

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

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

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# Summary

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

The survey comprised 3163 interviews with adults aged 16+ (with no upper age limit) across the UK. Within this total 511 interviews were conducted in Scotland to enable reporting at the country level.

Questions in the survey covered respondents’ understanding of a balanced diet, including their knowledge of the eatwell plate and the recommended daily intakes of fruit and vegetables, salt, fat and calories. The survey also covered attitudes and behaviours around eating, cooking and shopping and food safety attitudes and behaviours, as well as self-reported health, physical activity, height and weight.

## **Advice on Food Safety – understanding and behaviour**

- The majority of respondents in Scotland reported behaviour that follows recommended practices in relation to cleaning, cross-contamination, chilling and cooking (known collectively as the ‘4 C’s’). Reported behaviour in respect of washing of raw meat and poultry was less likely to be in line with the FSA advice.
- Respondents’ fridges were generally organised so that certain foods are put in certain places.
- A third of respondents (36%) said that they check the temperature of their fridges, and a further 8% that another household member checks. Just under half (45%) 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 (75%) and look (54%). 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’ (81%), ‘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’ (50%) and ‘You are more likely to get food poisoning abroad than in this country’ (50%).
- The majority (54%) reported that they had not had food poisoning.

## **Advice on Healthy Eating**

- More than nine out of ten thought that the following were important for a healthy lifestyle: 'Eating fruit and vegetables' (97%), 'Doing physical activity' (95%), 'Drinking water' (95%), 'Eating less salt' (94%), 'Keeping to a healthy weight' (93%), 'Eating breakfast every day' (92%), 'Limiting food and drinks high in sugar' (91%), and 'Limiting foods high in total fat' (91%)
- However, awareness of the types and proportions of foods needed for a healthy balanced diet was low. A fifth of respondents (19%) placed all food types in their correct proportions on the eatwell plate (the eatwell plate is a pictorial representation of what a healthy balanced diet should consist of). The food groups least likely to be placed correctly were protein sources and starchy foods.
- Awareness of maximum daily intakes of nutrients such as salt, total fat, saturated fat and calories was low. The majority of respondents either answered 'don't know' (41%) or gave an incorrect answer (47%) when asked their knowledge of recommended maximum intakes for salt. About two-thirds did not know the recommended maximum intakes for total fat and saturated fat.
- Respondents in Scotland (19%) were significantly less likely to place all food groups correctly on the eatwell plate than those in Northern Ireland (25%), but were at a similar level to those in Wales (16%) and England (21%).
- Respondents in Scotland (86%) along with those in England (84%) and Wales (90%) were more likely than those in Northern Ireland (81%) to give the correct answer of 'five' as the number of portions of fruit and vegetables it is recommended people should eat each day.
- Respondents in Scotland (3%) were less likely than those in Northern Ireland (8%) to give the correct answer of 70g for the recommended maximum daily intake of fat for women. Respondents in Scotland (6%) were also less likely than those in Northern Ireland (11%) and England (13%) to give the correct answer for the maximum intake of saturated fat for women.

## **Eating, cooking and shopping**

- One third of 'meals' (36%) were eaten in the late afternoon, with a similar proportion (39%) eaten in the early evening.

- Most respondents agreed with the statements 'I enjoy cooking and preparing food' (68%), 'I enjoy making new things to eat (65%) and 'The price of food doesn't matter as long as I know the quality is good' (61%). The majority (62%) disagreed with the statements 'My life is so busy that I just eat when I can while I'm on the go' and 'For me, food is just fuel to live'. Thirty eight per cent agreed that 'Cooking is like a hobby for me'.
- The most commonly-eaten types of food were bread, rice, pasta, potatoes and other starchy foods; fruit and vegetables; and milk and dairy foods; about seven out of ten respondents reported eating these at least once a day (69% for bread, rice, pasta, potatoes and other starchy foods, 70% for fruit and vegetables, and 72% for milk and dairy foods).
- About six out of ten (57%) said they cooked or prepared food for themselves every day, and 38% did so for others.
- The majority of respondents felt food prices had increased over the last 12 months (83%).

### **Eating outside of the Home**

- The majority (80%) of all 'meals', 'light meals' and 'snacks' were eaten at home, 15% were eaten at school, college or work, 2% at someone else's house, 2% at a food outlet (for example, a restaurant, café or pub) and 1% somewhere else.
- Almost three quarters of respondents had eaten out, according to the definition provided in the last seven days (73%) and the most common way this was done was eating in a restaurant (36%).
- 'Price' and 'Cleanliness and hygiene' were the important factors to more than half of respondents in Scotland when choosing where to eat out (53% and 52% respectively).
- 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 (61%).

### **Eating and health**

- Nearly all respondents (93%) 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' (89%) and almost seven out of ten disagreed with 'I don't really think about what I eat' (67%).

- Opinions about experts were mixed, with three-quarters (74%) agreeing with the statement 'Experts contradict each other over what foods are good for you', and half (50%) agreeing with 'I am fed up with experts telling me what I should eat'.
- Four-fifths (83%) felt their overall diet was healthy, and the same proportion thought that the food they tend to eat at home was healthy.
- Three-fifths (61%) felt the food they eat when out was less healthy than at home.
- About half (55%) agreed they do not need to make changes to the food they eat as it is already healthy enough.
- Six out of ten (61%) reported having made a change to their diet in the previous six months. The most common changes were eating more fruit and vegetables (30%) and eating smaller portions (25%).
- The most common reason respondents gave for changing their diet was to lose or maintain weight (mentioned by 35% of respondents who had made changes to their diet) and to be more healthy (20%).
- 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 (15%) and time constraints (8%). Twenty three per cent said they would not have any difficulties.

# 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.

This report focuses on the results in Scotland specifically and makes comparisons with the other regions of the UK.

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. In Scotland 511 interviews were completed, within this overall total.

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)<sup>1</sup> were asked to review the Agency’s Consumer Attitudes Survey (CAS)<sup>2</sup>, which ran for eight waves from the FSA’s inception in 2000<sup>3</sup>. The SSRC recommended that a new rigorous regular survey was needed to underpin the FSA’s policies.

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<sup>1</sup> The SSRC is an independent Scientific Advisory Committee set up to provide advice and challenge to the Agency on social science matters; further information can be found at: <http://ssrc.food.gov.uk/>

<sup>2</sup> Further information on CAS can be found at: <http://www.food.gov.uk/science/socsci/surveys/foodsafety-nutrition-diet/>

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

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.

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 promoting healthy eating and improving food safety;
- Assess public attitudes to new developments, such as emerging food technologies;
- Identify the complex influences on knowledge, attitudes and behaviour;
- Assess knowledge 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 2010-15<sup>4</sup> 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 safety<sup>5</sup>. 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 eating<sup>6</sup>. 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.

### **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)<sup>7</sup>. On 1 October

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

<sup>5</sup> For more information see <http://www.eatwell.gov.uk/keepingfoodsafes/>

<sup>6</sup> For more information see  
<http://tna.europarchive.org/20100929190231/http://www.eatwell.gov.uk/>

<sup>7</sup> 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>

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 responsibility of the Agency.

The FSA in Scotland is still responsible for:

- nutrition advice, surveys and nutrition research;
- nutritional labelling;
- nutrition and health claims, dietetic food and food supplements;
- calorie information in catering establishments;
- reformulation to reduce salt, saturated fat and sugar levels in food and reducing portion size (including catering and manufacturing)”

Nutrition policy in Scotland is included in *Preventing Overweight and Obesity in Scotland: A Route Map Towards Healthy Weight* (Scottish Government 2010), the Scottish Government’s cross-portfolio and cross-sector policy to take action against obesity and within *Recipe for Success: Scotland’s National Food and Drink Policy* (Scottish Government 2009).

Following these changes in Government, the FSA is in the process of reviewing its Strategic Plan.

### **1.2.5 Other relevant surveys**

The FSA in Scotland (FSAS) commissions projects to monitor the diet against Scottish Dietary Goals. This work ensures that Scottish issues are properly addressed at a UK and Scottish Government level and that the Agency's UK-wide research and surveillance programme takes full account of Scottish interests.

FSAS funds additional participants in the National Diet and Nutrition Survey (NDNS)<sup>8</sup> in Scotland and as well as ongoing monitoring of diet and nutrient intakes of the Scottish population using secondary analysis of the Living Costs and Food Survey. The surveillance portfolio also includes surveys of salt intake in adults and sugar intake in children.

Outside of FSAS, the Scottish Health Survey (SHeS) provides a detailed picture of the health of the Scottish population in private households, and includes a module on eating habits<sup>9</sup>.

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

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<sup>8</sup> Further information on the NDNS can be found at:  
<http://www.food.gov.uk/science/dietarysurveys/ndnsdocuments/>

<sup>9</sup> Further information on the SHeS can be found at:  
<http://www.scotland.gov.uk/Topics/Statistics/Browse/Health/scottish-health-survey>



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 A and in the technical report<sup>10</sup>.

#### **1.3.1 Survey fieldwork**

The survey sample was a stratified<sup>11</sup> random probability sample of private households in the UK, using the Postcode Address File (PAF)<sup>12</sup> 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.

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 A2 to A5 of Annex A 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 (predominately quantitative) covering food issues to assess

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<sup>10</sup> Available at: [http://www.foodbase.org.uk/results.php?f\\_category\\_id=&f\\_report\\_id=641](http://www.foodbase.org.uk/results.php?f_category_id=&f_report_id=641)

<sup>11</sup> 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)

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

what could be learnt from the existing research, minimise duplication and help inform question development for Food and You<sup>13</sup>.

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 including 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.

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

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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', fat, salt & calories intakes
- 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

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\* indicates a rotating module asked of a third of the sample

## 1.4 Information about this report

### 1.4.1 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 Archive<sup>14</sup>.

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.

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<sup>14</sup> <http://www.data-archive.ac.uk/>

### **1.4.2 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.

### **1.4.3 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.

### **1.4.4 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 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, 86% 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, 39% of respondents reported always washing raw meat and poultry and 41% raw fish and seafood.
- More than a third of respondents (36%) said that they check the temperature of their fridges, and a further eight per cent that another household member checks. Just under half (45%) 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 (75%) and look (54%). 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' (81%), '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' (50%) and 'You are more likely to get food poisoning abroad than in this country' (50%).
- Overall, 54% of respondents reported that they had not had food poisoning.

The FSA provides guidance on food safety to consumers. The key purpose of the advice is to minimise the risk of food poisoning in the home. Advice 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 hand washing. 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.

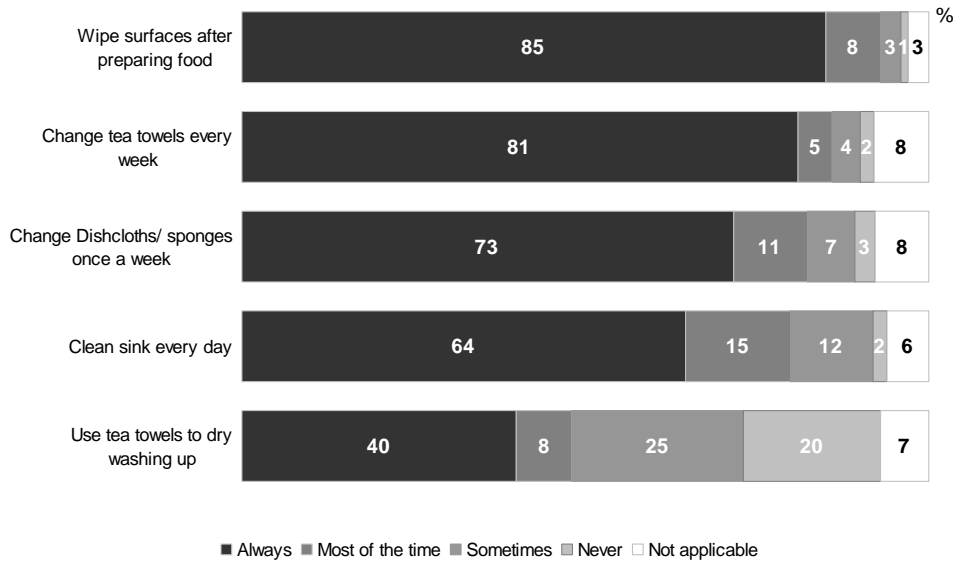
Respondents were asked to say how often (on a scale from 'Never' to 'Always') they wipe down surfaces after preparing food, change tea towels at least every week, change dishcloths/sponges at least once a week, clean sink and draining board thoroughly every day, and use tea towels to dry washing up.

As Chart 2.1 shows, the majority of respondents reported that they always wipe surfaces after preparing food (85% reported doing so), change both tea towels (81%) and dishcloths and sponges every week (73%) and clean their sinks thoroughly every day (64%).

For each of these behaviours there was a group of between four per cent and 14% 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, 93% 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.

Chart 2.1 *Cleaning practices in the kitchen*



Source: Q4.1  
 Base (unweighted): All respondents in Scotland (511)

### 2.1.2 Hand washing

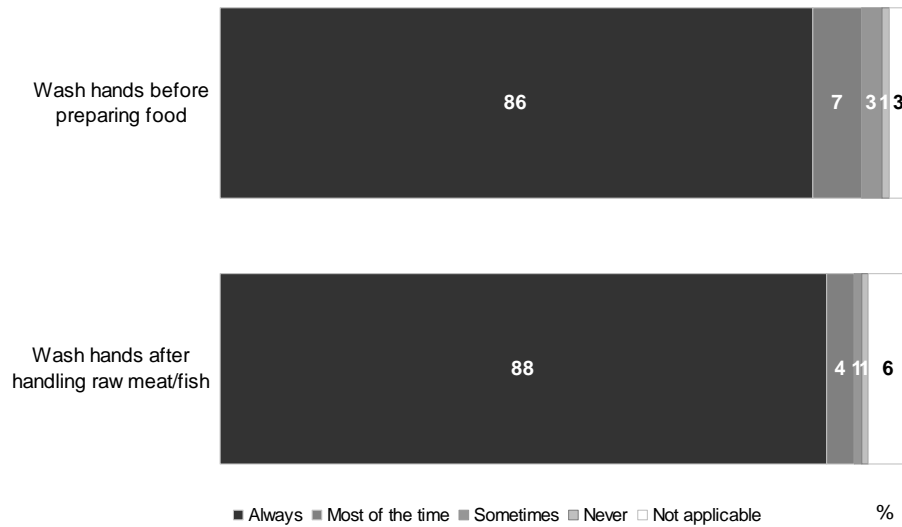
The FSA advises that hands be washed thoroughly with soap and warm water before starting to prepare food, after touching raw meat (including poultry) and after going to the toilet, touching the bin or touching pets in order to avoid spreading germs.

