think, incorrectly, that jacket potato (67% compared with 62%), rice (28% compared with 19%) and jam (21% compared with 14%) could count.

Respondents were asked three separate questions about their consumption of fruit and vegetables in the previous day – one on vegetables, one on fruit, and one on fruit juice¹⁷.

Overall, 83% of respondents said that they had eaten at least one portion of vegetables, 71% had eaten at least one portion of fruit, and 46% had consumed a portion of fruit juice.

Combining these, 47% of respondents said they had eaten at least five portions of fruit and vegetables in the previous day¹⁸.

¹⁷ Separate questions were asked about fruit and vegetables in order to aid respondents' recall. Fruit juice was asked about separately as only one portion of this can count per day.

¹⁸ A measure of fruit and vegetable consumption in the day prior to interview was included in the survey to provide additional explanatory power to the findings rather than to produce national estimates. It is recommended that the Health Survey for England (HSE) be used for national estimates of fruit and vegetable consumption.

Regression analysis of fruit and vegetable consumption

Table A5 reports the odds from a logistic regression that explores the effects of a range of variables on the probability that a respondent ate five or more portions of fruit and vegetables during the day prior to interview. The reference category for each factor is shown in brackets.

The analysis showed:

- Women were more likely to report eating at least '5 a day' compared to men (all other things being equal). The odds of men eating '5 a day' were approximately two thirds those of women.
- Respondents aged 25-74 were more likely to report eating at least '5 a day' than those in the youngest age group of 16-24. For example, those aged 45-54, 55-64 and 65-74 years were twice as likely as respondents aged 16-24 to report doing so.
- Respondents with higher educational qualifications were more likely to report eating at least '5 a day'. Respondents with at least a degree level education were two and half times as likely, and those with A levels or equivalent nearly twice as likely to do so as those with no qualifications.
- Respondents who were married/living as married were 1.3 times as likely to have eaten at least '5 a day' in the previous 24 hours as those reporting other marital statuses.
- Compared with social tenants, owner occupiers were 1.4 times as likely, and private tenants 1.6 times as likely to report eating at least '5 a day' in the 24 hours prior to interview.
- Respondents in Northern Ireland were less likely to report eating at least '5 a day' compared to their English counterparts.

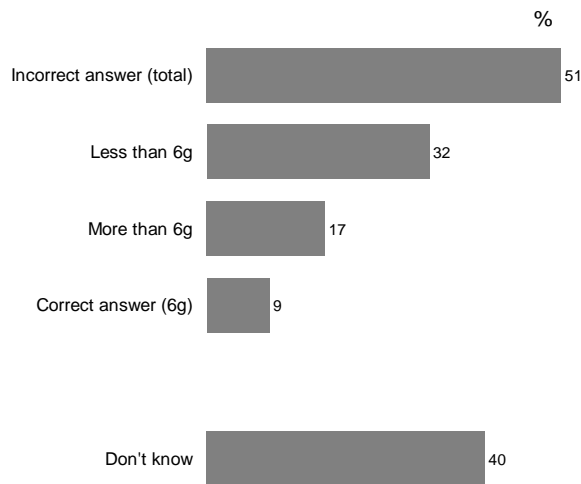
3.3.2 Salt

Recommended daily intake

Respondents were asked what they thought was the recommended maximum daily intake of salt adults should eat each day.

There was limited knowledge of the adult's daily maximum intake, with nine per cent of respondents stating the correct figure of 6g. About half (51%) gave an incorrect answer and 40% said they did not know (Chart 3.6).

Chart 3.6 Knowledge of daily maximum intake for salt



Source: Q2.30, Q2.31
Base (unweighted): All respondents (3163)

Respondents who gave an incorrect answer were more likely to give an answer that was lower than the daily maximum intake (32%) than higher (17%). There were no significant differences between demographic groups in the proportion giving the correct answer.

Understanding of the effects of salt

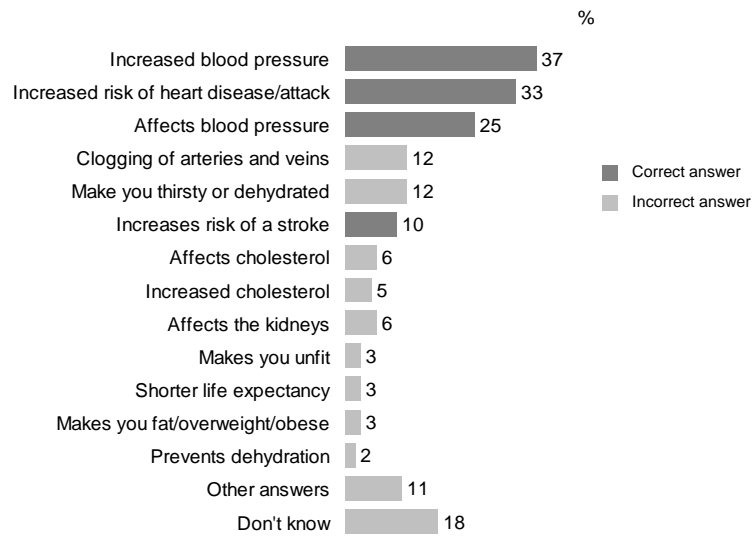
Respondents were asked what effects they thought eating too much salt could have on health. This was an open question, so respondents were not prompted with possible responses.

The main risk related to excessive salt consumption is that it increases blood pressure, and hence the risk of heart disease, heart attacks and strokes.

In total, 37% of respondents correctly stated that increased blood pressure was a potential effect of eating too much salt, 33% said that it could increase the risk of heart disease or a heart attack and 25% said it would affect blood pressure (without specifying that blood pressure would increase) (Chart 3.7).

Some respondents gave incorrect answers such as 'affects cholesterol' (6%) or 'increases cholesterol' (5%). Overall nearly one in five (18%) were not able to give an answer. Those aged 16-24 (23%) and 75+ (29%) were more likely to answer 'don't know', compared with 11% of those aged 35-44. Those in the lowest income bracket of less than £10,400 were more likely to answer 'don't know' (21%), compared with those in the highest income bracket of £52,000+ (12%).

Chart 3.7 Effects of eating too much salt (% saying each)



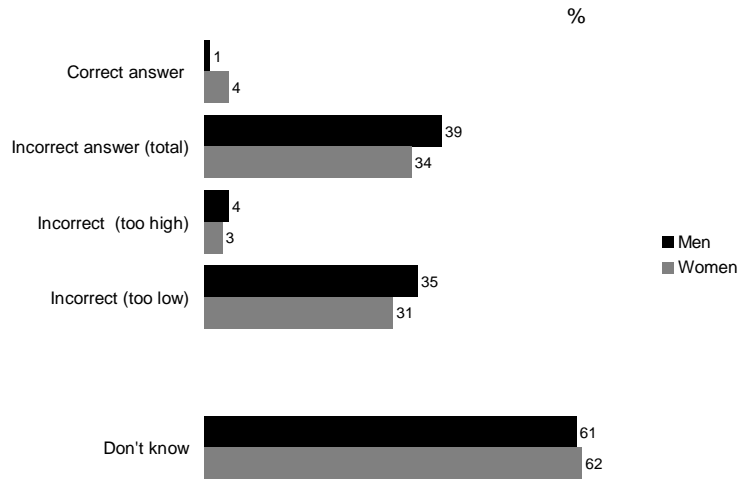
Source: Q2.32
Base (unweighted): All respondents (3163)

3.3.3 Fat

Men were asked what they thought was the recommended maximum daily intake of total fat that men should eat each day, and women were asked the maximum daily intake of total fat for women. Respondents were then told the appropriate maximum amount for total fat (95g for men/70g for women) and asked how much of this amount in grams they thought was made up of the recommended maximum daily intake of saturated fat (30g for men/20g for women).

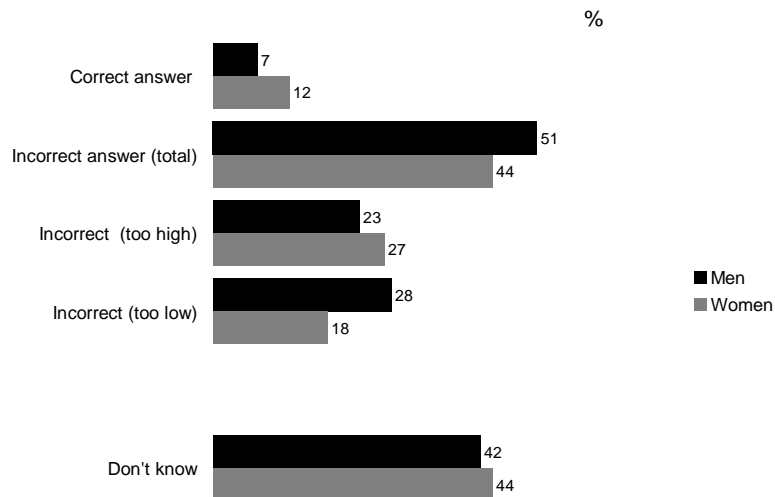
There was limited knowledge of the recommended maximum daily intakes for both total and saturated fat, with many giving incorrect answers or saying they did not know, as shown in Charts 3.8 and 3.9.

Chart 3.8 Knowledge of recommended daily allowance for total fat



Source: Q2.27
Base (unweighted): Men (1299), Women (1864)

Chart 3.9 Knowledge of recommended daily allowance for saturated fat



Source: Q2.28
Base (unweighted): Men (1299), Women (1864)

For total fat, one per cent of men and four per cent of women gave the correct answer for the recommended maximum daily intake. Once prompted with the recommended daily intake for total fat, seven per cent of men and 12% of women then gave the correct answer for saturated fat.

Understanding of the effects of saturated fat

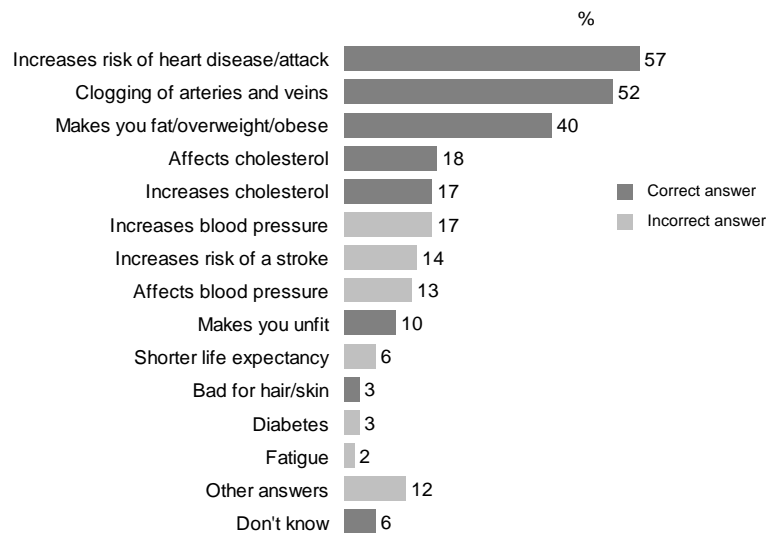
Respondents were asked what effects they think eating too much saturated fat can have on health. This was an open question, so respondents were not prompted with possible responses.

Eating too much saturated fat is one of the major risk factors for heart disease, as it causes a build up of cholesterol in the arteries. Too much fat also increases the risk of overweight and obesity which again is a risk factor for heart disease, as well as for some types of cancer. High saturated fat consumption has also been linked with an increased risk of diabetes.

Although (as described above) awareness of the recommended maximum daily intake of saturated fat was low, there was higher awareness of the possible adverse impacts of eating too much. Over half of respondents (57%) thought it would increase the risk of heart disease, 52% that it would cause clogging of arteries and veins and 40% mentioned it would cause overweight/obesity. Although some respondents gave vague or incorrect responses (e.g. makes you unfit, fatigue), six per cent said that they did not know what the effects of eating too much saturated fat were (Chart 3.10).