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

Eighty six percent of respondents reported that they always wash their hands before preparing food, and a similar proportion (88%) said they do so after handling raw meat or fish (Chart 2.2). The majority of the remainder reported washing their hands most of the time (7% before preparation and 4% after handling raw meat or fish). In both cases men were less likely than women to say they always wash their hands.



Chart 2.2 Cleaning – hand washing



Source: Q4.1, 4.6  
 Base (unweighted): All respondents in Scotland (511)

When asked about how hands were washed, just over eight out of ten (82%) used hot water, with 7% using cold water. Sixty four percent mentioned a soap product.

When asked about how hands were dried after being washed, just over two-thirds of respondents (69%) dry their hands using a hand towel, with a further 19% using kitchen roll for this. Around one in six (17%) dry their hands using a tea towel and a further 4% dry their hands on clothes, leave them to dry naturally or shake them dry.

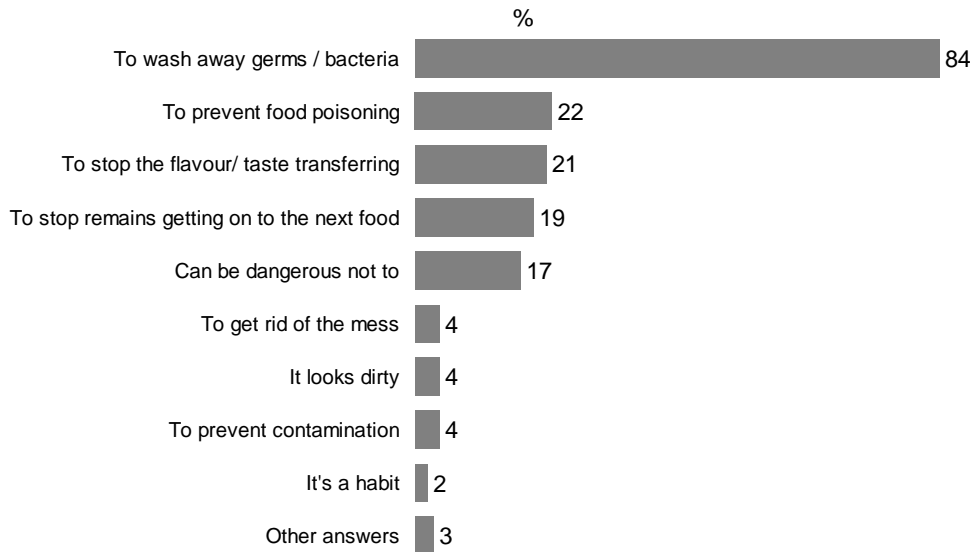
## 2.2 Reported behaviours relating to the 4 Cs - Cross-contamination

### 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. More than eight out of ten (84%) 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*



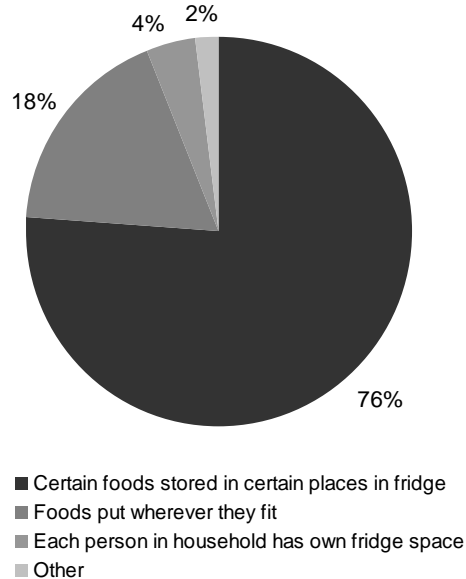
Source: Q4.3  
 Base (unweighted): All respondents in Scotland (511)

### 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 (76%) reported that their household’s fridge is organised so that certain foods are stored in certain places within it. A further fifth (18%) said they do not have any system but instead put foods wherever they fit. (Chart 2.4).

Chart 2.4 Cross contamination – food storage



Source: Q4.13  
Base (unweighted): All respondents in Scotland (511)

Overall about two thirds (65%) reported that they store raw meat and poultry at the bottom of the fridge, 5% keep it at the top, 7% in the middle of the fridge and 9% 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 (64%), or else in a covered container (29%) or covered with film or foil (26%).

Cooked meat and poultry, whether bought cooked, or cooked at home then refrigerated is stored by a third (34%) on the top shelf with a similar proportion (32%) keeping it on the middle shelf. Fourteen percent 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 a covered container (44%), in the original packaging (39%) or in foil or film (by 33%).

### 2.2.3 Washing raw meat and fish

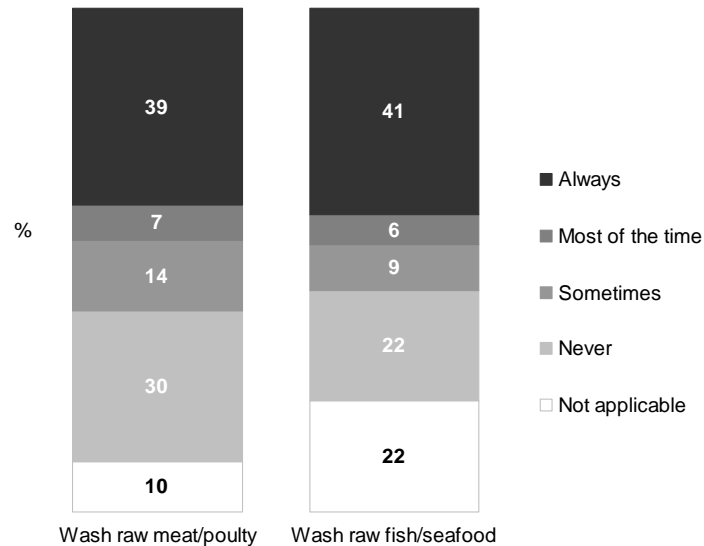
The FSA advises against washing raw meat or fish prior to cooking in order to avoid spreading germs.

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

Approximately four out of ten respondents (41%) said they always wash raw fish or seafood, and a similar proportion (39%) that they always wash raw meat and

poultry before cooking, which does not reflect the FSA advice. Almost a third of respondents (30%) said they never wash raw meat and poultry, and 22% that they never wash raw fish or seafood. A minority said they wash meat or fish either sometimes (14% for raw meat or poultry, 9% for raw fish or seafood) or most of the time (7% for raw meat or poultry, 6% for raw fish or seafood) (Chart 2.5).

Chart 2.5 Cross contamination – washing raw meat and fish



Source: Q4.1  
Base (unweighted): All respondents in Scotland (511)

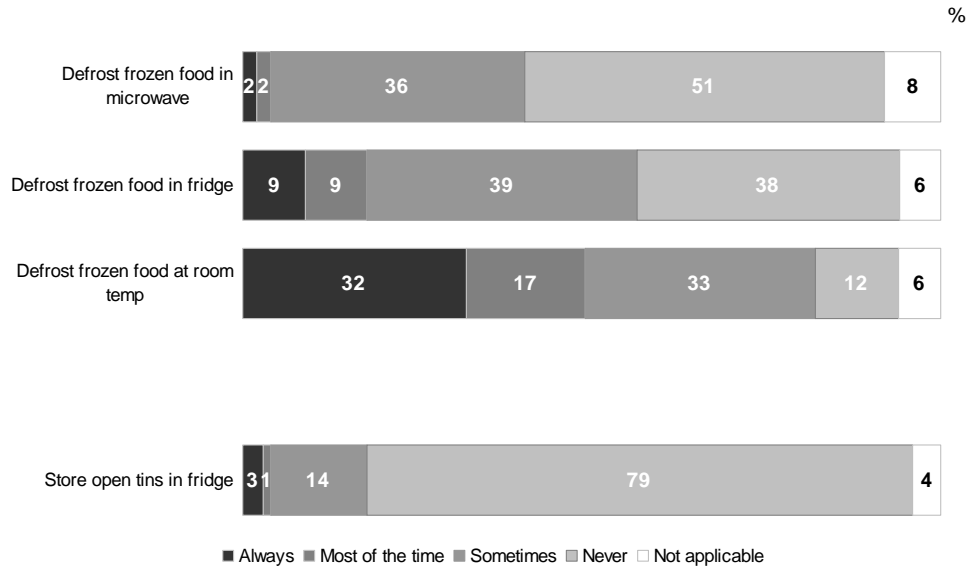
## 2.3 Reported behaviours relating to the 4 Cs - Chilling

### 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 often (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 in Scotland (511)

Eight out of ten respondents (79%) said they never store open tins in their fridges. Seventeen per cent of respondents said they did this either sometimes, most of the time or always.

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 32% saying they always defrost food in this way, and 12% that they never do. Defrosting food in the fridge was less common. Almost four out of ten respondents (38%) said they never do this, while 56% defrost food this way at least sometimes. One in ten respondents (9%) always defrosts food in the fridge. Defrosting food in the fridge was more commonly reported by women (62%) than men (50%).

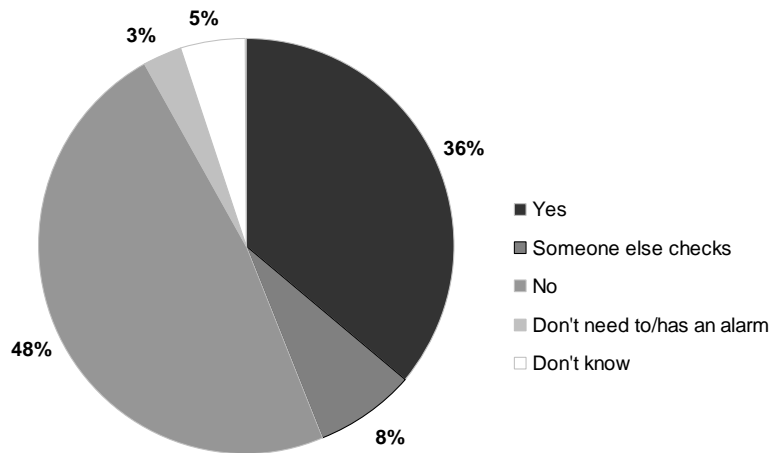
Use of the microwave was the least common method of defrosting food. Approximately half of respondents (51%) said they never defrost food in the microwave, and a similar proportion (41%) that they do so at least sometimes. A small minority of 2% said they always defrost this way.

### 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 (36%) said they ever check the temperature of their fridge, while 48% do not. A further 8% reported that another member of the household checks. (Chart 2.7).

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



Source: Q4.9  
 Base (unweighted): All respondents in Scotland (511)

Among those households where either the respondent or another household member does check the temperature of their fridge, 13% reported that it is done on a daily basis, 11% two or three times per week, and 17% once a week. A further 33% check it monthly or several times a month. Nineteen per cent 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 setting or gauge of the fridge in the fridge, which was reported by 35% of respondents who said that they, or another household member, checked the temperature. The same proportion (35%) said the temperature display/ built-in thermometer was checked, while 15% put a thermometer into the fridge to check the actual temperature. Other methods, both of which were reported by one in ten respondents included feeling food to see if it is cold (9%) and looking inside and checking for ice or condensation (10%).

All respondents were asked what they thought the temperature inside the fridge should be. Just over four out of ten (45%) correctly stated that the fridge temperature should be between 0 and 5 degrees C. Forty three per cent said they did not know, and the remainder answered incorrectly, with 2% saying it should be lower than 0 degrees C, and 8% that it should be more than 5 degrees C.

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*

	<b>Between 0 and 5 degrees C (correct answer)</b>	<b>Don't know</b>
<b>Total</b>	<b>45</b>	<b>43</b>
<b>Gender</b>		
Men	51	37
Women	40	48
<b>Age group</b>		
16-24	50	35
25-34	68	29
35-44	47	40
45-54	41	46
55-64	36	51
65-74	43	39
75+	29	67
<b>Children under 16 in household</b>		
Yes	51	38
No	44	44

Source: Q4.12

Base (unweighted): 511

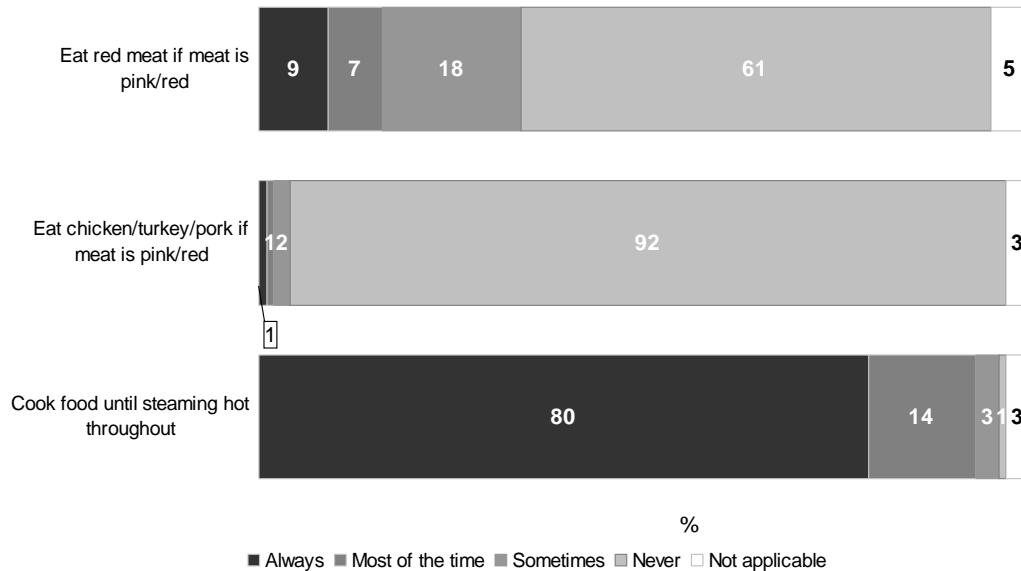
## **2.4 Reported behaviours relating to the 4 Cs - Cooking**

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 often (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 respondents (80%) reported always cooking food until it is steaming hot throughout. Fourteen per cent said they did this most of the time, 3% sometimes and 1% never.

Chart 2.8 Cooking behaviours



Source: Q4.1  
 Base (unweighted): All respondents in Scotland (511)

Women (87%) were more likely than men (72%) to say that they always cook food until steaming hot.

While the majority (92%) stated that they never eat poultry or pork when it is pink or has pink juices, 2% reported doing this sometimes, 1% most of the time and 1% always, which is not in line with FSA advice on cooking these types of meat.

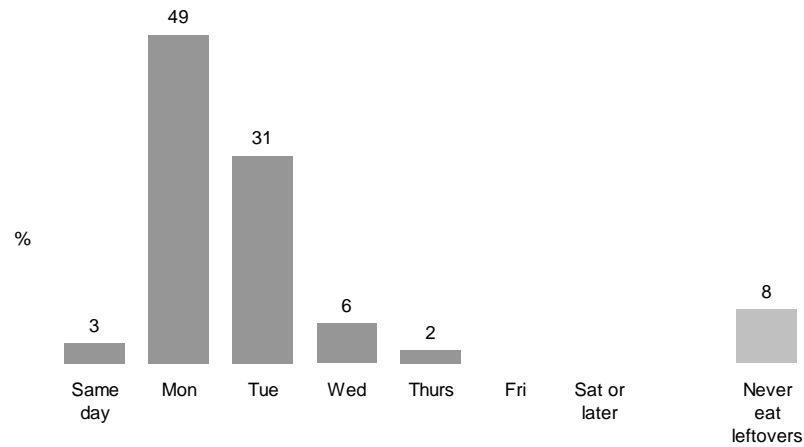
## 2.5 Leftovers

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 49%, followed by Tuesday (two days after), mentioned by almost a third (31%). Eight per cent reported that they never eat leftovers and 3% would only eat them on the same day as the meal was made. Eight per cent would consider eating the leftovers on Wednesday or later (Chart 2.9).



Chart 2.9 When respondents would eat leftover food



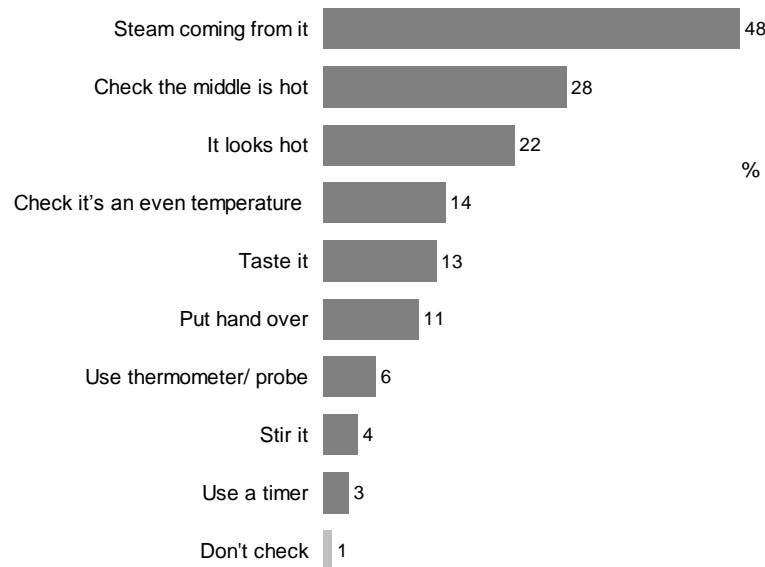
Source: Q4.24  
Base: All respondents in Scotland, (511 unweighted)

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 (83%) of those who eat leftovers said they would only reheat them once and 12% that they would not reheat at all. The remaining 7% reported that they would reheat twice 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 methods given were to check that there is steam is coming off the food (48%), checking that the middle is hot (28%) or seeing if it looks hot (22%). Chart 2.10 shows the full breakdown of responses.

Chart 2.10 Methods used to check leftover food is correctly heated



Source: Q4.26 – responses mentioned by 3% or over  
Base: Respondents in Scotland who reheat leftovers, (404 unweighted)

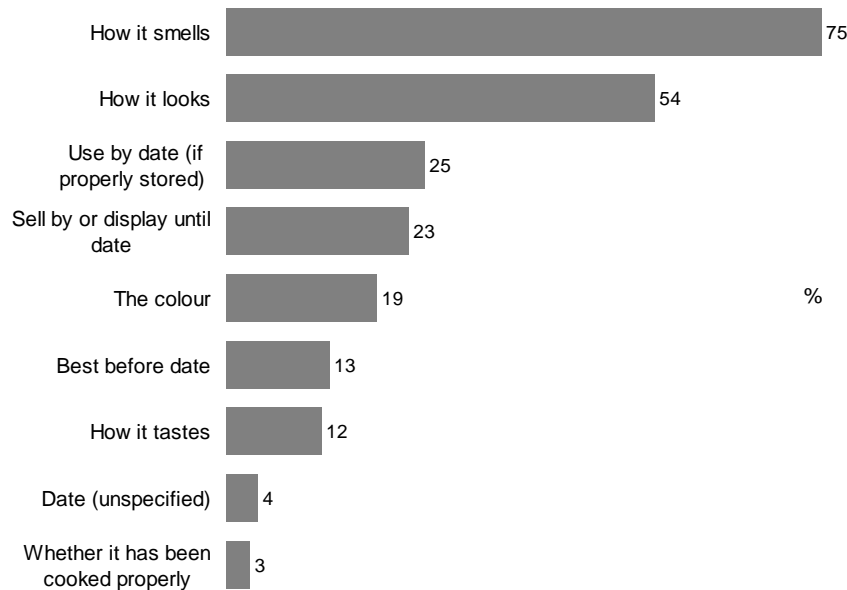
## 2.6 Use of storage information on food packaging

All respondents were asked whether they follow storage information provided on products. Forty one per cent reported that they always follow storage information provided on products; a further 18% said they would follow the advice depending on the food type. A further fifth (20%) said they follow the advice sometimes, and 4% when a food is bought for the first time. A small proportion (3%) reported never having noticed storage information on products and 12% said that they never follow the information.

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 three quarters (75%) and 'how it looks', given by more than half (54%).

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

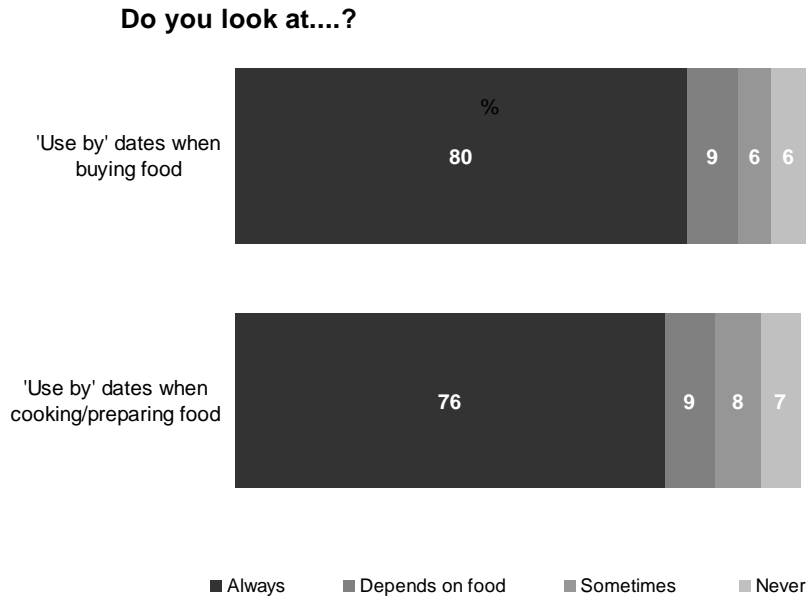


Source: Q4.18 – responses mentioned by 3% or over  
 Base: All respondents in Scotland, (511 unweighted)

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 of these types of date mark). Fifty six per cent correctly identified the ‘use by’ date, but many selected other date mark types. A quarter of the total (25%) chose the ‘best before’ date, 11% the ‘sell by’ date and 5% the ‘display until’ date. Respondents frequently selected more than one of the options: 38% 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, 80% said they always check ‘use by’ dates when buying food, and 76% 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: All respondents in Scotland, (511 unweighted)

## 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.

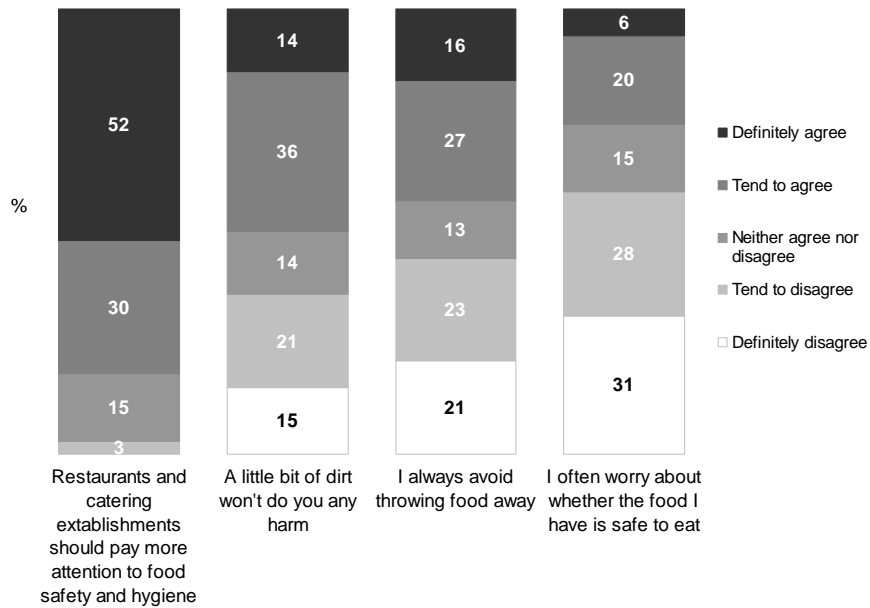
Overall there was strong agreement that 'Restaurants and catering establishments should pay more attention to food safety and hygiene' with 81% agreeing, of which 52% definitely agreed.

'A little bit of dirt won't do you any harm' was agreed with (either definitely agree or tend to agree) by 50% overall (14% definitely agree and 36% tend to agree).

About four out of ten respondents (43%) agreed with the statement 'I always avoid throwing food away'.

Approximately a quarter (27%) agreed with the statement 'I often worry about whether the food I have is safe to eat'.

Chart 2.13 Attitudes towards food safety



Source: Q4.27  
 Base: All respondents in Scotland, (511 unweighted)

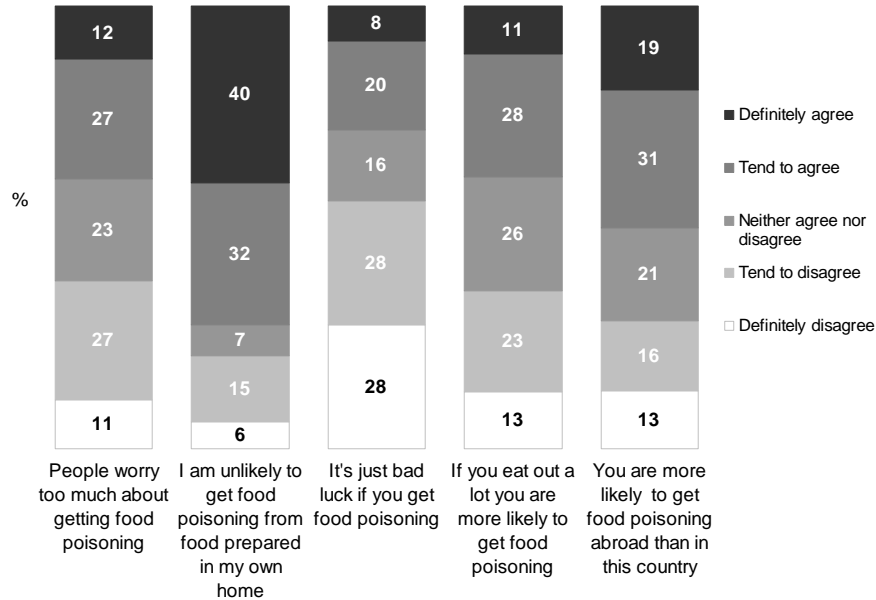
Chart 2.14 shows responses to statements about food poisoning and how respondents perceive the risks and likely source. About three-quarters (72%) agreed with the statement ‘I am unlikely to get food poisoning from food prepared in my home.’

Thirty nine per cent agreed with the statement ‘If you eat out a lot you are more likely to get food poisoning’.

Exactly half the respondents (50%) agreed that ‘You are more likely to get food poisoning abroad than in this country’.

Thirty nine per cent of respondents agreed with the statement ‘People worry too much about getting food poisoning’ while the same proportion disagreed (38%).

Chart 2.14 Agreement with statements about food poisoning



Source: Q4.27  
 Base: All respondents in Scotland, (511 unweighted)

## 2.8 Experiences of food poisoning

Respondents were asked if they personally have ever had food poisoning. The majority (54%) reported that they have not had food poisoning. Twenty three per cent said they have had it once, while 19% have had it more than once. Four per cent reported that they thought they had food poisoning but were not sure whether it actually was.

## 2.9 Comparisons between Scotland and the rest of the UK

Table 2.2 shows the breakdown by country of the proportions who do each type of behaviour at all (sometimes, most of the time or always). The behaviour of respondents in Scotland was not significantly different from respondents elsewhere in the UK on any of the measures.

Table 2.2 Food preparation behaviour in Scotland compared with the rest of the UK

	Scotland	England	Wales	Northern Ireland
	%	%	%	%
Store open tins in fridge	<b>18</b>	28	25	17
Defrost at room temperature	<b>82</b>	83	78	78
Defrost in fridge	<b>56</b>	64	64	58
Defrost in microwave	<b>41</b>	48	53	44
Wash raw meat or poultry	<b>61</b>	63	76	53
Wash raw fish or seafood	<b>56</b>	60	61	55
Wipe down surfaces after preparing food	<b>96</b>	97	97	91
Change dishcloths/ sponges at least once a week	<b>90</b>	88	90	88
Wash hands before starting food preparation	<b>96</b>	97	98	96
Wash hands after handling raw meat or fish	<b>93</b>	92	91	91
Cook food until it is steaming hot throughout	<b>96</b>	96	97	90
Eat chicken, turkey or pork if it has pink or red juices	<b>4</b>	6	9	5
Base (unweighted)	511	2025	121	506

Source: Q4.1

Respondents in Scotland 84% and Northern Ireland 88% were more likely to answer that people might wash a chopping board after using it for raw meat, poultry or fish 'to wash away germs or bacteria' than in England (78%).