Those aged 75+ were the age group most likely to answer 'don't know' (15%), and those aged 45-54 least likely (3%). Respondents in non-White ethnic groups were more likely to answer 'don't know' (12%) than White respondents (5%).

Chart 3.10 Effects of eating too much saturated fat (% saying each)

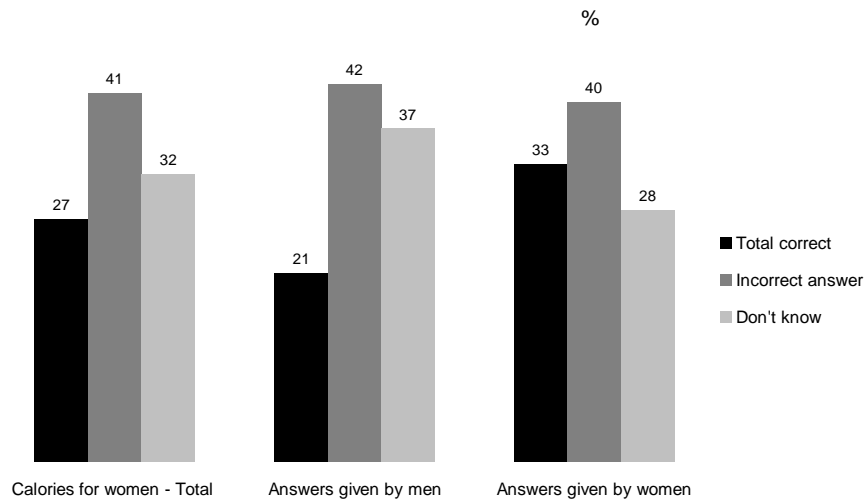


Source: Q2.29
Base (unweighted): All respondents (3163)

3.3.4 Calories

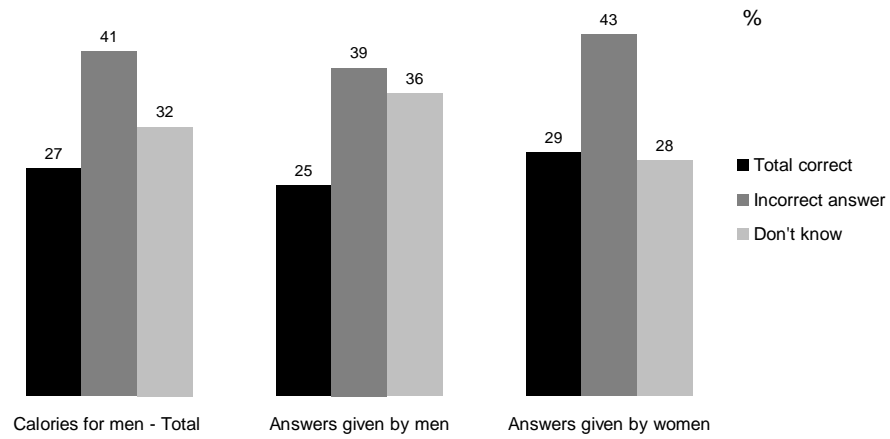
Respondents were asked what they thought was the recommended number of daily calories for women and men. Knowledge of the recommended calories was higher than for the other nutrients asked about. Just over a quarter of respondents (27%) answered each of these questions correctly (2,000 calories a day for women, 2,500 calories a day for men) (Chart 3.11, 3.12). Women were more likely than men to give the correct value for both genders. Where an incorrect answer was given, it was more usually a lower value than the correct response: 18% gave an answer of between 1,000 and 1,500 for women (the average answer was 1,684 calories) and 14% thought the correct value for men was 2,000 calories (the average answer was 2,247 calories).

Chart 3.11 Knowledge of recommended daily calories for women



Source: Q2.25
 Base (unweighted): Total (3163), Men (1299), Women (1864)

Chart 3.12 Knowledge of recommended daily calories for men



Source: Q2.26
Base (unweighted): Total (3163), Men (1299), Women (1864)

4. Eating, cooking and shopping

Summary

- Most respondents agreed with the statements 'I enjoy cooking and preparing food' (68%), and 'I enjoy making new things to eat' (65%). The majority (65%) disagreed with the statement 'For me, food is just fuel to live'. Overall, 40% agreed that 'Cooking is like a hobby for me'.
- The most commonly-eaten types of food were fruit and vegetables; bread, rice, pasta, potatoes and other starchy foods; and milk and dairy foods; about seven out of ten respondents reported eating these at least once a day (72% for fruit and vegetables, 71% for starchy foods, and 70% for milk and dairy products).
- Almost three-fifths (57%) said they cooked or prepared food for themselves every day, and 37% did so for others.
- Women were more likely than men to be responsible for all or at least half of the food shopping in their household (87% compared with 59%).
- The vast majority of respondents did their food shopping solely in shops (91%) as opposed to on the internet, and 97% said they did most of their food shopping in supermarkets.
- The majority of respondents thought that food prices had increased over the last 12 months (81%).

This chapter presents information on attitudes and behaviour around eating, cooking and shopping. This information will help to build an understanding of the role food plays within people's lives and the extent of their involvement with food.

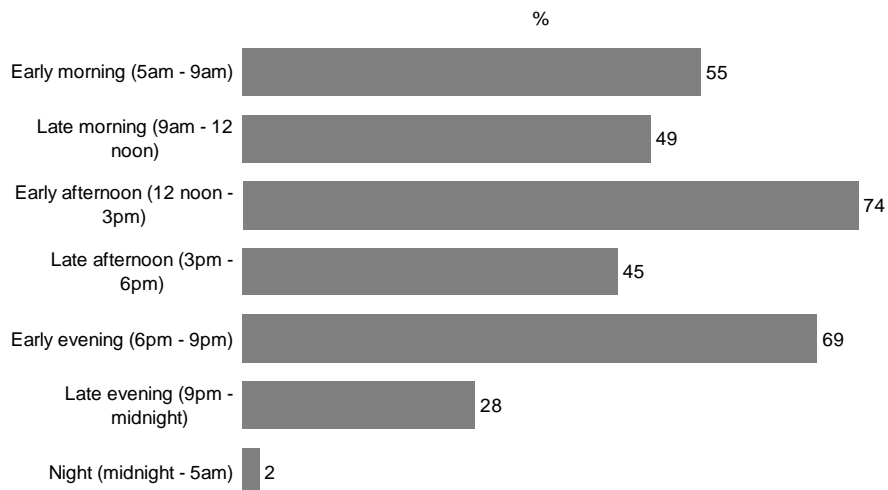
Section 4.1 covers general eating patterns to help build up a picture of when and where respondents ate in the previous 24 hours. Section 4.2 looks at attitudes towards food in general. Section 4.3 presents findings on self-reported consumption of different types of foods. Section 4.4 reports on cooking behaviours to assess the extent that respondents are involved in food preparation for themselves and others. Section 4.5 covers shopping, including responsibility for shopping, the extent of in-store and internet shopping and section 4.6 covers attitudes towards food prices.

4.1 General eating patterns

A third of the sample (selected at random) was asked about their eating patterns (1,073).

Respondents were asked to report all of the occasions on which they had something to eat, from the time they got up on the day before the interview, until the time they got up on the day of the interview. Respondents were most commonly found to eat in the early afternoon (74% of respondents reported eating during this time) and early evening (69%). In contrast, very few respondents ate at night (2%) (Chart 4.1).

Chart 4.1 Times eaten from getting up yesterday to getting up today



Source: Q2.5
Base (unweighted): All respondents asked this section (1073)

Respondents were asked to classify what they had eaten on each occasion as a 'meal', 'light meal' or 'snack'. No further definitions were given, so this was purely based on the respondent's interpretation.

Over half of 'meals' (58%) were eaten in the late afternoon or early evening. Almost a third of 'light meals' (31%) were eaten in the early morning and about the same proportion (33%) in the early afternoon. 'Snacks' were eaten across all times of the day, although late morning between 9am and noon was the most popular time, with about a quarter of snacks being eaten during this time (23%) (Table 4.1).

Table 4.1 When meals, light meals and snacks were eaten

	Meals	Light meals	Snacks
	%	%	%
Early morning (5am – 9am)	10	31	10
Late morning (9am – 12 noon)	8	18	23
Early afternoon (12 noon – 3pm)	19	33	18
Late afternoon (3pm – 6pm)	21	6	13
Early evening (6pm – 9pm)	37	8	16
Late evening (9pm – midnight)	4	3	18
Night (midnight – 5am)	1	1	1
Source: Q2.5, Q2.6			
Base (unweighted): Occasions	1335	1176	1145

Almost two-thirds (64%) of ‘meals’ were eaten with family or a partner, while 27% of ‘meals’ were eaten alone. Of ‘light meals’ eaten, the proportion of those eaten alone (46%) was about the same as those eaten with family or a partner (42%). Over half (53%) of all ‘snacks’ were eaten alone, but about a third (32%) were eaten with family or a partner (Table 4.2).

Table 4.2 Who meals, light meals and snacks were eaten with

	Meals	Light meals	Snacks
	%	%	%
Family/partner	64	42	32
Work colleagues	5	7	9
Friends	7	7	6
Someone else	1	-	1
No-one else	27	46	53
Source: Q2.6, Q2.8			
Base (unweighted): Occasions	1335	1176	1145

4.2 Attitudes towards food

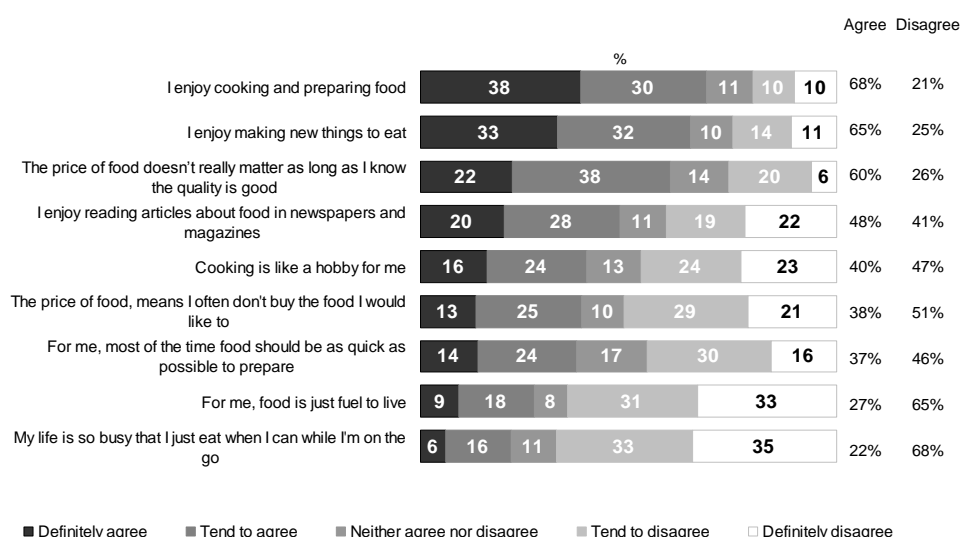
Respondents were asked the extent to which they agreed or disagreed with a range of statements regarding their attitudes towards food. Results are shown in Chart 4.2. Further demographic comparisons are shown in Table A8.

Generally respondents felt that food is not just a fuel to live (65% disagreed with the statement ‘For me, food is just fuel to live’). Instead, the general consensus was that eating food and cooking are pleasant experiences. Two-thirds (68%) agreed with the statement ‘I enjoy cooking and preparing food’ and 65% agreed with ‘I enjoy making new things to eat’. About half (48%) of respondents agreed with the statement ‘I enjoy reading articles about food in newspapers or magazines’ and two-fifths (40%) agreed that ‘Cooking is like a hobby for me’.

Approximately half (51%) of respondents disagreed with the statement 'The price of food means that I often don't buy the food I would like to', and three-fifths (60%) agreed with the statement 'The price of food doesn't matter as long as I know the quality is good'. There were some differences according to household income, with those in lower income households being more likely to agree that the price of food means they often do not buy the food they would like to; for example, 53% of those in households with incomes up to £10,399 agreed with this statement, falling to 22% of those in households with incomes of £52,000+.