Respondents in Scotland and Northern Ireland were also more likely to report that they used hot water for hand-washing (83% and 84% respectively) than those in England (61%) and Wales (30%) and also to dry their hands with kitchen roll or paper towels (19% in Scotland and 21% in Northern Ireland) against 12% in England and 16% in Wales.

There was no difference in fridge temperature checking behaviour between respondents in Scotland and those in other regions and respondents in Scotland were no more or less likely than those in other regions to know the correct temperature for a fridge.

There were no significant differences between regions in terms of how fridges are arranged or how food is stored. Similarly respondents' behaviour in checking use-by dates did not vary across the different regions of the UK.

On leftovers, respondents in both Scotland and Northern Ireland were more cautious than those in England. Over half the respondents in Scotland (52%) and Northern Ireland (68%) would only eat leftovers either the same day or one day later, compared with 44% in England.

Respondents in Scotland were equally likely to have experienced food poisoning as those in England: 46% had had it in Scotland, 46% in England and 38% in Wales. The reported level in Northern Ireland was significantly lower at 31%.

Table 2.3 shows the breakdown by country of views around food safety and food poisoning. For each statement the total proportion of those who agreed ('definitely agree' plus 'tend to agree' is shown.) Respondents in Scotland were significantly less likely to agree with the statements 'I always avoid throwing food away' and 'A little bit of dirt won't do you any harm.'

*Table 2.3 Attitudes towards food safety and food poisoning in Scotland compared with the rest of the UK*

	<b>Scotland</b>	England	Wales	Northern Ireland
	<b>%</b>	%	%	%
Restaurants and catering establishments should pay more attention to food safety and hygiene	<b>81</b>	82	83	87
I am unlikely to get food poisoning from food prepared in my own home	<b>72</b>	72	69	77
You are more likely to get food poisoning abroad than in this country	<b>50</b>	50	49	59
A little bit of dirt won't do you any harm	<b>50</b>	55	58	53
I always avoid throwing food away	<b>43</b>	48	48	52
If you eat out a lot you are more likely to get food poisoning	<b>39</b>	43	30	45
People worry too much about getting food poisoning	<b>39</b>	41	41	41
I often worry about whether the food I have is safe to eat	<b>27</b>	24	23	34
It's just bad luck if you get food poisoning	<b>28</b>	28	28	31
Base (unweighted)	511	2025	121	506

*Source: Q4.27*



### 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 (19%) 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 (80% 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 (38%).
- 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 total fat (91%).
- Respondents were asked what they thought was the recommended maximum daily intake of salt that adults should eat each day: 12% of respondents stated the recommended maximum amount of 6g, 41% said they 'didn't know'. About half (47%) suggested amounts either above (18%) or below (29%) 6g.
- Respondents in Scotland (19%) were significantly less likely to place all food groups correctly on the eatwell plate than those in Northern Ireland (25%), but were at a similar level to those in Wales (16%) and England (21%).
- Respondents in Scotland (86%) along with those in England (84%) and Wales (90%) were more likely than those in Northern Ireland (81%) to give the correct answer of 'five' as the number of portions of fruit and vegetables it is recommended people should eat each day.
- There were some differences between respondents in Scotland and the rest of the UK in what respondents thought could count towards the recommended fruit and vegetable portions.

At the time of the Food and You fieldwork, the Food Standards Agency provided healthy eating advice through the eatwell website.<sup>15</sup> The advice centred on the

<sup>15</sup> <http://tna.europarchive.org/20100929190231/http://www.eatwell.gov.uk/>

eatwell plate and '8 tips for eating well', including advice on eating at least five portions of fruit and vegetables a day and the daily maximum intake of salt.

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.

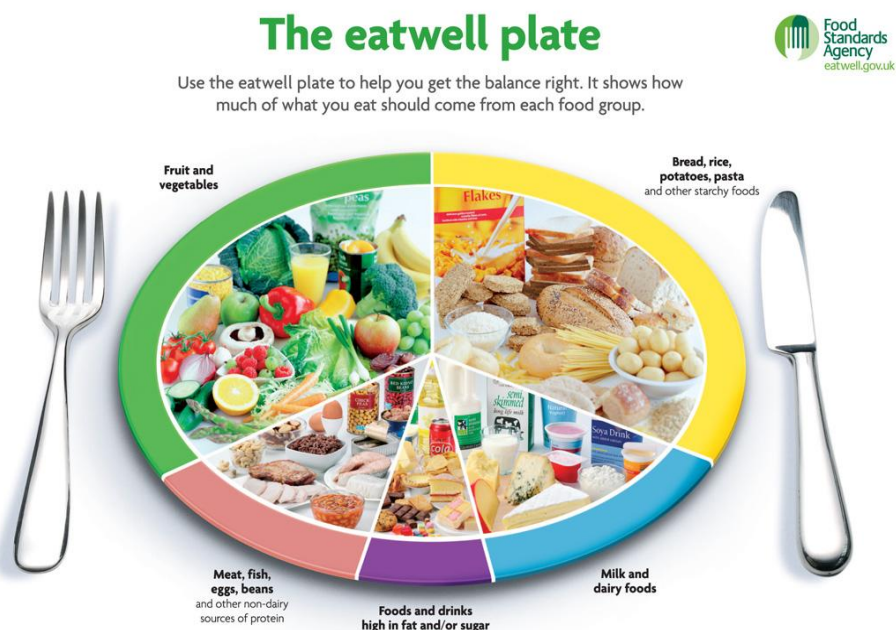
Section 3.1 covers the eatwell plate, section 3.2 the '8 tips' and the importance of different foods for a healthy lifestyle, section 3.3 recommended daily consumption of fruit and vegetables and maximum daily intakes of salt, fat and calories.

### 3.1 The eatwell plate

The eatwell plate illustrates the types and proportions of foods needed for a healthy balanced diet. 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

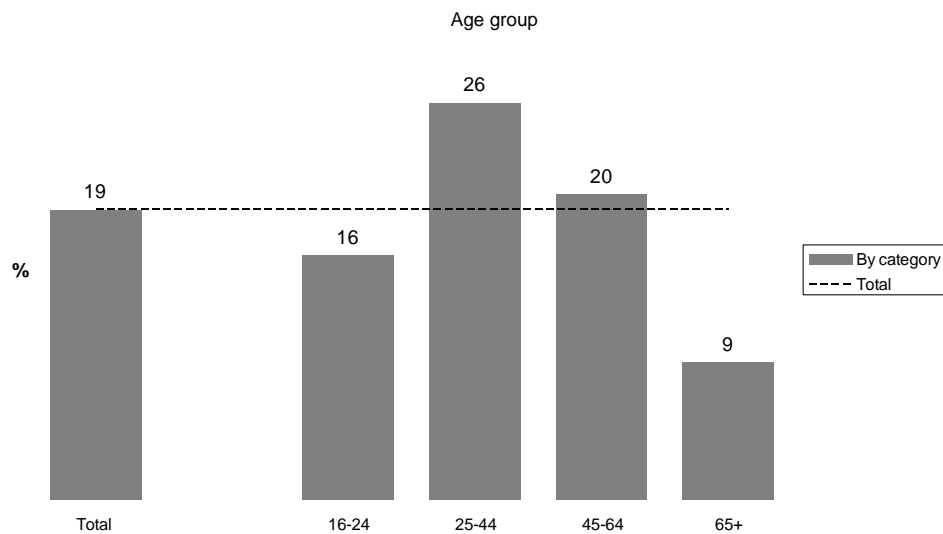


Source: Department of Health

Overall, 19% of respondents in Scotland placed all the food groups in the correct proportions on the plate, 64% placed three food groups correctly, and 5% two food groups. Eight per cent of respondents were able to place only one section of the plate correctly and 4% were not able to place any food groups correctly.

Respondents aged 25-44 were the most likely age group to place all foods correctly (26% did so), while those aged 65+ (9%) were less likely than those in the 25-44 (26%) and 45-64 (20%) groups to do so. (Chart 3.2).

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



Source: Q 2.17  
 Base (unweighted): Total (511), 16-24 (46), 25-44 (162), 45-64 (178), 65+ (125)

The food group most likely to be placed correctly was foods and drinks high in fat and/or sugar, which 80% of respondents correctly placed as the smallest portion on the plate. About three quarters also correctly placed fruit and vegetables as one of the largest sections (76%), and milk and dairy foods as one of the medium sections (76%).

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 – 38% 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'

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	<b>The tip</b>	<b>Detail of advice</b>
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. Try to choose wholegrain starchy foods
2.	Eat lots of fruit and veg	Try to eat at least 5 portions of a variety of fruit and veg every day
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	Drink 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**

- 69% of respondents reported eating starchy foods at least once a day, although 7% reported eating them once or twice a week or less often
- 31% thought that eating starchy foods was very important for a healthy lifestyle, and a further 54% that it was fairly important

#### **Eat lots of fruit and veg**

- 70% of respondents reported that they ate fruit and vegetables at least once a day, although 10% said once or twice a week or less often

- 78% said that eating fruit and vegetables was very important for a healthy lifestyle
- 43% 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 56% other fish, at least once a week. 38% reported eating *both* oily fish and other fish at least once a week.
- 54% thought that eating fish was very important for a healthy lifestyle, and a further 35% that it was fairly important

### **Cut down on saturated fat and sugar**

- 67% 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 62% said the same for total fat
- 31% reported eating biscuits, pastries and cakes at least once a day
- 22% reported eating processed meats at least three or four times a week
- 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**

- 69% said eating less salt was very important for a healthy lifestyle
- 12% stated the correct maximum daily intake of salt for adults (6g)

### **Get active and try to be a healthy weight**

- 66% said that doing physical activities was very important for a healthy lifestyle
- 39% 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
- 57% said keeping to a healthy weight was very important for a healthy lifestyle
- 32% said that eating the right amount of calories each day was very important for a healthy lifestyle
- 31% gave the correct recommended maximum daily intake of calories for women (2000 calories a day) and 30% did so for men (2500 calories a day)

### **Drink plenty of water**

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

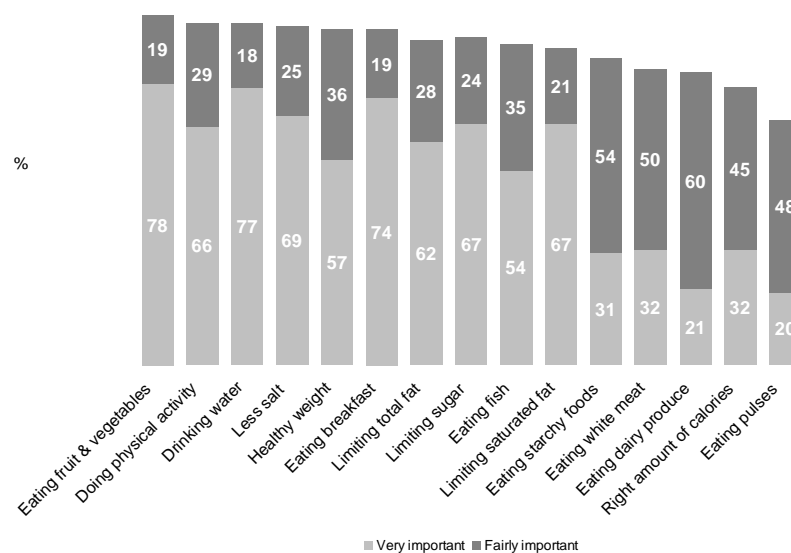
## Don't skip breakfast

- 74% 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 habits 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: All respondents in Scotland, (511 unweighted)

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

- Eating fruit and vegetables (97%)
- Doing physical activity (95%)
- Drinking water (95%)
- Eating less salt (94%)
- Keeping to a healthy weight (93%)
- Eating breakfast every day (92%)
- Limiting food and drinks high in sugar (91%)
- Limiting foods high in total fat (91%)

Eating fruit and vegetables was also the most likely factor to be considered very important - indeed 78% of respondents said that this was very important.

### 3.3 Knowledge, awareness and understanding of recommended daily amounts

#### 3.3.1 Fruit and vegetables

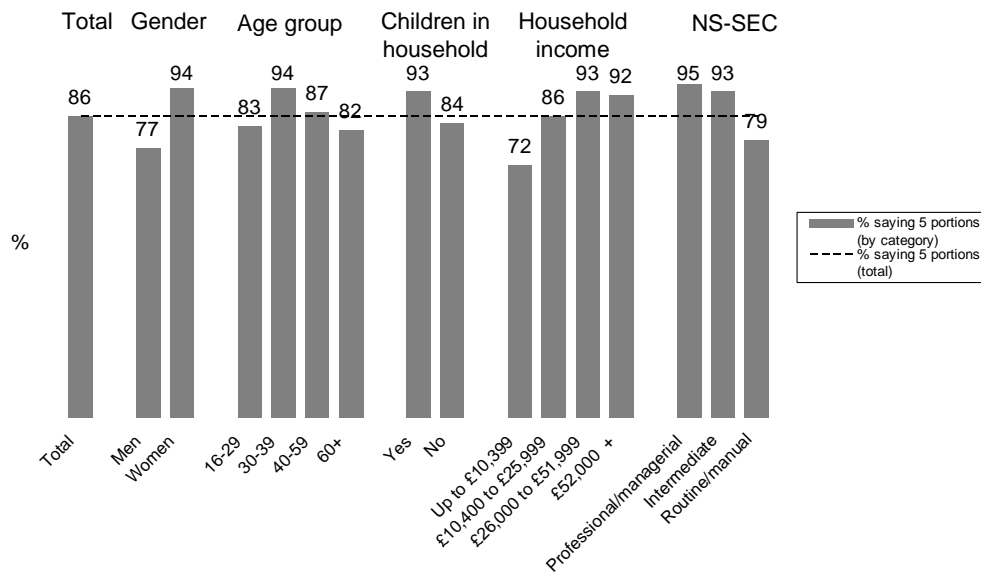
##### Awareness and consumption

Respondents were asked how many portions of fruit and vegetables they thought that health experts recommend people should eat every day<sup>16</sup>.

Overall, 86% of respondents gave the correct answer of five portions, with 1% thinking it was higher than this, 7% that it was lower, and 6% 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 (94% gave the correct answer), those aged 30-39 (94%), those with children (93%), those in higher income households (93% of those with a household income of £26,000 to £51,999, and 92% of those with a household income of £52,000 or more), and those from professional/managerial (95%) and intermediate (93%) households (Chart 3.4).

Chart 3.4 Knowledge of recommended fruit and vegetable portions per day



Source: Q 2.9  
 Base (unweighted): Total (511), Men (206), Women (305), 16-29 (83), 30-39 (83), 40-59 (182), 60+ (163), Children in household (103), No children (408), Up to £10,399 (94), £10,400 to £25,999 (147), £26,000 to £51,999 (107), £52,000+ (49), Professional (130), Intermediate (71), Routine/manual (175)

<sup>16</sup> 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'*

<b>Foods that count as a portion of fruit and vegetables</b>	<b>% who thought this could count</b>
Pure fruit juice	92
Frozen vegetables	82
Fruit smoothies	77
Dried fruit	77
Tinned fruit or vegetables	75
Pulses	54
Baked beans	53
<b>Foods that do not count as a portion of fruit and vegetables</b>	
Jacket potato	68
Rice	25
Jam	16

Source: Q2.10

Base (unweighted): 511

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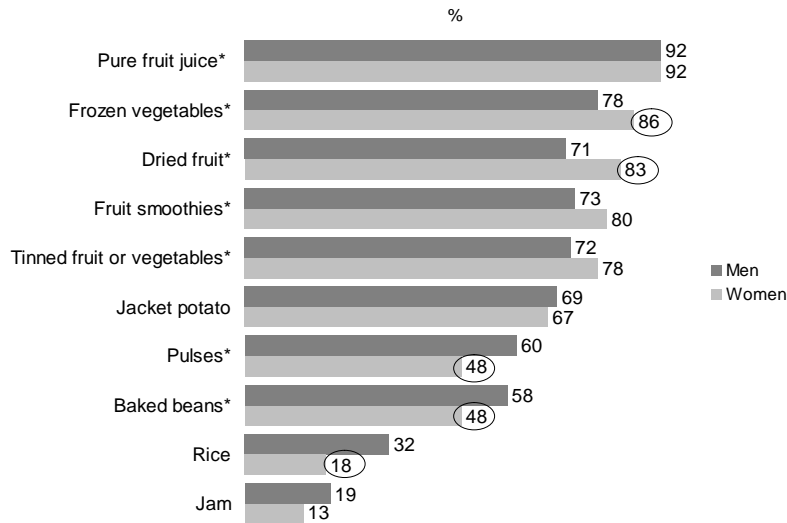
More than three quarters of respondents correctly recognised that pure fruit juice (92%), frozen vegetables (82%), fruit smoothies (77%), and dried fruit (77%) tinned fruit or vegetables (75%), could count towards '5 a day'.

Around two-thirds of respondents (68%) wrongly stated that a jacket potato would count, higher than the proportions which recognised that baked beans (53%) or pulses (54%) would count. Significant minorities also thought that rice (25%) and jam (16%) 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'



Source: Q2.10  
 Base (unweighted): Men (206), Women (305) in Scotland  
 \* indicates the food or drink counts as a portion of fruit or vegetables  
 Significant differences between men and women are circled.

Women were more likely than men to give the correct answer for dried fruit (80% compared with 72%), fruit smoothies (86% compared with 71%), and pulses (66% compared with 55%). Men were more likely than women to think, incorrectly, that rice (38% compared with 22%) and jam (23% compared with 13%) 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 juice<sup>17</sup>.

Overall, 89% of respondents said that they had eaten at least one portion of vegetables, 72% had eaten at least one portion of fruit, and 48% had consumed a portion of fruit juice.

Combining these, 43% of respondents said they had eaten at least five portions of fruit and vegetables in the previous day<sup>18</sup>.

<sup>17</sup> 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.

<sup>18</sup> 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 Scottish Health Survey (SHeS) be used for national estimates of fruit and vegetable consumption.

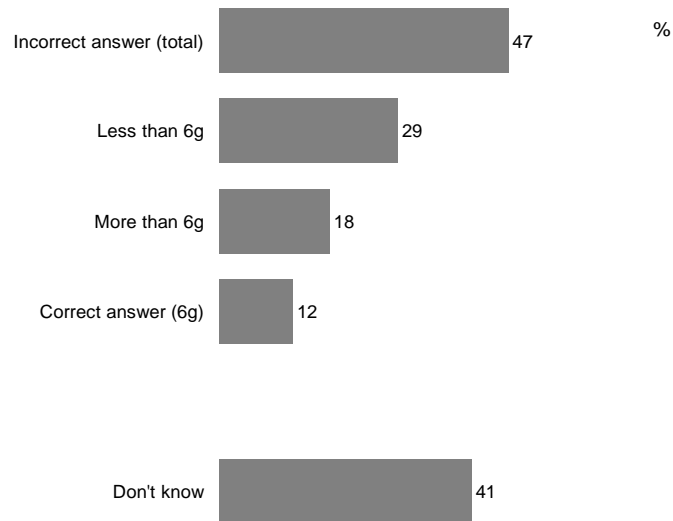
### 3.3.2 Salt

#### 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 12% of respondents stating the correct figure of 6g. Almost half (47%) gave an incorrect answer and 41% said they didn't know (Chart 3.6).

Chart 3.6 Knowledge of daily maximum intake for salt



Source: Q2.30, Q2.31  
Base: All respondents in Scotland, (511 unweighted)

Respondents who gave an incorrect answer were more likely to give an answer that was lower than the daily maximum intake (29%) than higher (18%). 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.

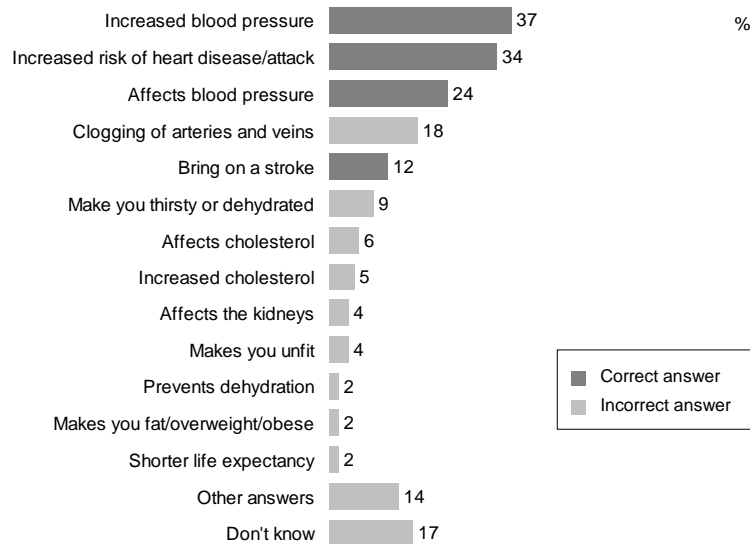
The main risk related to excessive salt consumption is that it increases blood pressure, and hence increasing the risk of heart disease, heart attacks and strokes.

Thirty seven per cent of respondents correctly stated that increased blood pressure was a potential effect of eating too much salt, and 34% that it could increase the risk of heart disease or a heart attack. Twenty four per cent 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%). Around a fifth (18%) said it would cause clogging of arteries and veins. Overall nearly one in seven (17%) were not able to give an answer.

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



Source: Q2.32  
Base: All respondents in Scotland, (511 unweighted)

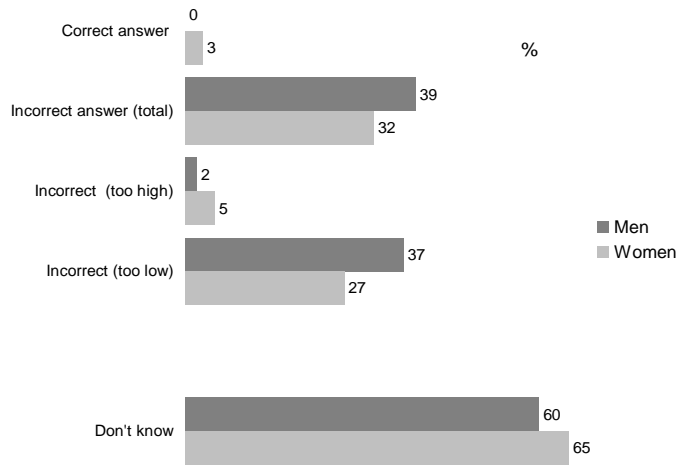
### 3.3.3 Fat

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<sup>19</sup>. 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.

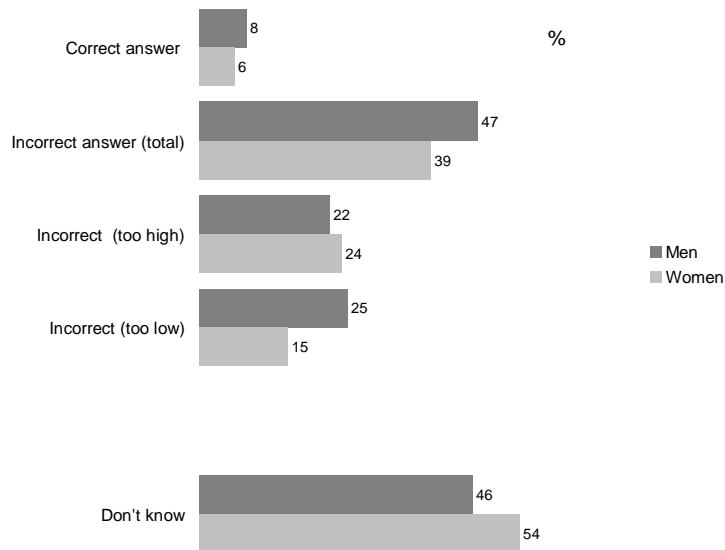
<sup>19</sup> Questions about the recommended maximum daily intake of fats were included to provide contextual information on how people understood a balanced diet.

Chart 3.8 Knowledge of recommended daily allowance for total fat



Source: Q2.27  
Base (unweighted): Men (206), Women (305) in Scotland

Chart 3.9 Knowledge of recommended daily allowance for saturated fat



Source: Q2.28  
Base (unweighted): Men (206), Women (305) in Scotland

For total fat, 0% of men and 3% of women gave the correct answer for the recommended daily allowance. Once prompted with the recommended daily

allowance for total fat, 8% of men and 6% of women then gave the correct answer for saturated fat (maximum 20g of saturated fat per day for women, 30g for men).

### Understanding of the effects of saturated fat

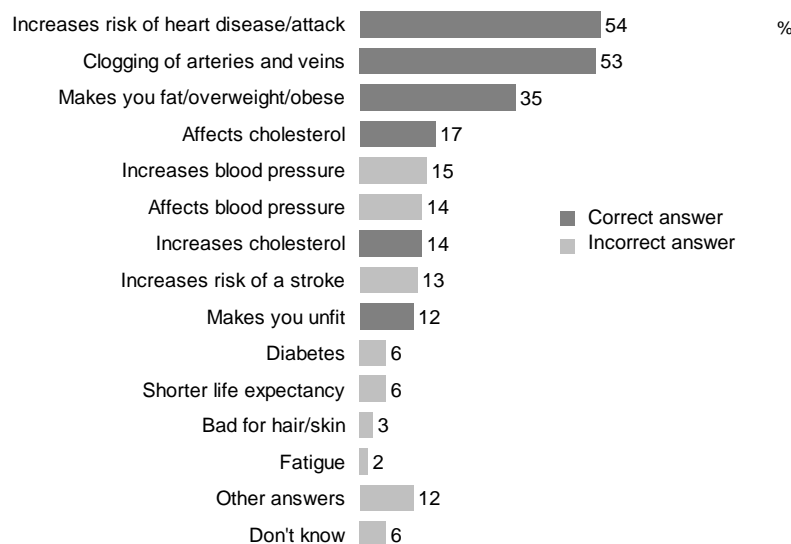
Respondents were asked what effects they think eating too much saturated fat can have on health. This was an open question, so respondents were not prompted with possible responses.

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 level of saturated fat was low, there was higher awareness of the possible adverse impacts of eating too much. Over half of respondents thought it would increase the risk of heart disease (54%), and that it would cause clogging of arteries and veins (53%). Thirty five per cent mentioned it would cause overweight/obesity. Although some respondents gave vague or incorrect responses (e.g. makes you unfit, fatigue), 6% 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' (30%).

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

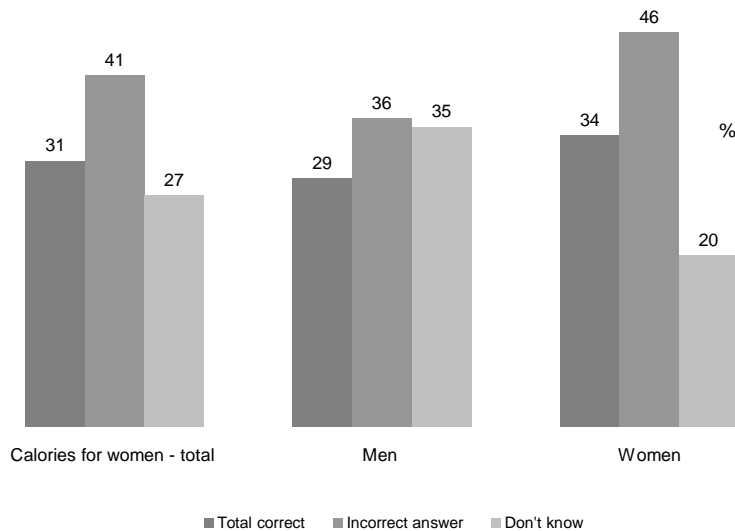


Source: Q2.29  
Base: All respondents in Scotland, (511 unweighted)

### 3.3.4 Calories

Respondents were asked what they thought was the recommended number of daily calories for women and men<sup>20</sup>. Knowledge of the recommended calories was higher than for the other nutrients asked about. About a third of respondents answered each of these questions correctly - 31% for women (2000 calories a day) and 30% for men (2500 calories a day) (Chart 3.11, 3.12). Where an incorrect answer was given, it was more usually a lower value than the correct response: 22% gave an answer of between 1000 and 1500 for women (the mean was 1670) and 14% thought the correct value for men was 2000 calories (mean value of 2242).