When asked whether they agreed or disagreed with the statement 'For me, most of the time food should be as quick as possible to prepare', 37% agreed and 46% disagreed. About a fifth (22%) agreed that 'My life is so busy that I just eat when I can while I'm on the go', whilst 68% disagreed with this statement.

Chart 4.2 Attitudes towards food



Source: Q2.2
Base (unweighted): All respondents (3163)

Some differences were observed by age and gender. Women were more likely than men to agree that they enjoy cooking and preparing food (72% compared with 64%), they enjoy making new things to eat (72% compared with 58%) and to enjoy reading articles about food (60% compared with 35%). Those aged 25 to 59 were more likely to enjoy cooking and preparing food (between 70% and 75%, compared with 64% of 16-24s and 60% of those aged 60+) and to say that cooking is like a hobby (between 41% and 51%, compared with 35% of 16-24s and 33% of those aged 60+). Those aged 25-49 (between 72% and 77%) were more likely than those aged 16-24 (64%), 50-59 (66%) or 60+ (50%) to enjoy making new things to eat. Younger respondents were more likely to agree that their lives are so busy that they just eat on the go: 35% of 16-24s agreed with

this, falling to 30% of 25-39s, 23% of 40-49s, 17% of 50-59s and seven per cent of those aged 60+.

4.3 Consumption of different types of food

In order to get an indication of their diets, respondents were asked how often they eat a range of types of food¹⁹:

- Processed meat like sausages, ham or tinned meat
- Milk and dairy foods like cheese and yoghurt
- Biscuits, pastries and cakes
- Bread, rice, pasta, potatoes and other starchy foods
- Fried chips or roast potatoes
- Oily fish like salmon, sardines, mackerel or fresh tuna
- Other fish like cod, haddock, plaice or tinned tuna
- Beef, lamb or pork
- Fruit and vegetables
- Microwave meals and oven ready foods.

As Table 4.3 shows, the types of food respondents reported eating most often were fruit and vegetables; bread, rice, pasta, potatoes and other starchy foods; and milk and dairy foods, each of which about seven out of ten respondents (72% for fruit and vegetables, 71% for bread, rice, pasta, potatoes and other starchy foods, and 70% for milk and dairy foods) said they had eaten at least once a day.

Approximately half (52%) of respondents said they ate biscuits, pastries and cakes three or four times a week or more often. Overall, 77% reported eating beef, lamb or pork at least once a week, while 64% said they ate processed meats at least once a week.

Consumption of oily fish and other fish was similar, with over half of respondents (53% for oily fish, 58% for other fish) saying that they ate these at least once a week.

Looking at microwave meals and oven ready foods, respondents were fairly evenly split between eating these at least once a week (31%), less than once a week (33%), or never (36%).

¹⁹ Measures of the consumption of different types of food were included in the survey to provide additional explanatory power to the findings rather than to produce national estimates. It is recommended that the National Diet and Nutrition Survey (NDNS) be used for national estimates of consumption.

Table 4.3 Frequency of eating different types of food

	At least once a day	5-6 times a week	3-4 times a week	Once or twice a week	Less than once a week	Never
Fruit and vegetables	72	9	11	7	1	-
Starchy foods	71	9	13	6	1	-
Milk and dairy	70	7	11	7	3	2
Biscuits, pastries and cakes	28	6	18	27	15	7
Processed meat	5	3	15	40	22	14
Beef, lamb or pork	4	4	22	48	15	8
Microwave meals	3	2	6	20	33	36
Oily fish	1	2	10	40	27	20
Other fish	-	1	7	50	30	12

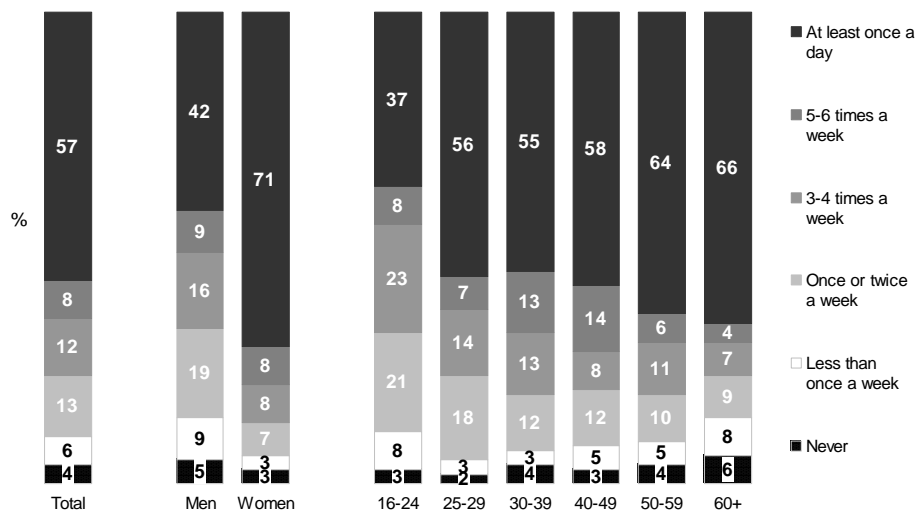
Source: Q2.14

Base (unweighted): 3163

4.4 Cooking behaviour

Respondents were asked how often they cook or prepare food for themselves. Almost three-fifths (57%) said that they cooked or prepared food for themselves at least once a day. About a third prepared or cooked food for themselves between once and six times a week (33%) and one in ten did so less frequently or never (10%) (Chart 4.3).

Chart 4.3 How often respondents cook or prepare food for themselves



Source: Q2.3

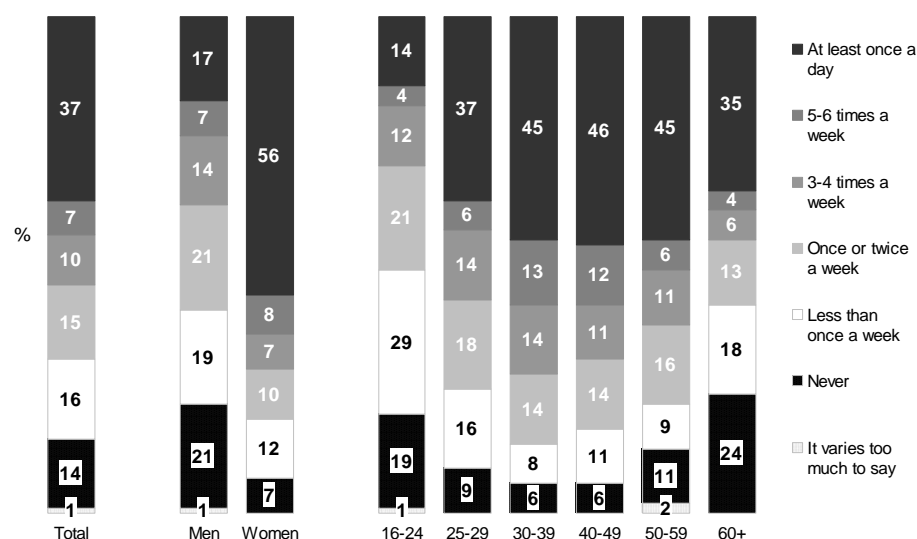
Base (unweighted): Total (3163), Men (1299), Women (1864), 16-24 (284), 25-29 (237), 30-39 (558), 40-49 (516), 50-59 (475), 60+ (1093)

As Chart 4.3 shows, men and those aged 16-24 were less likely than other groups to cook or prepare food for themselves on a regular basis. For example, 42% of men cooked or prepared food for themselves at least once a day, compared with 71% of women. Of those aged 16-24, 37% cooked or prepared food for themselves at least once a day, compared with between 55% and 66% of the older groups.

Those with a lower household income (up to £10,399) were more likely to prepare or cook food for themselves every day than those with an income of £26,000 or more (66% and 52% respectively).

Respondents were also asked about cooking or preparing food for other people. About two-fifths (37%) reported cooking or preparing food for others at least once a day (Chart 4.4). Further demographic comparisons are shown in Table A9.

Chart 4.4 How often respondents cook or prepare food for others



Source: Q2.4
 Base (unweighted): Total (3163), Men (1299), Women (1864), 16-24 (284), 25-29 (237), 30-39 (558), 40-49 (516), 50-59 (475), 60+ (1093)

Women were much more likely than men to cook or prepare food for others on a regular basis; for example, 56% of women did this at least once a day, compared with 17% of men.

Respondents aged 16-24 were less likely than older groups to cook or prepare food for others; for example, 14% of 16-24s did this at least once a day, compared with between 35% and 46% of the older groups.

The following sub-groups were more likely to prepare food for others on a daily basis:

- Those with children under 16 in the household (56%, compared with 31% of those with no children)
- Those who were married/living as married (50%, compared with 19% of those who were single/widowed/divorced)
- Respondents in households with 3 or more members (42%, compared with 33% of those in 1 or 2 person households).

4.5 Shopping behaviour

A third of the sample (selected at random) was asked about their food shopping behaviour (1,034). These respondents were first asked their level of responsibility for the food shopping in their household and were then asked how, where and when they did their food shopping.

4.5.1 Responsibility for household shopping

Of the third of the sample who answered the shopping behaviour section, 73% were responsible for all or half of the food shopping in their household. Women were more likely to be fully, or half, responsible for the food shopping (87%) than men (59%).

Of those who were married or living as married, 77% were responsible for all or half of the food shopping. For those who were single this was significantly lower at 68%. Similarly, 77% of respondents who were in work were responsible for all or half the food shopping, compared with 70% of those who were not in work.

Just over a third of those aged 16-24 years (38%) were responsible for all or half the food shopping, compared with 86% of 45-54 year olds, and 80% of 35-44 year olds. About three-quarters of those in the other age groups were responsible for all or half the food shopping (25-34, 75%, 55-64, 74%, 65-74, 78% and 75+, 76%).

4.5.2 How respondents do their household shopping – in shops or on-line

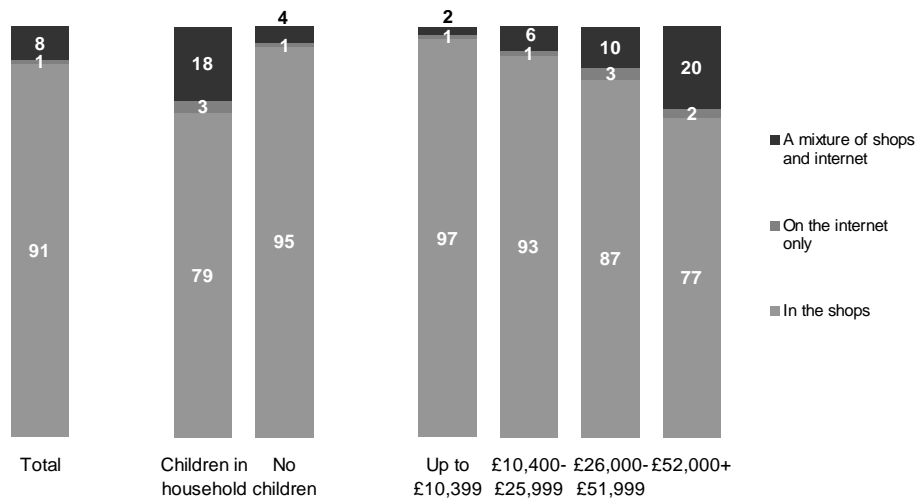
The vast majority of respondents (91%) usually did all of their food shopping solely by visiting shops. A further eight per cent visited shops and used the internet to do their food shopping. One per cent of respondents solely used the internet (Chart 4.5).

Women were more likely than men to use the internet for all or some of their food shopping (11% compared with 7%). There were distinct differences in the use of the internet for food shopping by age. Those aged 25-34 (16%) were most likely to use the internet for some or all of their food shopping, while those aged 16-24 (2%), 55-64 (1%) and 65-74 (2%) were least likely to do so.