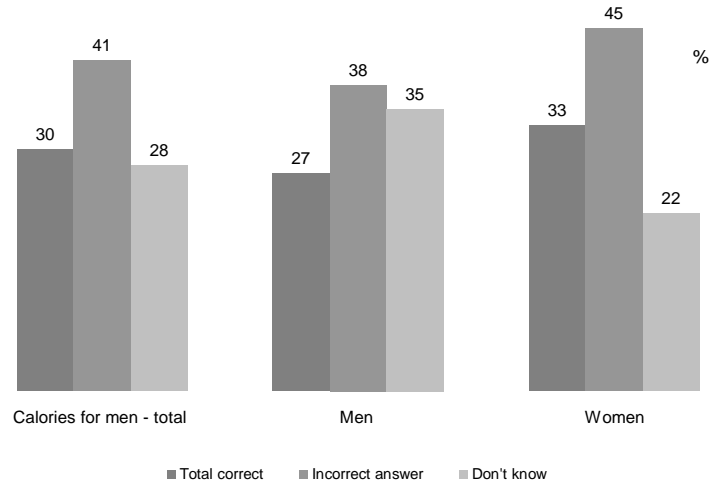
Chart 3.11 Knowledge of recommended daily calories for women



Source: Q2.25  
 Base (unweighted): Men (206), Women (305) in Scotland

<sup>20</sup> Questions about the recommended number of daily calories were included to provide contextual information on how people understood a balanced diet.

Chart 3.12 Knowledge of recommended daily calories for men



Source: Q2.26  
 Base (unweighted): Men (206), Women (305) in Scotland

### 3.4 Comparisons between Scotland and the rest of the UK

Table 3.3 summarises comparisons between respondents in Scotland and the rest of the UK in understanding of a balanced diet and the importance of factors for a healthy lifestyle.

*Table 3.3 Understanding of a balanced diet and the importance of factors for a healthy lifestyle in Scotland compared with the rest of the UK*

	<b>Scotland</b>	England	Wales	Northern Ireland
Eatwell plate – all food groups correctly placed	<b>19</b>	21	16	25
Importance of factors for a healthy lifestyle (% saying each was ‘important’ or ‘very important’)				
- Eating fruit and vegetables	<b>97</b>	99	98	99
- Eating less salt	<b>97</b>	92	94	97
- Limiting food and drinks high in sugar	<b>91</b>	93	93	96
- Limiting foods high in total fat	<b>91</b>	91	89	95
- Limiting foods high in saturated fat	<b>88</b>	92	93	94
- Eating fish, including oily fish	<b>88</b>	88	88	90
Base (unweighted)	511	2025	121	506

*Source: Q2.17, 2.18*

Respondents in Scotland (and England and Wales) were significantly less likely than those in Northern Ireland to correctly place all five food groups onto the eatwell plate.

Looking at the importance of factors for a healthy lifestyle, the following differences were significant, as shown in Table 3.3:

- Respondents in Scotland (97%) were more likely than those in England (92%) to say that eating less salt was important
- Respondents in Scotland (88%) were less likely than those in England (92%) and Northern Ireland (94%) to say that limiting foods high in saturated fat was important.
- Respondents in Scotland (88%) were less likely than those in Northern Ireland (94%) to say that limiting foods high in saturated fat was important.

Table 3.4 shows comparisons between Scotland and the rest of the UK on awareness of recommended consumption of fruit and vegetables, and reported consumption.

As Table 3.4 shows, respondents in Scotland (86%), along with those in England (84%) and Wales (90%) were more likely than those in Northern Ireland (81%) to give the correct answer of ‘five’ as the number of portions of fruit and vegetables it is recommended people should eat each day.



Table 3.4 Awareness and consumption of fruit and vegetables

	Scotland	England	Wales	Northern Ireland
<b>Recommended fruit and vegetable portions – 5 a day (% giving correct response)</b>	<b>86</b>	84	90	81
<b>Foods that count as a portion of fruit and vegetables (% who thought each could count)</b>				
- Pure fruit juice	<b>92</b>	90	93	87
- Tinned fruit or vegetables	<b>75</b>	76	74	81
- Frozen vegetables	<b>82</b>	82	90	81
- Fruit smoothies	<b>77</b>	78	80	79
- Dried fruit	<b>77</b>	82	84	76
- Baked beans	<b>53</b>	52	52	64
- Pulses	<b>54</b>	60	58	60
<b>Foods that do not count as a portion of fruit and vegetables (% who thought each could count)</b>				
- Jacket potato	<b>68</b>	63	77	73
- Rice	<b>25</b>	23	36	30
- Jam	<b>16</b>	17	26	17
<b>Consumption of fruit and vegetables in previous day:</b>				
- Ate at least one portion of vegetables	<b>82</b>	84	85	89
- Ate at least one portion of fruit	<b>68</b>	72	62	72
- Had a portion of fruit juice	<b>47</b>	46	45	48
- Had at least five portions of fruit and vegetables	<b>43</b>	47	53	40
Base (unweighted)	<b>511</b>	2025	121	506

Source: Q2.9, 2.10, 2.11, 2.12, 2.13

There were some differences between respondents in Scotland and the rest of the UK in what respondents thought could count towards the recommended fruit and vegetable portions:

- Respondents in Scotland (92%) were more likely than those in Northern Ireland to think that pure fruit juice would count as a portion (87%).
- Respondents in Scotland (77%) were less likely than those in England (82%) to think that dried fruit would count.
- On pulses, those in Scotland were less likely (54%) to think they can constitute a portion of fruit and vegetables than those in England and Northern Ireland (60% in both).

Respondents in Scotland (68%) and Northern Ireland (73%) were also more likely than those in England (63%) to think (incorrectly) that jacket potatoes could count.

Looking at consumption of fruit and vegetables, respondents in Scotland (82%) were less likely than those in Northern Ireland (89%) to say they had eaten at least one portion of vegetables in the previous day – but the proportion saying this was similar to that in England (84%)

There was no significant difference between Scotland and the other nations in the proportion of respondents reporting eating at least five portions of fruit and vegetables in the previous day.

Tables 3.5 and 3.6 show the comparisons between Scotland and the rest of the UK on knowledge of recommended daily intakes for salt, calories, fat and saturated fat.

*Table 3.5 Knowledge of recommended daily intakes – salt and calories*

	<b>Scotland</b>	England	Wales	Northern Ireland
Recommended daily intake of salt - % giving correct answer (6g)	<b>12</b>	9	12	11
Recommended daily calories for women - % giving correct answer (2000)	<b>31</b>	27	29	27
Recommended daily calories for men - % giving correct answer (2500)	<b>30</b>	26	28	24
Base (unweighted)	<b>511</b>	2025	121	506

*Source: Q2.30, 2.31, 2.25, 2.26*

Respondents in Scotland (30%) were more likely than those in Northern Ireland (24%) to give the correct answer of 2500 as the recommended daily calories for men (Table 3.5).

Table 3.6 Knowledge of maximum daily intakes – fat and saturated fat

	Scotland	England	Wales	Northern Ireland
Maximum daily intake of fat for men - % giving correct answer (95g) <sup>1</sup>	*	*	5	1
Maximum daily intake of fat for women - % giving correct answer (70g) <sup>2</sup>	3	4	4	8
Maximum daily saturated fat for men - % giving correct answer (30g) <sup>1</sup>	8	8	-	9
Maximum daily saturated fat for women - % giving correct answer (20g) <sup>2</sup>	6	13	4	11
<sup>1</sup> Base (unweighted) - men	206	861	46	186
<sup>2</sup> Base (unweighted) - women	305	1164	75	320

Source: Q2.27, 2.28

Note: \*\*=less than 0.5%

Respondents in Scotland (3%) were less likely than those in Northern Ireland (8%) to give the correct answer of 70g for the recommended maximum daily intake of fat for women. Respondents in Scotland (6%) were also less likely than those in Northern Ireland (11%) and England (13%) to give the correct answer for the maximum intake of saturated fat for women (Table 3.6).

## 4. Eating, cooking and shopping

### Summary

- One third of 'meals' (36%) were eaten in the late afternoon, with a similar proportion (39%) eaten in the early evening.
- Most respondents agreed with the statements 'I enjoy cooking and preparing food' (68%), 'I enjoy making new things to eat (65%) and 'The price of food doesn't matter as long as I know the quality is good' (61%). The majority (62%) disagreed with the statements 'My life is so busy that I just eat when I can while I'm on the go' and 'For me, food is just fuel to live'. Thirty eight per cent agreed that 'Cooking is like a hobby for me'.
- The most commonly-eaten types of food were bread, rice, pasta, potatoes and other starchy foods; fruit and vegetables; and milk and dairy foods; about seven out of ten respondents reported eating these at least once a day (69% for bread, rice, pasta, potatoes and other starchy foods, 70% for fruit and vegetables, and 72% for milk and dairy foods).
- About six out of ten (57%) said they cooked or prepared food for themselves every day, and 38% did so for others.
- The majority of respondents felt food prices had increased over the last 12 months (83%).

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.

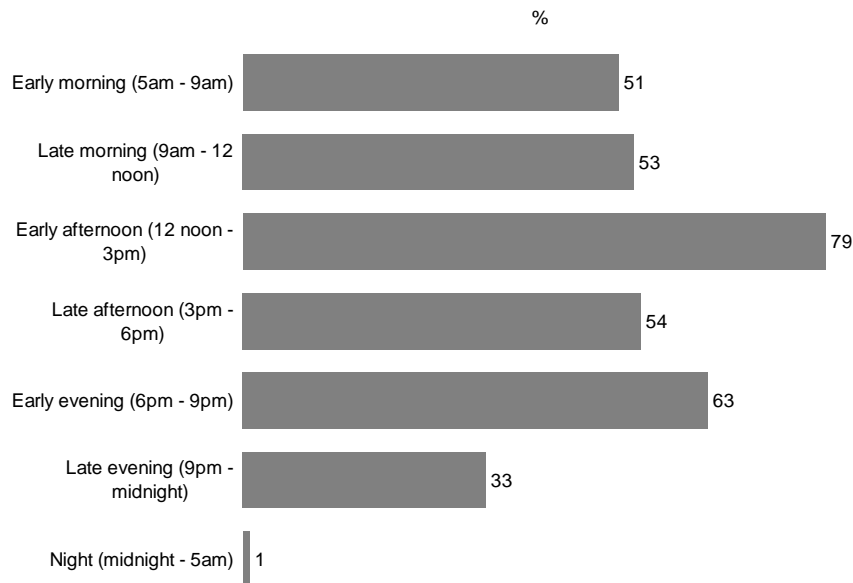
Section 4.1 covers general eating patterns to help build up a picture of when and where respondents ate in the previous 24 hours. Section 4.2 looks at attitudes towards food in general. Section 4.3 presents findings on self-reported consumption of different types of foods. Section 4.4 reports on cooking 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 attitudes towards food prices.

### 4.1 General eating patterns

A third of the sample (selected at random) was asked about their eating patterns (176).

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 (79% of respondents reported eating during this time). In contrast, very few respondents ate at night between the hours of midnight and 5am (1%) (Chart 4.1).

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



Source: Q2.5  
 Base: One third of respondents in Scotland, (174 unweighted)

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.

One third of 'meals' (32%) were eaten in the late afternoon, with a further 39% eaten in the early evening. About a third of 'light meals' (38%) were eaten in the early afternoon, and 27% in the early morning. 'Snacks' were most likely to be eaten in the early afternoon (23%), late evening (20%) and the late morning (20%) (Table 4.1).

Table 4.1 When meals, light meals and snacks were eaten

	Meals	Light meals	Snacks
	%	%	%
Early morning (5am – 9am)	6	27	12
Late morning (9am – 12 noon)	7	24	20
Early afternoon (12 noon – 3pm)	12	38	23
Late afternoon (3pm – 6pm)	36	6	13
Early evening (6pm – 9pm)	39	4	12
Late evening (9pm – midnight)	4	2	20
Night (midnight – 5am)	-	-	1
Source: Q2.5, Q2.6			
Base (unweighted): Occasions	198	177	226

About two thirds (63%) of ‘meals’ were eaten with family or a partner. About four out of ten ‘light meals’ (44%) were eaten with family or a partner, as were a similar proportion of ‘snacks’ (39%). ‘Snacks’ and ‘light meals’ were more likely to be eaten alone than ‘meals’– 49% of snacks were eaten alone and 44% of ‘light meals’ compared with 28% of ‘meals’ (Table 4.2).

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

	Meals	Light meals	Snacks
	%	%	%
Family/partner	63	44	39
Work colleagues	6	10	8
Friends	2	2	3
Someone else	2	-	2
No-one else	28	44	49
Source: Q2.6, Q2.8			
Base (unweighted): Occasions	198	177	226

## 4.2 Attitudes towards food

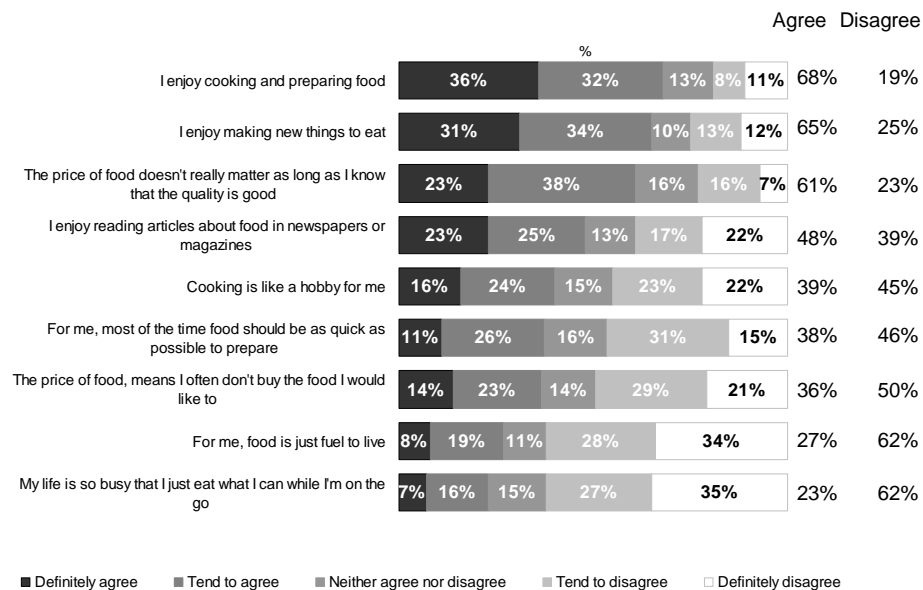
Respondents were asked the extent to which they agreed or disagreed with a range of statements regarding their attitudes towards food. Results are shown in Chart 4.2.

Generally respondents felt that food is not just a fuel to live (62% 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 (39%) agreed that ‘Cooking is like a hobby for me’.

Six out of ten respondents (61%) disagreed with the statement 'The price of food means that I often don't buy the food I would like to', and 61% agreed with the statement 'The price of food doesn't matter as long as I know the quality is good'.

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', 38% agreed and 46% disagreed. One fifth (23%) agreed that 'My life is so busy that I just eat when I can while I'm on the go', whilst the majority (62%) disagreed with this statement.

Chart 4.2 Attitudes towards food



Source: Q2.2  
Base: All respondents in Scotland, (511 unweighted)

Some differences were observed by age and gender. Women were more likely than men to agree that they enjoy cooking and preparing food (74% compared with 61%), they enjoy making new things to eat (74% compared with 55%) and to enjoy reading articles about food (64% compared with 31%).

### 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 food<sup>21</sup>:

- 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

<sup>21</sup> 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.

- 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 bread, rice, pasta, potatoes and other starchy foods; fruit and vegetables; and milk and dairy foods, each of which about seven out of ten respondents (69% for bread, rice, pasta, potatoes and other starchy foods, 70% for fruit and vegetables, and 72% for milk and dairy foods) said they had eaten at least once a day (Table 4.3).

Just over half (54%) of respondents said they ate biscuits, pastries and cakes three or four times a week or more often. Seventy eight per cent reported eating beef, lamb or pork at least once a week, while 62% said they ate processed meats at least once a week. Nearly six out of ten respondents (56%) ate fried chips or roast potatoes at least once a week.

Consumption of oily fish and other fish was similar, with over half of respondents (53% for oily fish, 56% for other fish) saying that they ate these at least once a week.

Looking at microwave meals and oven ready foods, a third of respondents (34%) said they never ate these, while 35% ate them less than once a week, and 31% once a week or more often.



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
Starchy foods	69	8	16	6	1	*
Fruit and vegetables	70	7	11	8	1	2
Milk and dairy	72	7	9	6	3	2
Biscuits, pastries and cakes	31	3	20	23	14	8
Processed meat	6	4	12	40	25	13
Beef, lamb or pork	4	4	23	48	15	7
Fried chips or roast potatoes	3	3	9	41	32	12
Microwave meals	3	1	6	21	35	34
Oily fish	1	1	10	41	24	24
Other fish	-	1	4	51	30	14

Source: Q2.14

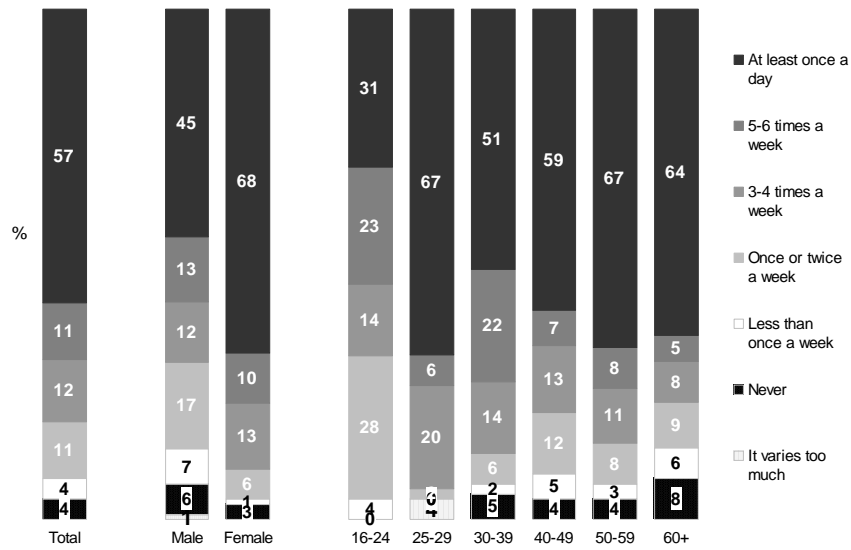
Base (unweighted): 511

Note: \*\*=less than 0.5%

#### 4.4 Cooking behaviour

Respondents were asked how often they cook or prepare food for themselves. Almost six out of ten (57%) said that they cooked or prepared food for themselves at least once a day. A third prepared or cooked food for themselves between once and six times a week (35%) and 8% did so less frequently or never (Chart 4.3).

Chart 4.3 How often respondents cook or prepare food for themselves

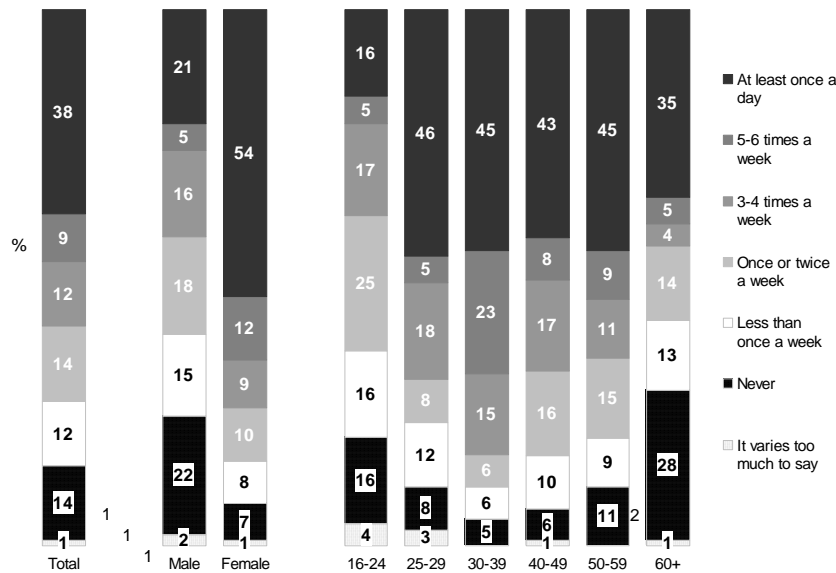


Source: Q2.3  
Base: All respondents in Scotland, (511 unweighted)

As Chart 4.3 shows, men were less likely than women to cook or prepare food for themselves on a regular basis. For example, 45% of men cooked or prepared food for themselves at least once a day, compared with 68% of women.

Respondents were also asked about cooking or preparing food for other people. Nearly four out of ten (38%) reported cooking or preparing food for others at least once a day (Chart 4.4).

Chart 4.4 How often respondents cook or prepare food for others



Source: Q2.4  
Base: All respondents in Scotland, (511 unweighted)

Women were much more likely than men to cook or prepare food for others on a regular basis; for example, 54% of women did this at least once a day, compared with 21% of men.

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

- Those with children under 16 in the household (57%, compared with 33% of those with no children)
- Those who were married/living as married (51%, compared with 20% of those who were single/widowed/divorced).

## 4.5 Shopping behaviour

A third of the sample (selected at random) was asked about their food shopping behaviour (172). 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, 58% 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 (78%) than men (36%).

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

The vast majority of respondents (90%) usually did all of their food shopping solely by visiting shops. A further 6% both visited shops and used the internet to do their food shopping, while 3% used only the internet for this.

#### 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 felt food prices had gone up in the last 12 months (83%). Forty nine per cent thought they had increased a lot, 34% thought they had increased a little, 15% thought they had stayed the same and 2% thought they had decreased a little.

#### 4.7 Comparisons between Scotland and the rest of the UK

There were some differences in eating patterns between respondents in Scotland and the rest of the UK, as shown in Table 4.4.

Table 4.4 Times eaten from getting up yesterday to getting up today

	Scotland	England	Wales	Northern Ireland
Early morning (5am – 9am)	51	56	43	55
Late morning (9am – 12 noon)	53	48	55	58
Early afternoon (12 noon – 3pm)	79	73	80	88
Late afternoon (3pm – 6pm)	54	44	35	57
Early evening (6pm – 9pm)	63	70	73	54
Late evening (9pm – midnight)	33	26	33	46
Night (midnight – 5am)	1	2	-	4
Base (unweighted)	174	687	40	172

Source: Q2.5, 2.6

Respondents in Scotland were significantly more likely to report eating in the late afternoon than respondents in England, and less likely than those in Northern Ireland to have eaten in the late evening, but otherwise there were no differences between the eating times reported in the UK.

Comparisons between respondents in Scotland and the rest of the UK in attitudes towards food are shown in Table 4.5.

Table 4.5 Attitudes towards food

% Agree	Scotland	England	Wales	Northern Ireland
I enjoy cooking and preparing food	<b>68</b>	68	69	65
The price of food doesn't really matter as long as I know the quality is good	<b>61</b>	60	59	65
I enjoy making new things to eat	<b>65</b>	66	61	57
I enjoy reading articles about food in newspapers and magazines	<b>48</b>	48	47	53
For me, most of the time food should be as quick as possible to prepare	<b>38</b>	37	46	46
Cooking is like a hobby for me	<b>39</b>	40	40	38
The price of food means I often don't buy the food I would like to	<b>36</b>	39	33	37
For me, food is just fuel to live	<b>27</b>	26	35	29
My life is so busy that I just eat what I can while I'm on the go	<b>23</b>	21	27	22
Base (unweighted)	<b>511</b>	2025	121	506

Source: Q2.2

There were no significant differences on any of these statements between respondents in Scotland compared with those in England. Respondents in Scotland (and in England) were more likely than those in Northern Ireland to agree with the statement 'I enjoy making new things to eat', and less likely to agree with 'For me, most of the time food should be as quick as possible to prepare' (Table 4.5)

Table 4.6 shows comparisons between Scotland and the rest of the UK in the frequency of eating different types of food.

Table 4.6 Frequency of eating different types of food

	Scotland	England	Wales	Northern Ireland
<b>At least once a day:</b>				
Starchy foods	69	71	73	84
Fruit and vegetables	70	72	75	78
Milk and dairy	72	69	72	73
Biscuits, pastries and cakes	31	27	32	49
<b>At least once a week:</b>				
Processed meat	62	63	65	80
Beef, lamb or pork	78	77	76	85
Fried chips or roast potatoes	56	66	71	69
Microwave meals	31	31	35	22
Oily fish	53	53	49	55
Other fish	56	58	63	62
Base (unweighted)	511	2025	121	506

Source: Q2.14

Respondents in Scotland (56%) were less likely than those in England (66%) and Northern Ireland (69%) to report eating fried chips or roast potatoes.

It is Northern Ireland where there were more differences in eating habits: respondents here were more likely than those in the rest of the UK to report eating biscuits, pastries and cakes, starchy foods and fruit and vegetables at least once a day.

Respondents in Northern Ireland reported higher rates of consumption at least once a week than in the rest of the UK for processed meat (80% said they ate this at least once a week in Northern Ireland, compared with 63% in England, 65% in Wales and 62% in Scotland), beef, lamb or pork (85% in Northern Ireland, compared with 77% in England, 76% in Wales and 78% in Scotland).

Table 4.7 How often respondents cook or prepare food for themselves and others

	Scotland	England	Wales	Northern Ireland
Cook or prepare food for self at least once a day	57	56	64	68
Cook or prepare food for others at least once a day	38	36	45	46
Base (unweighted)	511	2025	121	506

Source: Q2.3, 2.4

As Table 4.7 shows, respondents in Scotland were equally likely as those in England to cook for themselves and others. However they were significantly less likely than those in Northern Ireland to cook or prepare food for themselves at

least once a day (68% in Northern Ireland, compared with 56% in England and 57% in Scotland), and to cook for others at least once a day (46% in Northern Ireland, compared with 36% in England and 38% in Scotland).

## 5. Eating outside of the home

### Summary

- The majority (80%) of all 'meals', 'light meals' and 'snacks' were eaten at home, 15% were eaten at school, college or work, 2% at someone else's house, 2% at a food outlet (for example, a restaurant, café or pub) and 1% somewhere else.
- Almost three quarters of respondents had eaten out, according to the definition provided in the last seven days (73%) and the most common location for this was a restaurant (36%).
- 'Price' and 'Cleanliness and hygiene' were the important factors to respondents in Scotland when choosing where to eat out (53% and 52% respectively).
- 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 (61%).

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 healthy eating and food safety. 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 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 information should be provided 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 occasions in the last 24 hours

A third of the sample (selected at random) was asked about eating out behaviours (169).



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
<b>Where respondents ate:</b>				
<b>At home</b>	80	87	81	72
<b>Outside of the home:</b>				
- At school/ college/ work	15	8	15	20
- At someone else's house	2	2	2	3
- A food outlet (restaurant/ café/ pub)	2	3	1	3
- Other	1	-	1	2

Source: Q2.5

Base: All eating occasions among respondents in Scotland (609 unweighted)

The vast majority of 'meals' (87%), 'light meals' (81%) and snacks (72%) in Scotland were eaten at home. Three per cent of 'meals' were eaten in a restaurant or other food outlet. This was less common for 'light meals' (3%) and 'snacks' (3%). Twenty per cent 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 8%.

## 5.2 Eating out in the last seven days

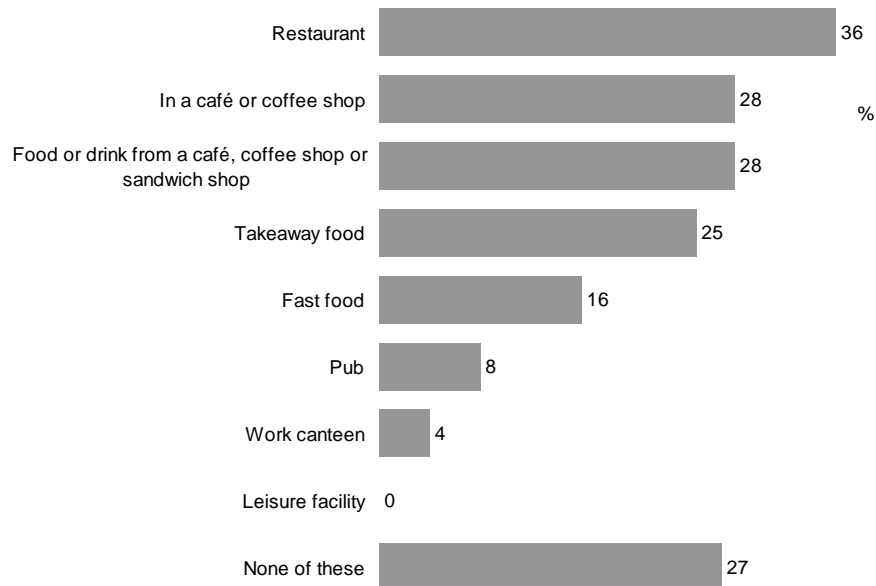
For the purposes of the survey, eating out was defined as doing one of the following:

- 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, and then, for those that they had done, how many times.