Other sub-groups more likely to use the internet for food shopping included:

- Those who were living as married (those who were married, cohabiting or in civil partnerships), 12%, compared with five per cent of those who were single, widowed or divorced
- Those who were in work (13%, compared with 5% of those not in work)
- Respondents with children in their households (21%, compared with 5% of those without children)
- Those in higher income households – 22% of respondents in households with incomes of £52,000+ used the internet for some or all of their food shopping, as did 13% of those in households with incomes of £26,000 to £51,999; this fell to seven per cent among those in households with incomes of £10,400 to £25,999 and three per cent of those in households with incomes below £10,400
- Those in larger households – 19% of respondents in households with five or more people used the internet for some or all of their food shopping, compared with 13% in 3 to 4 person households and five per cent in 1 to 2 person households

Chart 4.5 How respondents do their food shopping



Source: Q3.2
 Base (unweighted): Total (1034), Children in household (238), No children (796), Up to £10,399 (156), £10,400-£25,999 (277), £26,000-£51,999 (202), £52,000+ (133)

4.5.3 Where respondents do their household shopping

The majority (97%) of respondents said they did most of their food shopping in supermarkets. Specialist shops such as butchers and green grocers were used by eight per cent of all respondents who only use shops, however those aged 55-64 used them most (14%), in comparison to four per cent of 16-24 year olds who did so. Those living in the lowest household income bracket (up to £10,399) who only use shops, were the least likely to use specialist shops (3% reported doing so). One in ten (10%) of those with a higher household income used them. Small

grocery stores or corner shops were used by one in ten of those with the lowest household income who only shop in shops (11%), compared with half as many (4%) of those living in households with the highest incomes (£52,000+).

4.6 Attitudes to food prices

A random third of the sample were asked questions about attitudes to food prices. The majority of these respondents (81%) felt food prices had gone up in the last 12 months – 43% thought they had increased a lot, 38% thought they had increased a little, 13% thought they had stayed the same and four per cent thought they had decreased a little. One per cent of those over 75 thought food prices had decreased a lot; no one else from other age groups did (Table 4.4).

Table 4.4 Perception of food prices in the last 12 months

	Increased a lot	Increased a little	Stayed the same	Decreased a little	Decreased a lot	Don't know
Total	43	38	13	4		
Gender						
Men	42	38	14	4	-	2
Women	45	38	12	4	-	2
Age group						
16-24	18	62	9	7	-	1
25-34	35	39	22	7	-	4
35-44	47	40	10	3	-	-
45-54	51	25	15	2	-	-
55-64	50	36	10	6	-	-
65-74	51	33	11	4	-	-
75+	51	31	15	5	-	-
Marital status						
Married/living as married	49	35	11	4	1	1
Single/widowed/divorced	35	42	16	4	-	3
Household income						
Up to £10,399	46	34	13	3	-	4
£10,400 - £25,999	47	38	10	5	1	-
£26,000 - £51,999	43	40	13	2	-	2
£52,000+	39	36	19	5	-	1

Source: Q3.12

Base (unweighted): 1034

'-' indicates <0.5%

Respondents aged 55-64 years were most likely to think that food prices had increased (a lot or a little) (87%), while those aged 25-34 years were least likely to think prices had increased (74%).

About a half of older respondents thought that food prices had increased a lot (51% of 45-54 year olds, 50% of 65-74 year olds, 51% of 75+). The proportion of

those aged 25-34 years who thought that food prices had increased a lot was significantly lower at 35%. This decreased further among the youngest age group, to 18% of those aged 16-24.

Over a fifth of 25-34 year olds thought prices had stayed the same (22%), compared with between nine per cent and 15% of the other age groups.

Overall, 84% of those who were married or living as married thought food prices had increased, and just under half (49%) that they had increased a lot. In comparison, 77% of single respondents thought there had been price increases, and a third (35%) thought food prices had increased a lot.

5. Eating outside of the home

Summary

- The majority (79%) of all 'meals', 'light meals' and 'snacks' were eaten at home, 13% were eaten at school, college or work, three per cent at someone else's house, four per cent at a food outlet (for example, a restaurant, café or pub) and three per cent somewhere else.
- About two thirds of respondents had eaten out in the last seven days (69%) and the most common location for this was a restaurant.
- Cleanliness and hygiene were important factors to most respondents (63%) in choosing where to eat out.
- The general appearance of places to eat and buy food was used by most respondents (71%) as a sign of standards of hygiene when eating out or buying food.

People are increasingly eating in out of home settings. This will impact on the proportion of diets which are consumed inside and outside the home and the extent that people are exposed to food hygiene practices in catering establishments. Information on patterns of and views on eating outside the home will help inform messages about food safety and healthy eating. For the purpose of the survey, 'eating out' was defined as eating out or while on the go.

Section 5.1 looks at eating out behaviour in the last 24 hours with section 5.2 covering eating out in the last seven days prior to interview to build up a picture of where respondents are eating outside of the home. Section 5.3 looks at the likelihood of respondents eating outside of the home to identify which characteristics are associated with eating outside the home. Section 5.4 considers the frequency of eating outside the home with section 5.5 looking at the factors which are important when deciding where to eat out. Section 5.6 covers views on where respondents would like to see more information on healthy food options in out of home settings while section 5.7 discusses awareness of hygiene standards, including how respondents judge standards of hygiene.

5.1 Eating out behaviour in the last 24 hours

A third of the sample (selected at random) was asked about eating out behaviours (1,073).

Respondents were asked to recall what they had eaten in the last 24 hours, and where, when and with whom they had eaten it. They were then asked to define

what they had eaten as a 'meal', a 'light meal' or a 'snack'. General eating patterns are discussed in Section 3.1. Table 5.1 shows where 'meals', 'light meals' and 'snacks' were eaten.

Table 5.1 Where respondents ate in the last 24 hours

	Total	When eating a meal	When eating a light meal	When eating a snack
Where respondents ate:				
At home	79	84	78	73
Outside of the home:				
- At school/ college/ work	13	6	15	18
- At someone else's house	3	3	3	2
- A food outlet (restaurant/ café/ pub)	4	6	2	3
- Other	3	1	3	3

Source: Q2.5, 2.7

Base (unweighted): 1073

The vast majority (84%) of 'meals' were eaten at home. Similarly over three-quarters (78%) of 'light meals' were eaten at home, as were 73% of 'snacks'. Six per cent of 'meals' were eaten in a restaurant or other food outlet. This was less common for 'light meals' (3%) and 'snacks' (2%). In total, 18% of 'snacks' were eaten whilst at work, school or college, as was a similar proportion of 'light meals' (15%). The proportion of 'meals' eaten at work, school or college was lower at six per cent.

5.2 Eating out in the last seven days

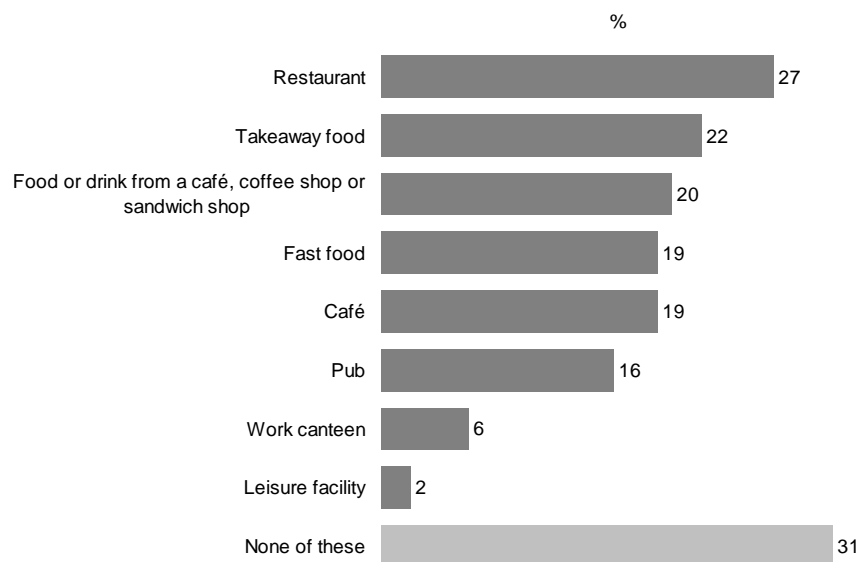
For the purposes of the survey, eating out was defined as doing one of the following:

- Eating in a restaurant
- Eating in a pub
- Eating in a café or coffee shop
- Buying food or drink from a café, coffee shop or sandwich bar to take away
- Eating fast food e.g. McDonald's, KFC, kebab shops
- Eating food from a work canteen
- Eating food from a cinema, bowling alley, theme park or other leisure facility
- Eating takeaway food (e.g. Indian/Chinese/Pizza/Fish and chips).

Respondents were asked first whether they had done any of the above in the last seven days prior to interview, and then, for those that they had done, how many times.

Of all respondents asked this section, 69% had eaten out at some point in the last seven days (Chart 5.1).

Chart 5.1 Where respondents had eaten in the last seven days



Source: Q2.33
Base (unweighted): Respondents asked this section (1056)

25

Restaurants

The food outlets that had been visited by the highest proportion of respondents were restaurants - 27% had been to a restaurant in the last seven days.

A third of 16-24 year olds, and a similar proportion of 65-74 year olds (33% and 37% respectively) had visited a restaurant, compared with a fifth of 45-54 and 55-64 year olds (19% and 20% respectively). Respondents without children in their household (29%) were more likely to have visited a restaurant in the past week, compared with 21% of those with children in their household.

Takeaway food

About a fifth of respondents (22%) had eaten takeaway food, such as pizza, Indian, Chinese, or fish and chips, in the seven days prior to interview. Men were more likely than women to have eaten takeaways in the last seven days (27% of men compared with 17% of women).

Respondents in younger age groups were more likely to have eaten takeaway food, with 34% of 16-24 year olds and 33% of 25-34 year olds having done so in the last seven days, compared with 13% of those aged 55-64, six per cent of those aged 65-74, and seven per cent of those aged 75 or older.

Of those with children in the household, 27% had eaten takeaways in the last seven days, compared with 20% of those without children. A higher proportion of respondents in work had eaten takeaway food, compared with those respondents who were not in work (28% and 17% respectively).

Food or drink from a café, coffee or sandwich shop to take away

In total, 20% of respondents had bought food or drink from a café, coffee shop or sandwich shop in the last seven days, to take away.

A significantly higher proportion of the youngest respondents compared to other age groups had bought something to take away from a café or coffee shop. Nearly half of all 16-24 year olds had done so (48%) compared with 21% of 25-34 year olds. This proportion steadily decreased with increasing age, to seven per cent of those aged 75+.

A quarter of single respondents had bought something to take away from a café or coffee shop (25%) compared with 16% of those married or living as married. Those who were in work were also more likely to have done this (23%), than those not in work (18%).

Fast food outlets

Overall, 19% of respondents had eaten fast food such as KFC, McDonalds or kebabs in the last seven days. Men (24%) were more likely than women (14%) to have done so.

Respondents in the younger age groups were more likely than those in older groups to have eaten fast food: 41% of 16-24 year olds and 37% of 25-34 year olds had done so, falling to 17% among 35-44 year olds and continuing to decrease with increasing age.

Of single/divorced/widowed respondents, 22% had eaten fast food, compared with 16% of those who were married or living as married. A higher proportion of those with children in the household had eaten fast food in the last seven days (24%), compared with 17% of those without children.

Not eaten out in the last seven days

Approximately a third of all respondents had not eaten out in the last seven days (31%). Older respondents were less likely to have eaten out than younger groups. Half (53%) of those aged 75+ and 46% of those aged 55-64 had not eaten out in the last week, compared with one in ten 16-24 year olds (9%), and 15% of 25-29 year olds.

A third of those without children in their household had not eaten out (33%), compared with about a fifth of those with children (22%). Whilst 23% of respondents who were in work had not eaten out in the last week, the proportion of those not in work who had not eaten out was higher at 38%.

Full details of the demographic comparisons for different food outlets are shown in Table A10.

5.3 Regression analysis – eating out

Initial analysis looked at eating out in each location and revealed that similar patterns emerged about types of respondents eating out. Regression analysis was used to combine reported eating out occasions and to separate out the different socio-demographic factors associated with eating outside of the home.

Table A11 reports the odds from a logistic regression that explores associations between a range of variables and the probability that a respondent ate out in the seven days prior to interview. The reference category for each factor is shown in brackets. Eating out as defined in the relevant question embraces a range of activities from eating in a restaurant to eating in a work canteen, fast food establishment, or a coffee shop.

Broadly speaking, the older the respondent the less likely they were to report having eaten out in the previous seven days. The youngest sample members, those aged 16-24, displayed a particularly high tendency to eat out compared with the rest of the sample. For example, those aged 35-44 reported odds of eating out over 80% lower than those aged 16-24.

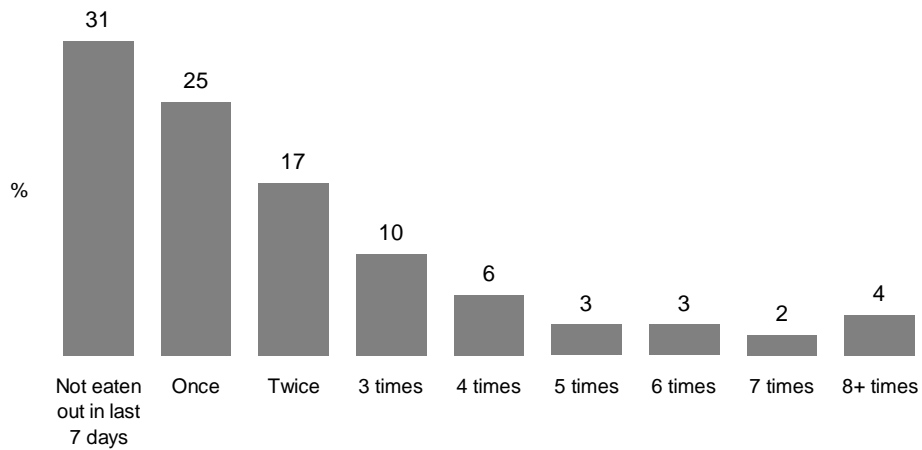
White respondents had high odds of eating out relative to non-White groups. They were over three times more likely to report having eaten out in the last seven days.

Respondents in work were four times more likely to report having eaten out in the last seven days than those not in work.

5.4 Frequency of eating out

About a third of respondents had not eaten out at all in the week prior to interview (31%). A quarter had eaten outside of the home once (25%), 17% had eaten out twice and ten per cent had eaten out three times (Chart 5.2).

Chart 5.2 Number of times respondents had eaten out in the last seven days

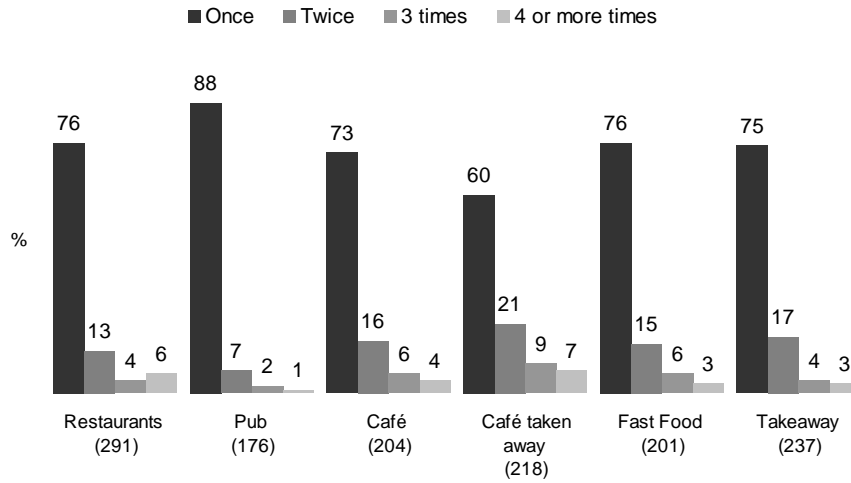


Source: Q2.34
 Base (unweighted): Respondents asked this section (1056)

When respondents were asked how frequently they had been to each of the food outlets they had visited in the last seven days, most had only been once. Nearly nine out of ten respondents who had visited a pub had only been once (88%). Approximately three-quarters of those respondents who had visited a restaurant (76%), a café (73%), eaten fast food (76%), or eaten takeaways (75%) had done so once.

Nearly two-thirds of respondents (60%) who had visited a café or coffee shop to buy food to take away had been once, a further 21% had been twice and 16% three times or more in the last seven days (Chart 5.3).

Chart 5.3 *Number of times respondents had eaten out in each place in the last seven days*

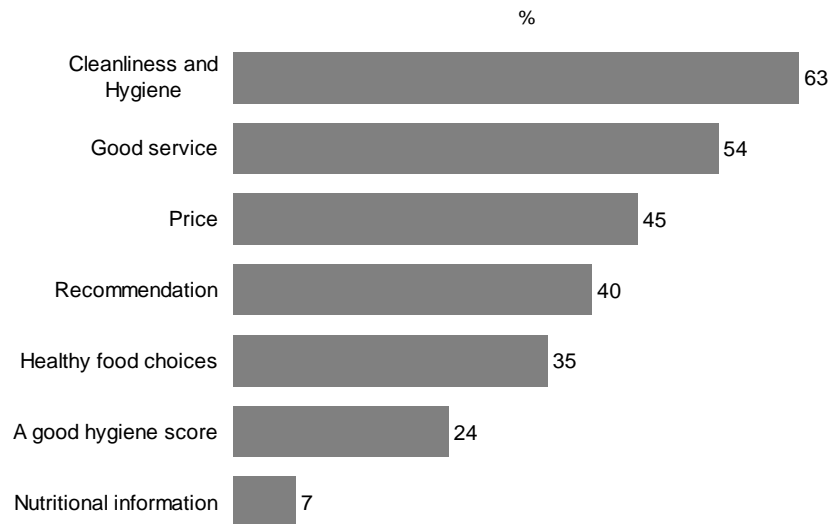


Source: Q2.34
 Base (unweighted): Respondents who had eaten in each place in the last 7 days (shown in brackets)

5.5 Factors that are important when eating outside of the home

Respondents were asked to say, from a list of possible items, what factors were important to them in deciding where to eat outside of the home. Results are shown in Chart 5.4; a detailed breakdown of demographic groups is shown in Table A12.

Chart 5.4 Importance of factors in deciding where to eat out



Source: Q2.35
Base (unweighted): Respondents asked this section (1056)

28

The factor that was most commonly mentioned by respondents as important when deciding where to eat out was cleanliness and hygiene, chosen by almost two-thirds (63%). Women were more likely than men to select cleanliness and hygiene as an important factor (67% compared with 58%).

The majority of all age groups highlighted cleanliness and hygiene as an important factor when choosing where to eat out or buy food from. There was some variation by age group, with 69% of 35-44 year olds selecting this as an important factor, compared with 59% of 25-34 year olds, and 52% of those aged 75+ (the group least likely to say this was important).

Of respondents whose household income was between £26,000 and £51,999, 71% felt cleanliness and hygiene were important, compared with 65% of those in the income brackets either side (£10,400 to £25,999 and £52,000 or more) and 56% of those respondents earning up to £10,399.

Women were more likely than men to say that having healthy food choices was an important factor when choosing where to eat out (38% compared with 31%).

Approximately a quarter of respondents (24%) considered a good hygiene score as an important factor when choosing somewhere to eat or buy food. About a fifth of 16-24 and 25-34 year olds (23% and 22% respectively) and a similar proportion of older respondents said a good hygiene score was important (23% of 55-64 year olds and 23% of 65-74 year olds). This was significantly lower than for those aged 35-44 years and 45-54 years (30% and 31% respectively).

Seven per cent of respondents reported that choosing a place to eat or buy food from which had nutritional information available was important to them when eating outside of the home.

5.6 Information about healthy food options

When specifically asked, in a separate question, where they would like to see more information displayed about how healthy different options are, about three-quarters of respondents said they would like to see more information in at least one of the catering outlets asked about; 24% would not like to see this information in any of the catering outlets.

Respondents aged 16-24 and 25-34 were most likely to say that they would like to see more information on healthy options (84% and 81% respectively), compared with 71% of 55-64 year olds and 58% of respondents aged 75+.

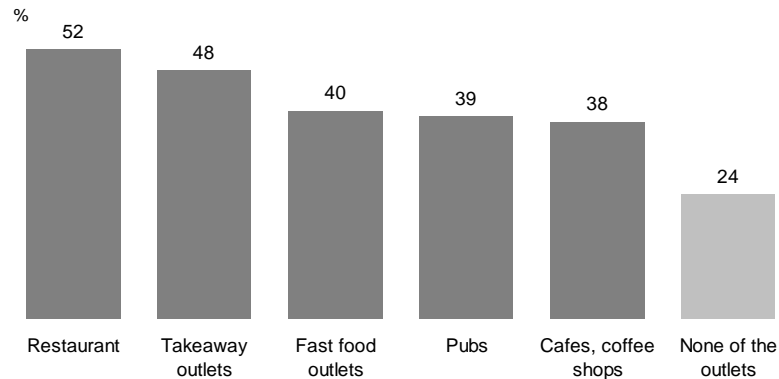
About eight out of ten of those with children in their household (82%) said they would like to see more information on healthy options, compared with 74% of those with no children.

Over two-thirds of those with household incomes of £52,000 and over said they would like to see more information (68%), compared with eight out of ten of those with lower household incomes (81%).

Full details of the demographic comparisons are given in Table A13.

Responses to this question for the different food outlets asked about are shown in Chart 5.5. Just over half (52%) the sample would like to see more information on how healthy food options were in restaurants. The proportion of respondents who wanted this in takeaway outlets was 48%. Approximately four in ten respondents would like to see more information about healthy food options in fast food outlets (40%), pubs (39%) and cafés and coffee shops (38%). (Chart 5.5)

Chart 5.5 *Places where respondents would like to see more information displayed about healthy options*



Source: Q2.40
 Base (unweighted): Respondents who ever eat out (983)

5.7 Awareness of hygiene standards

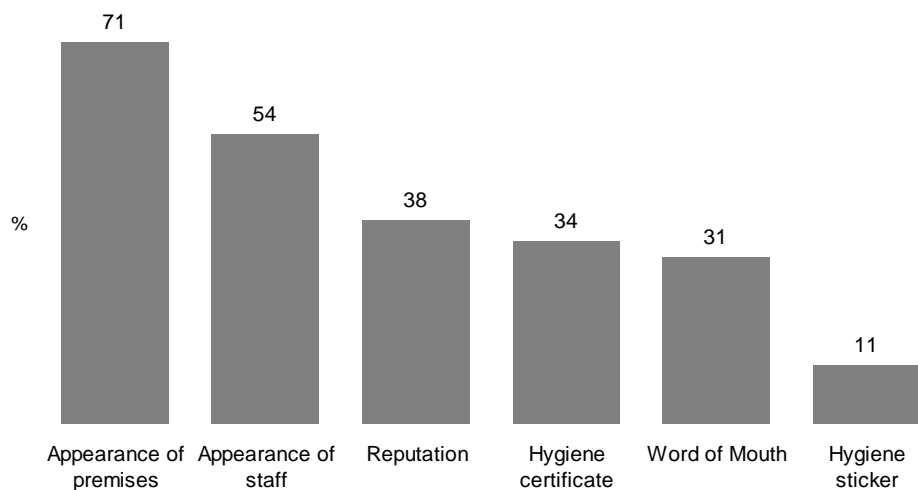
Respondents were asked how aware they would say they generally were about standards of hygiene when eating out in places such as restaurants, cafés, pubs and takeaways, or buying food to take home to eat from supermarkets or shops.

Overall, seven in ten respondents (70%) said they were ‘very aware’ or ‘fairly aware’ of standards of hygiene when eating out or buying food from supermarkets. Women were more likely than men to say they were aware of hygiene standards (74% compared with 65%).

Respondents in the older age groups were more likely than those in younger groups to say they were aware of standards of hygiene (83% of those aged 75+, and 81% of 65-74s, compared with 64% of those aged 16-24 and 54% of 25-34s).

Respondents who said they were ‘very aware’, ‘fairly aware’ or ‘neither aware nor unaware’ of hygiene were next asked to select, from a list of options presented, how they know about the hygiene standards of the places they eat out at or buy food from. Results are shown in Chart 5.6.

Chart 5.6 Signs of standards of hygiene when eating out



Source: Q2.38
 Base (unweighted): Respondents who ever eat out and have some awareness of hygiene standards (827)

30

General appearance

Most respondents said they used the general appearance of the premises as a sign of standards of hygiene when eating out or buying food (71%).

Just over three-quarters of women used general appearance of premises as a sign of standards of hygiene (76%), compared with almost two-thirds of men (65%). Those who were in work were more likely to use general appearance as a sign of hygiene (75%) compared with those who were not in work (67%).

Those aged 25-29 were the least likely age group to say they used general appearance of premises as a sign of hygiene standards, just over half of them reported this (53%), compared with 81% of those aged 45-54.

Appearance of staff

Just over half of all respondents took the appearance of staff as a measure of hygiene (54%); married respondents (60%) were more likely than single respondents (46%) to do this. Respondents aged 16-24 (27%) were significantly less likely than other age groups to say they used the appearance of staff as an indicator of hygiene standards (for example 68% of those aged 45-54 and 66% of 65-74 year olds did so).

Reputation

Reputation was seen by 38% of respondents as an indicator of standards of hygiene. Those aged 25-34 were least likely to say they used reputation as a sign of hygiene standards - 25% of them did so, compared with 45% of 35-44 year olds and 44% of 65-74 year olds.

Hygiene certificate

About a third of respondents (34%) said that they used a hygiene certificate as an indicator of standards of hygiene. Those with children in their household were more likely to mention a hygiene certificate (47%) compared with 31% of those without children. Significantly more 25-29 year olds did so (58%) compared with the other age groups, with about a quarter of those 55-64 and 65-74 doing so (26% and 25%). Those aged 75+ were least likely to say they used hygiene certificates (17% did so).

Word of mouth

Approximately a third of respondents said they knew about hygiene standards from word of mouth (31%).

Hygiene sticker

About one in ten respondents said they knew about hygiene standards from a hygiene sticker (11%). Respondents aged 25-34 were most likely to select this option - 17% of them did so, compared with eight per cent of 35-44 year olds and one per cent of those over 75.

Full details of these demographic comparisons are shown in Table A14.

6. Eating and health

Summary

- Nearly all respondents (94%) agreed with the statement 'Even if you don't have a really healthy diet, it's worth making small changes', there was a high level of agreement with 'What you eat makes a big difference to how healthy you are' (91%) and almost three-quarters disagreed with 'I don't really think about what I eat' (72%).
- Opinions about experts were mixed, with nearly half of respondents (47%) agreeing with the statement 'I am fed up with experts telling me what I should eat', and almost three-quarters (73%) agreeing with 'Experts contradict each other over what foods are good for you'.
- Over four-fifths of respondents (82%) felt their overall diet was healthy, and a similar proportion (86%) thought that the food they tend to eat at home was healthy.
- Almost three-fifths of respondents (58%) felt the food they eat when out was less healthy than at home.
- Over half of respondents (55%) agreed with the statement 'I do not need to make any changes to the food they eat, as it is already healthy enough'.
- Nevertheless, almost three-fifths (57%) reported having made a change to their diet in the previous six months. The most common changes were eating more fruit and vegetables (28%) and eating smaller portions (25%).
- The most common reason respondents gave for changing their diet was to lose or maintain weight (mentioned by 33% of respondents who had made changes to their diet) and to be more healthy (18%).
- Respondents were asked what difficulties that they would have, if any, if they tried to eat more healthily. The main difficulties reported were the cost of eating more healthily (12% of respondents mentioned this) and time constraints (8%). Almost a quarter (23%) said they would not have any difficulties.

This chapter supports information presented in Chapter 3 on healthy eating messages, covering issues, which could be relevant to people's propensity to follow healthy eating messages.

Section 6.1 covers attitudes to healthy eating. Section 6.2 looks at perceptions of diets to assess how far respondents see their diets as healthy or unhealthy overall, when eating at home and when eating away from home. Section 6.3 presents information on changes to diet made in the last six months, what the changes were and barriers and motivations to change, to help identify what prevents and triggers improvements to diet. Section 6.4 considers self-reported levels of physical activity, and self-reported weight and height which has been used to estimate body mass index (BMI).

6.1 Attitudes towards healthy eating

Respondents were asked to say, on a five-point scale from 'definitely agree' to 'definitely disagree', how much they agreed or disagreed with a range of statements about healthy eating. Results are shown in summary in Table 6.1.

Table 6.1 Attitudes towards healthy eating

	Agree %	Neither %	Disagree %
Even if you don't have a really healthy diet, it's worth making small changes	94	4	3
What you eat makes a big difference to how healthy you are	91	4	4
People think more about their weight than about how healthy they are	85	8	7
I enjoy eating healthy foods	83	11	5
Experts contradict each other over what foods are good for you	73	15	12
The tastiest foods are the ones that are bad for you	49	13	37
I am fed up with experts telling me what I should eat	47	21	31
The main reason for people to eat a more healthy diet is to lose weight	45	12	42
I get confused over what's supposed to be healthy	31	9	60
As long as you take enough exercise you can eat whatever you want	27	9	63
I don't really think about what I eat	21	7	72
If you are not overweight you can eat whatever you like	18	7	75
Good health is just a matter of good luck	15	8	76

Source: Q2.16
Base (unweighted): 3163

Over nine out of ten respondents agreed with the statements 'What you eat makes a big difference to how healthy you are' (91%), and 'Even if you don't have a really healthy diet, it's worth making small changes' (94%). Just over one in five (21%) agreed with the statement 'I don't really think about what I eat'. One in seven (15%) agreed that 'Good health is just a matter of good luck'.

Most respondents disagreed with the statements 'If you are not overweight you can eat whatever you like' (75%), and 'As long as you take enough exercise you can eat whatever you want' (63%), although sizeable minorities agreed with both of these statements (18% and 27% respectively).

Over eight out of ten respondents (83%) agreed with the statement 'I enjoy eating healthy foods', and five per cent disagreed. However, opinion towards the statement 'The tastiest foods are the ones that are bad for you' was more mixed, with 49% agreeing and 37% disagreeing.

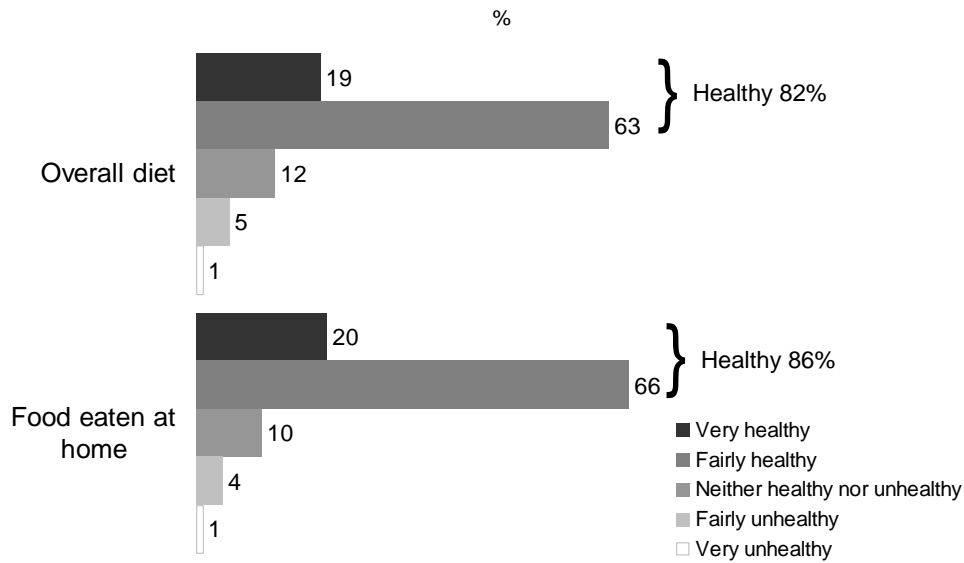
There was some evidence of confusion over messages about healthy eating. Opinions about experts were mixed, with just under half of respondents (47%) agreeing that 'I am fed up with experts telling me what I should eat', although nearly a third (31%) disagreed with this statement. Over seven out of ten respondents (73%) agreed with the statement 'Experts contradict each other over what foods are good or bad for you', and nearly a third (31%) agreed with 'I get confused over what's supposed to be healthy'.

The majority of respondents (85%) agreed with 'People think more about their weight than about how healthy they are'. Opinions on the statement 'The main reason for people to eat a more healthy diet is to lose weight' were split fairly evenly, with 45% agreeing and 42% disagreeing with this statement.

6.2 Perceptions of diet

Respondents were asked to say, in their opinion, whether what they usually eat was healthy or unhealthy (on a five point scale from 'very healthy' to 'very unhealthy'). They were later asked, using the same scale, how healthy is the food they usually eat *at home*. Results are shown in Chart 6.1.

Chart 6.1 Perceptions of food usually eaten



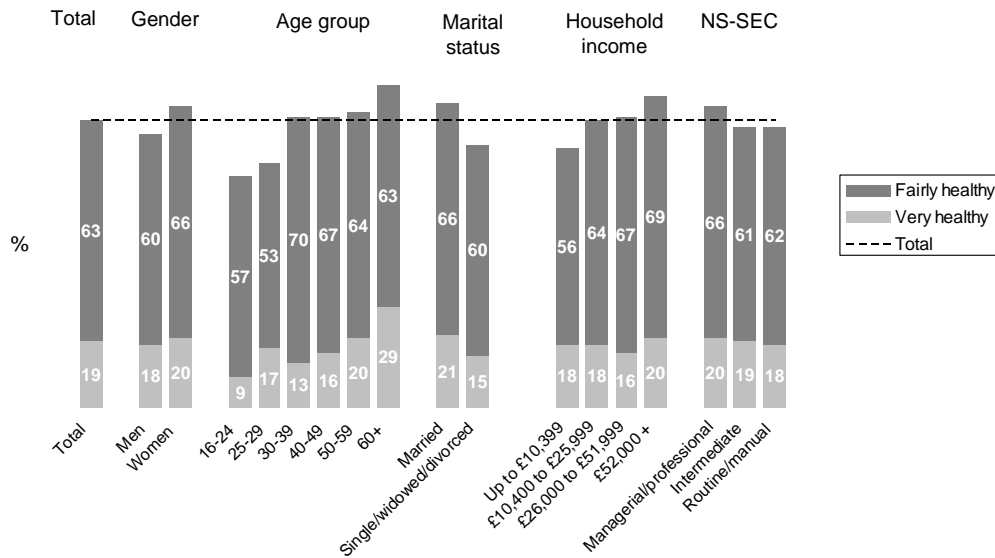
Source: Q2.1, Q2.15
 Base (unweighted): All respondents (3163)

About eight out of ten respondents (82%) felt that their overall diet was healthy – almost one in five (19%) that it was ‘very healthy’, and a further 63% ‘fairly healthy’.

Respondents were slightly more likely to say that the food they ate at home was healthy (86%) compared with their overall diet. One in five (20%) said that the food eaten at home was ‘very healthy’, with a further two-thirds (66%) saying it was ‘fairly healthy’.

There were some significant differences between different demographic groups in their rating of their overall diet, shown in Chart 6.2.

Chart 6.2 Perceptions of food usually eaten, by demographic variables



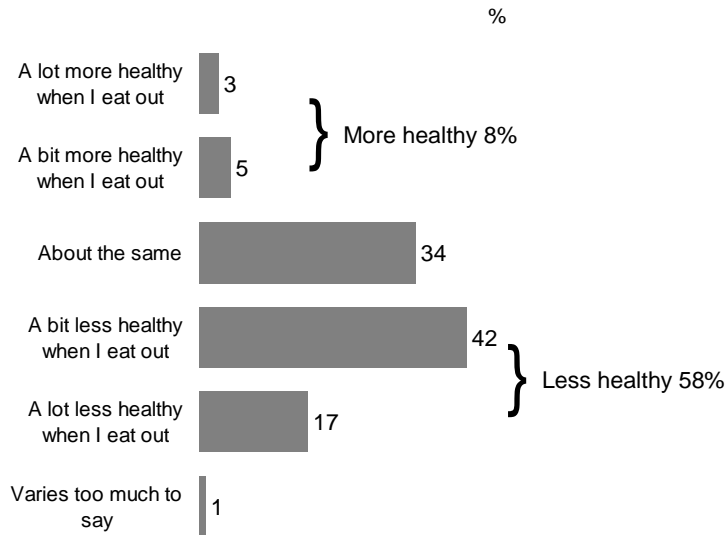
Source: Q2.1

Base (unweighted): Total (3163), Men (1299), Women (1864), 16-24 (284), 25-29 (237), 30-39 (558), 40-49 (516), 50-59 (475), 60+ (1093), Married/living as married (1629), Single/widowed/divorced (1531), Up to £10,399 (529), £10,400-£25,999 (844), £26,000-£51,999 (624), £52,000 + (380), Managerial/professional (944), Intermediate (537), Routine/manual (1106)

Women (86%) were more likely than men (78%) to say that the food they usually eat is healthy. Older respondents were more likely than younger ones to say they eat healthily – 92% of respondents aged 65-74 and 94% of those aged 75 and over said that what they usually eat is healthy, compared with 66% of those aged 16-24. Respondents who were married/living as married (87%) were more likely than those who were single/widowed/divorced (75%) to say they eat healthily. Respondents in higher income households (89%), and in managerial/professional households (86%), were also more likely to say that what they usually eat is healthy compared with those in lower income (73% of those with an income of up to £10,399) and those in intermediate and routine and manual households (81% and 80% respectively). Similar patterns were found for ratings of food eaten at home.

Respondents were also asked how healthy they would say that the food they eat outside of the home is, compared with when they eat at home. This question was asked of one third of the sample only, and was not asked of the six per cent of this group who said that they never eat out. As Chart 6.3 shows, the majority of these respondents (58%) said that the food they eat outside of the home is less healthy than the food they eat when at home. About a third of these respondents (34%) said it was about the same, with fewer than one in ten (8%) saying that they ate more healthily when they eat out.

Chart 6.3 *Healthiness of food when eating outside of the home, compared with eating at home*



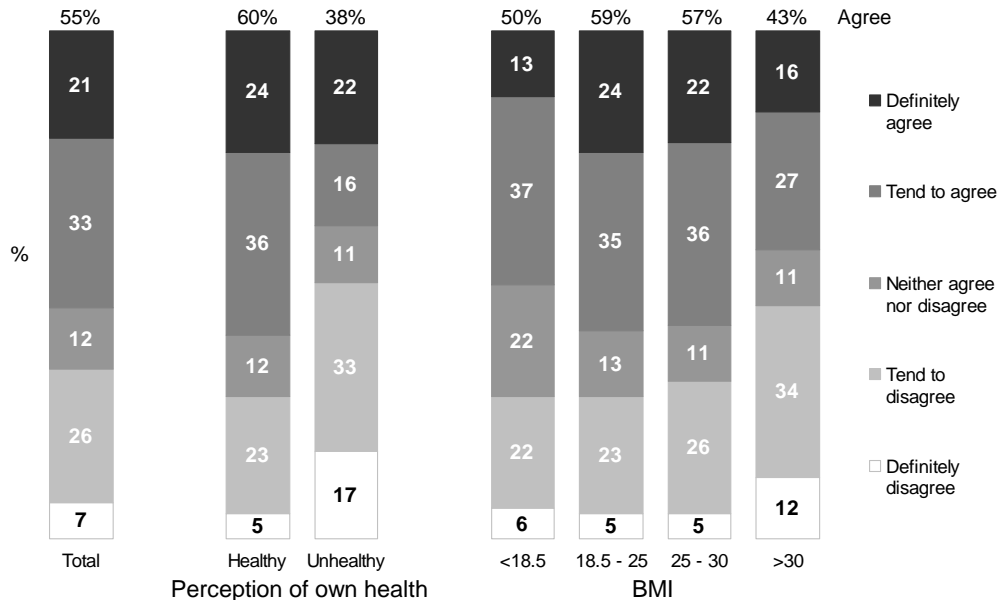
Source: Q2.39
 Base (unweighted): All respondents asked this section (983)

6.3 Dietary change

6.3.1 Changes to food eaten

Respondents were asked how much they agreed or disagreed with the following statement ‘I do not need to make any changes to the food I eat, as it is already healthy enough’. Just over half (55%) agreed and one third (33%) disagreed (Chart 6.4).

Chart 6.4 Agreement that there is no need to make changes to food eaten as it is already healthy enough



Source: Q2.24
 Base (unweighted): Total (3163), Healthy (2212), Unhealthy (179), <18.5 (82), 18.5-25 (1355), 25-30 (1076), >30 (581)

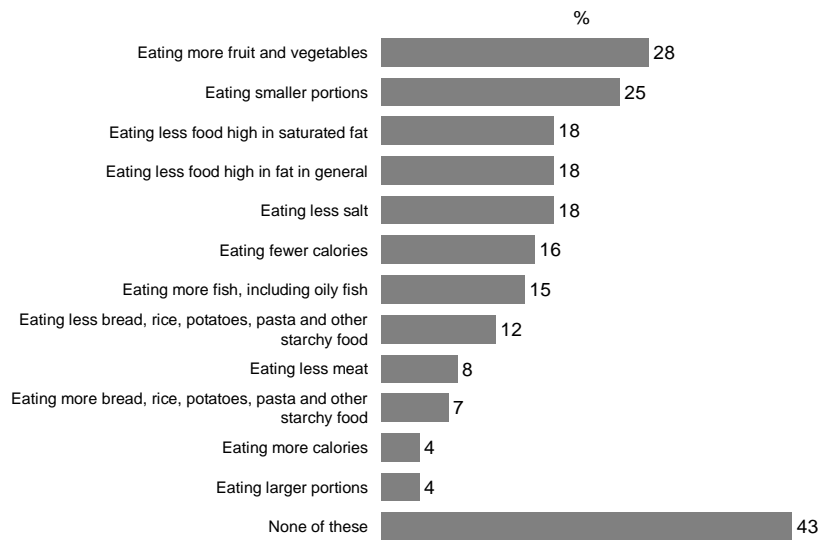
Those most likely to say that they did not need to make changes to the food they eat were:

- Aged 65+ (76% agreed with this statement)
- Those who never ate outside of the home (67%)
- Those who reported eating five or more portions of fruit and vegetables per day (65%)
- Perceived their overall diet as healthy (63%)
- Those who reported doing at least 30 minutes of moderate physical activity on six or seven days a week (62%)
- Perceived themselves as healthy (60%)
- Had a healthy (between 18.5 and 25) or an overweight (between 25-30) BMI (59% and 57% respectively).

Full details are shown in Table A15.

Respondents were also asked whether they had made any changes to the food they eat over the last six months. About a quarter said they were eating more fruit and vegetables and eating smaller portions (28% and 25% respectively). Just under a fifth were eating less food high in saturated fats, high in fat in general and eating less salt (all 18%). Two-fifths (43%) had not made any of these changes to their diet, while 57% had made at least one of these changes (Chart 6.5).

Chart 6.5 Changes made to food eaten in the last six months



Source: Q2.19
Base (unweighted): All respondents (3163)

Younger respondents were more likely than older respondents to have made a change to the food they eat in the last six months; 62% of those aged 65+ answered 'none of these' compared with 30% of those aged 16-24. Younger respondents were more likely to have started eating more fruit and vegetables (40%) and eating more starchy food (16%).

Respondents with no dietary restrictions were less likely to have made any changes than those with restrictions (53% compared with 65%).

Those who perceived themselves to be overweight and those with an overweight or obese BMI were more likely to have started:

- Eating less food high in saturated fat (23%, 18% and 28% respectively)
- Eating less fat in general (22%, 20% and 23%)
- Eating less salt (23%, 20% and 24%)
- Eating fewer calories (23%, 19% and 23%).

Full details are shown in Table A16.

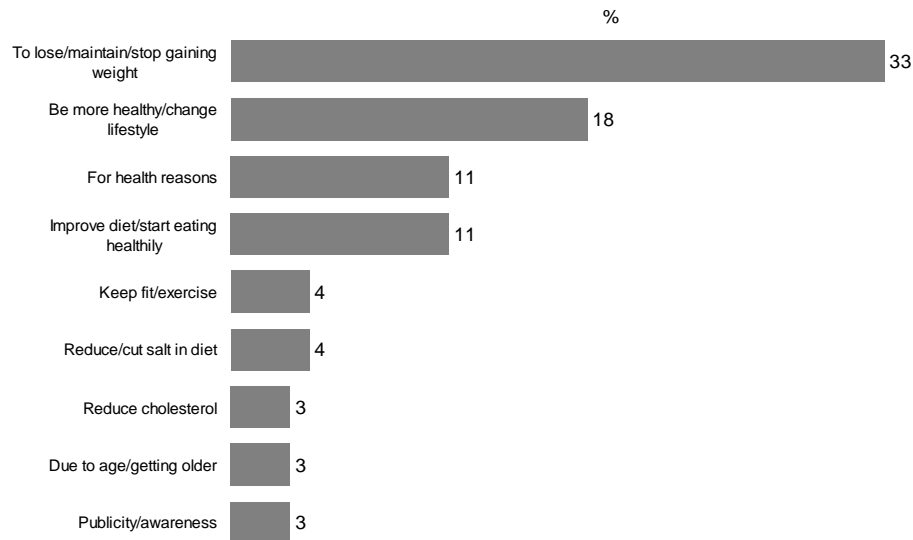
6.3.2 Barriers and motivations to change

Respondents who had made a change to their diet in the last six months were asked to say, in an open question, what the reasons for this change were.

A wide range of reasons was given by respondents. The most common reason (given by 33%) was to lose, maintain or stop gaining weight. Other common

reasons given were to be more healthy (mentioned by 18%), health reasons in general (11%) and to improve diet/start eating healthily (11%). Three per cent of respondents said they had made a change as a result of publicity/awareness from media such as television, radio and newspapers (this includes information from experts and from government campaigns such as Change4Life) (Chart 6.6).

Chart 6.6 *Reasons for making changes to food eaten in the last six months*



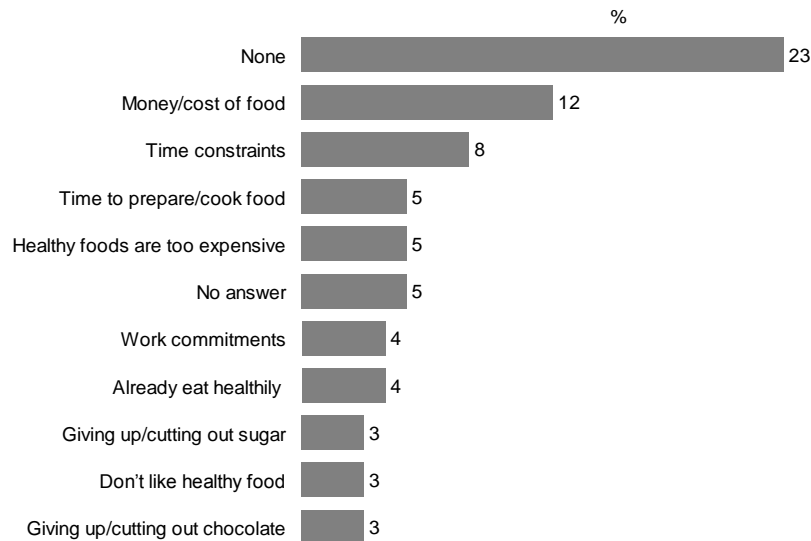
Source: Q2.21 – responses mentioned by 3% or over
 Base (unweighted): Respondents who have made changes to the food they eat over the last 6 months (1738)

Men were more likely to have made changes in order to keep fit or exercise than women (8% compared with 1%), whilst women were more likely than men to have made changes to lose weight (40% compared with 26%). Respondents aged 55-64 and 65+ were more likely than younger groups to have made a change for health reasons (24% and 19%) and were less likely to have made a change to have a healthier lifestyle (13% and 10%). Full details are shown in Table A17.

Respondents were asked to say, in an open question, what difficulties that they would have, if any, if they tried to eat more healthily. Answers are shown in Chart 6.7.

The main difficulties respondents envisaged were the cost of eating more healthily (12%) and time constraints (8%). A quarter (23%) said that they would not have any difficulties.

Chart 6.7 Difficulties in trying to eat more healthily



Source: Q2.22 – responses mentioned by 3% or over
Base (unweighted): All respondents (3163)

Older respondents were more likely than younger respondents to say that they would not have any difficulties trying to eat more healthily (36% of those 65+ compared with 16% of those aged 16-24).

The issue of money or cost of food was more commonly mentioned by those from households with the lowest incomes (18% of those with an annual income of up to £10,399), whilst those with the highest incomes (£52,000 or more per year) were more likely to cite time constraints (13%). Full details are shown in Table A18.

6.4 Diet, physical activity and physical measurements

Respondents were asked about a range of other factors related to a healthy lifestyle, including:

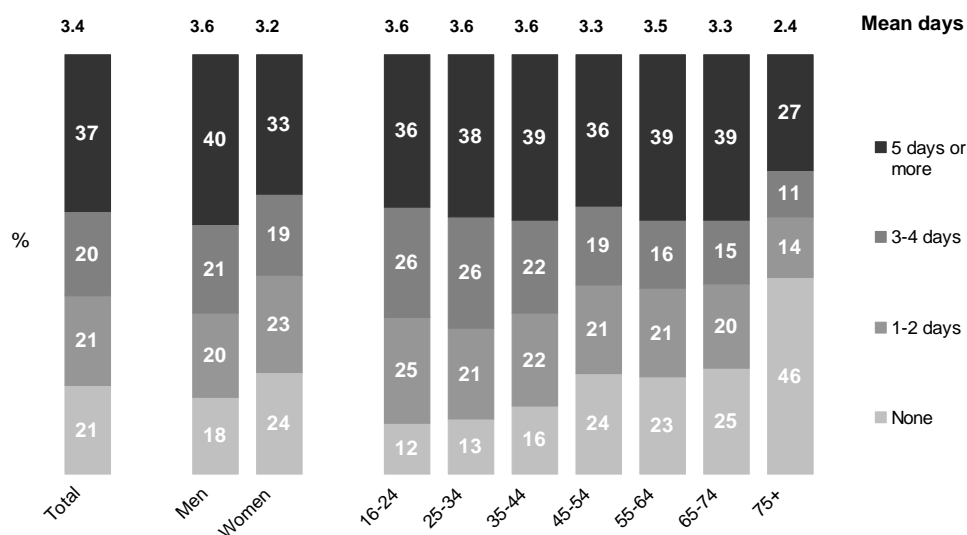
- Participation in physical activity – self-reported number of days of moderate activity for at least 30 minutes in the last seven days
- Body mass index (BMI)²⁰ – calculated from self-reported height and weight
- Respondents' assessment of their own weight
- Respondents' assessment of their own health

Overall, 78% of respondents said they had taken part in physical activity of at least moderate intensity, for at least 30 minutes a time, in the last week. This was

²⁰ BMI is calculated from the individual's body weight divided by the square of his or her height. The recommended healthy BMI is between 18.5 and 25.

higher among men (81%) than women (75%). Physical activity participation was highest among those aged 16-24 (87%) and 25-34 (85%), and lowest among those aged 75 and over (52%). (Chart 6.8).

Chart 6.8 Number of days' physical activity in the last week



Source: Q5.1
 Base (unweighted): Total (3163), Men (1299), Women (1864), 16-24 (284), 25-34 (516), 35-44 (531), 45-54 (506), 55-64 (489), 65-74 (442), 75+ (393)

For general health benefit, it is recommended that adults should achieve a total of at least 30 minutes a day of at least moderate intensity physical activity on five or more days of the week²¹. Overall, 37% of respondents reported that they had taken part in 30 minutes or more moderate physical activity on five or more days in the last week²². This was higher among men (40%) than women (34%), and lower among those aged 75+ (27%) than among all other age groups.

Respondents were asked for their height and weight measurements (self-reported), and a body mass index (BMI) was calculated where both height and weight were provided. Nearly all respondents provided a height measurement, and 98% gave a weight measurement, so BMI was calculated for 98% of respondents. Where BMI was calculated, three per cent of respondents had a BMI of less than 18.5 (underweight), 45% had a BMI between 18.5 and 25

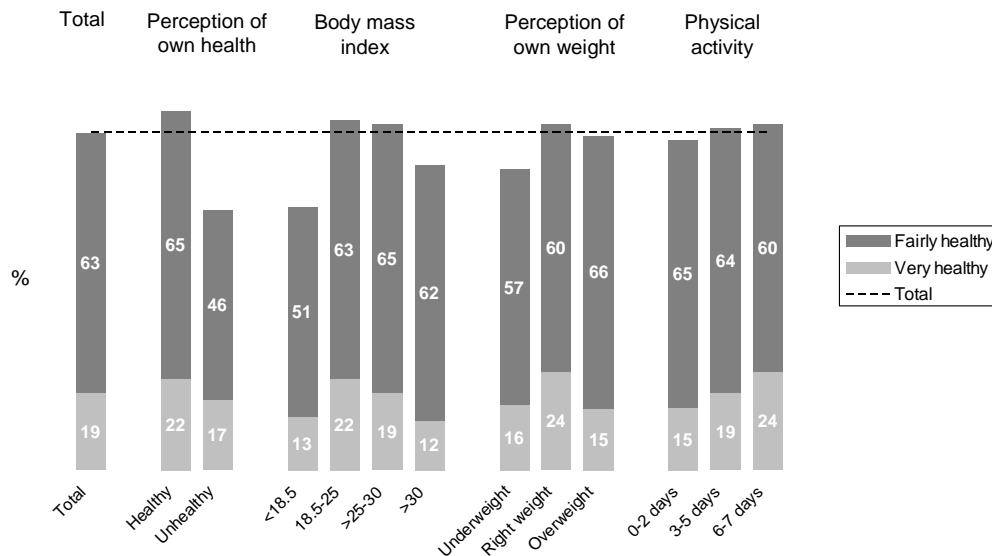
²¹ Source: Department of Health (2004). At least five a week: Evidence on the impact of physical activity and its relationship to health. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4080994

²² Measures of physical activity were included in the survey to provide additional explanatory power to the findings rather than to produce national estimates. It is recommended that the Health Survey for England (HS) be used for national estimates of physical activity.

(healthy weight), 34% had a BMI of 25-30 (overweight), and 19% had a BMI over 30 (obese).

Chart 6.9 shows how respondents' assessments of the healthiness of what they usually eat varied according to these other lifestyle factors.

Chart 6.9 Perceptions of food usually eaten by perception of own health, body mass index, perception of own weight and physical activity



Source: Q2.1
 Base (unweighted): Total (3163), Healthy (2212), Unhealthy (179), <18.5 (82), 18.5-25 (1355), >25-30 (1076), >30 (581), Underweight (225), Right weight (1241), Overweight (1691), 0-2 days (1370), 3-5 days (934), 6-7 days (840)

Generally, respondents who reported that the food they usually ate was healthy, were also more likely to either rate themselves more healthy, or to report more healthy behaviour in respect of these other factors.

Among respondents who reported that their general health was good or very good, 87% felt that the food they usually eat was healthy, compared with 63% of those whose reported general health was bad or very bad.

Looking at body mass index (BMI), respondents with a healthy BMI were most likely to report that they had a healthy diet (85%), followed by overweight respondents (84%). Respondents who were obese (74%) and particularly, underweight (65%) were less likely to say that the food they usually ate was healthy.

Respondents who reported taking part in the most physical activity (6-7 days per week) were more likely to say that their diet was very healthy – 24% of this group did so, compared with 15% of those who did the least physical activity (0-2 days per week). Overall, the proportion reporting a healthy diet (very or fairly) did not differ significantly according to respondents' physical activity level.

7. Groups of interest

Initial analyses explored the relationships between knowledge, attitudes and behaviour and individual's characteristics and circumstances. The groups shown in Table 7.1 were found to be less likely to be aware of and report following advice provided by government across a number of healthy eating and food safety issues. For example, older respondents (aged 60+) were less likely to be aware that you should eat five portions of fruit and vegetables a day and they were also more likely to report behaving in ways, or to hold attitudes, which could increase their risk of food poisoning (such as always washing raw meat and poultry).

Table 7.1 Groups of interest

	Food safety reported behaviours and attitudes	Healthy eating knowledge
Older respondents (60+)	<ul style="list-style-type: none"> • More likely to store food wherever it will fit in the fridge • More likely to wash raw meat and poultry • More likely to agree that ‘a little bit of dirt won’t do you any harm’ and ‘I am unlikely to get food poisoning from food prepared in my own home’ • More likely to agree that ‘I always avoid throwing food away’ 	<ul style="list-style-type: none"> • Less likely to correctly place all food groups on the eatwell plate • Less likely to know they should eat 5 portions of fruit and vegetables a day
Men	<ul style="list-style-type: none"> • Less likely to wipe down surfaces after preparing food • Less likely to wash their hands before food preparation and after handling raw meat or fish • More likely to store open tins in their fridges 	<ul style="list-style-type: none"> • Less likely to know they should eat 5 portions of fruit and vegetables a day
Low income households (annual household income up to £10,400)	<ul style="list-style-type: none"> • More likely to agree that ‘I always avoid throwing food away’ 	<ul style="list-style-type: none"> • Less likely to correctly place all food groups on the eatwell plate
Non-White respondents²³	<ul style="list-style-type: none"> • More likely to wash raw meat and poultry • More likely to eat poultry and pork when it is pink or has pink juices • More likely to reheat leftovers more than once • More likely to agree that ‘I always avoid throwing food away’ 	<ul style="list-style-type: none"> • Less likely to know they should eat 5 portions of fruit and vegetables a day

²³ It should be noted that this is a very heterogeneous group, however it has been included here as respondents in this group consistently had lower levels of knowledge and likelihood of following government advice on food safety and healthy eating.

7.1 Looking ahead

Future analyses can examine the relationships outlined in Table 7.1 in more depth and consider the potential health risks for particular groups.

With future waves of data further analysis will also be possible to explore these groups in more detail, for example further waves of data could be aggregated to allow finer level subgroup analysis and to track changes over time.

As shown throughout the report, the first wave of Food and You provides a rich source of information on people's attitudes towards and knowledge of food issues, as well as their behaviours. It has not been possible to report fully all of the information here; however, to enable others to conduct further analysis the data has been made available on the UK Data Archive²⁴.

²⁴ <http://www.data-archive.ac.uk/>