Of all respondents asked this section, 73% 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: One third of respondents in Scotland, (unweighted 165)

40

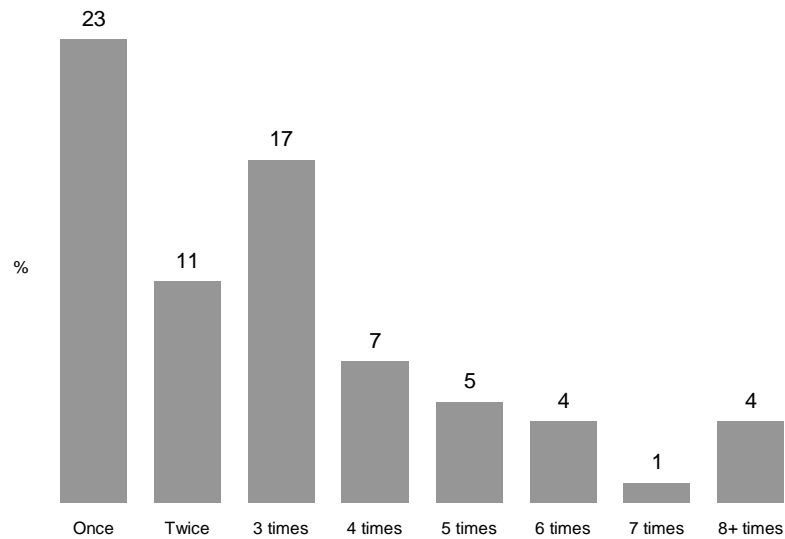
The food outlets that had been visited by the highest proportion of respondents in Scotland were restaurants - 36% had eaten in one in the previous seven days. About a quarter had eaten in a café or coffee shop (28%), eaten food taken away from a café, coffee shop or sandwich shop (28%) and eaten take away food (25%).

Men (42%) were more likely than women (31%) to have eaten take away food in the last seven days.

### 5.3 Frequency of eating out

About a quarter of respondents had not eaten out at all in the week prior to interview (27%). Almost a quarter had eaten outside of the home once (23%), 11% had eaten out twice and 17% had eaten out three times (Chart 5.2).

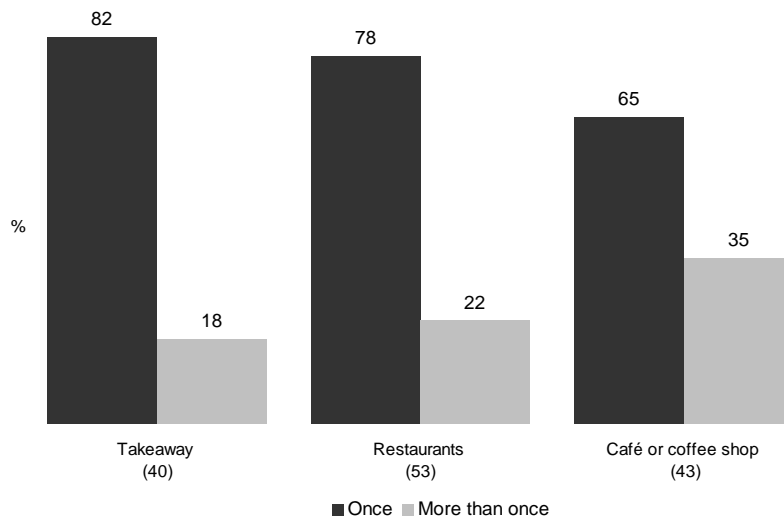
Chart 5.2 Number of times respondents had eaten out in the last seven days



Source: Q2.34  
 Base: One third of respondents in Scotland, (unweighted 169)

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. Around eight out of ten respondents who had visited a restaurant (78%) or eaten takeaways (82%) had done so only once. Similarly the majority of those who had eaten in a café or coffee shop (65%) had done this in the preceding seven days to the interview. (Chart 5.3).

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

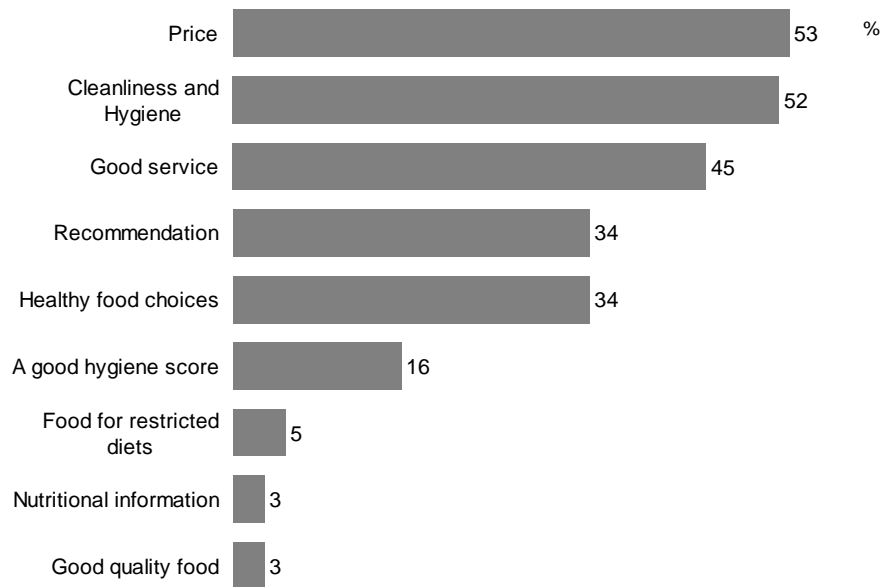


Source: Q2.34  
 Base: Respondents in Scotland who had eaten in these places in the last 7 days

## 5.4 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.

Chart 5.4 Importance of factors in deciding where to eat out



Source: Q2.35  
Base: One third of respondents in Scotland, (unweighted 165)

43

Two factors were chosen by more than half of respondents as being important when deciding where to eat out. These were 'price', which was selected by 53% and cleanliness and hygiene, which was chosen by 52%. Women were more likely than men to select cleanliness and hygiene as an important factor (64% compared with 40%).

About one in six respondents (16%) considered a good hygiene score as an important factor when choosing somewhere to eat or buy food.

Three per cent of respondents in Scotland 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.

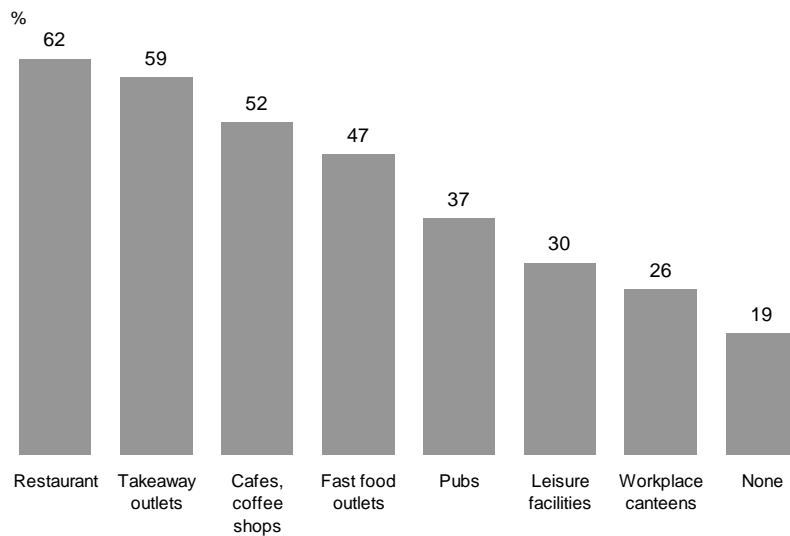
## 5.5 Information about healthy food options

When specifically asked, in a separate question, where they would like to see more information displayed about how healthy different options are, eight out of ten respondents (81%) said they would like to see more information in at least

one of the catering outlets asked about; 19% would not like to see this information in any of the catering outlets.

Responses to this question for the different food outlets asked about are shown in Chart 5.5. Six out of ten respondents (62%) would like to see more information on how healthy food options were in restaurants, while more than half (59%) would like this in takeaway outlets and cafes (52%). Other locations where a sizeable proportion of respondents wanted to see more information about healthy food options were in fast food outlets (47%), in pubs (37%) and in leisure facilities (30%) and in workplace canteens (26%). (Chart 5.5)

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



Source: Q2.40  
Base: Respondents who eat out in Scotland, (unweighted 146)

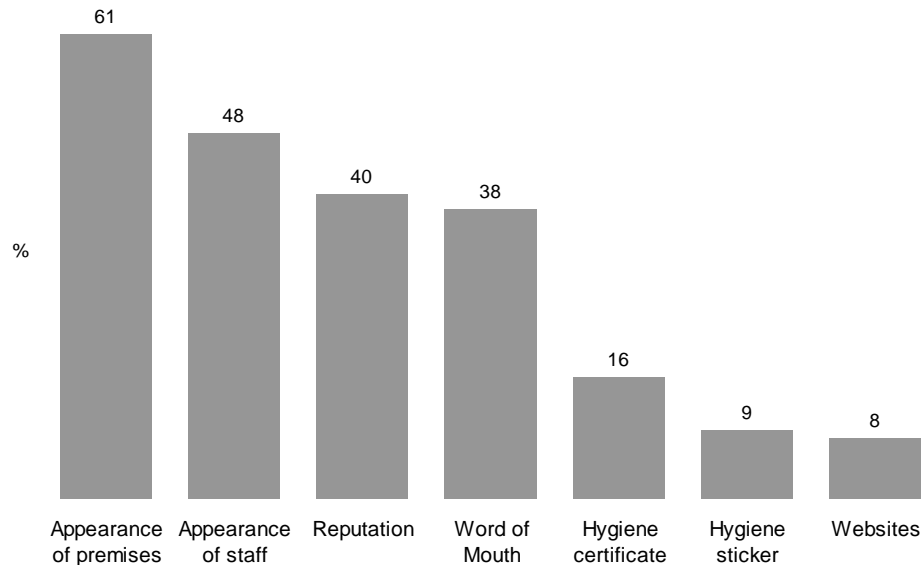
## 5.6 Awareness of hygiene standards

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

Overall, seven in ten respondents (72%) 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 (79% compared with 66%).

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: Respondents who ever eat out and have some awareness of hygiene standards within a third of the sample in Scotland, (unweighted 118)

45

### **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 (61%).

### **Appearance of staff**

Approximately half of all respondents took the appearance of staff as a measure of hygiene (48%).

### **Reputation**

Reputation was seen by 40% of respondents as an indicator of standards of hygiene. Men (32%) were less likely than women (47%) to give this response.

### **Word of mouth**

Just over a third of respondents said they knew about hygiene standards from word of mouth (38%).

### **Hygiene certificate**

Sixteen per cent of respondents said that they used a hygiene certificate as an indicator of standards of hygiene.

### **Hygiene sticker**

About one in ten respondents in Scotland said they knew about hygiene standards from a hygiene sticker (9%).

## 5.7 Comparisons between Scotland and the rest of the UK

A slightly higher proportion of eating occasions were reported by respondents in Northern Ireland as being eaten at home than in other regions of the UK: 84% of the total eating occasions here were at home, compared with 78% in England and Wales and 80% in Scotland.

Respondents in Scotland, along with those in England were less likely to have eaten out in the last seven days. Seventy three per cent in Scotland and 68% of respondents in England had eaten out (according to the definition provided) compared with 78% in Northern Ireland and Wales.

In Scotland, as in England and Wales a restaurant was the most frequently reported type of eating out (36% in Scotland, 26% in England and 31% in Wales) while Northern Ireland was the only region where take away was the most common type of eating out that was reported (by 35%).

In all regions apart from Scotland 'cleanliness and hygiene' was most commonly mentioned by respondents as important when deciding where to eat out, but there was some difference by region: respondents in England (64%) and Wales (65%) were more likely to choose this response than those in Scotland (52%) and Northern Ireland (52%). Only in Scotland was 'Price' most commonly chosen as an important factor when choosing where to eat (53%), and indeed was significantly more likely to be selected compared with the other regions, England (44%) and Wales (45%) and Northern Ireland (39%).

A good hygiene rating or score was less likely to be mentioned in Scotland than in the other regions.

When asked about whether they would like more information to be displayed about how healthy options are when eating out, respondents in Scotland gave somewhat different responses from those in England, Wales and Northern Ireland, as Table 5.2 shows.

Table 5.2 Where respondents would like to see more information displayed about how healthy different options are

	<b>Scotland</b>	England & Wales	Northern Ireland
	%	%	%
Any of the options chosen	<b>81</b>	76	75
Restaurants	<b>62</b>	51	50
Take away outlets	<b>44</b>	47	44
Fast food restaurants	<b>47</b>	40	40
Cafes, coffee shops and sandwich shops	<b>39</b>	37	34
Pubs	<b>40</b>	39	24
Food outlets at cinemas etc.	<b>23</b>	22	17
Workplace canteens	<b>30</b>	22	13
None	<b>30</b>	24	25
Source: Q2.40			
Base (unweighted):	146	678	159

Respondents in Scotland were equally likely to say they were 'very aware' or 'fairly aware' aware of standards of hygiene when eating out or buying food from supermarkets to those the other regions. In Northern Ireland 74% were aware, compared with 68% in England, 72% in Scotland and 79% in Wales.

In all regions, general appearance of premises was the most common response when asked how people tell about hygiene standards. Respondents in Scotland were the least likely to choose the option of 'Hygiene Certificate' (16%) compare with 25% in Northern Ireland and 36% in England and Wales.

Table 5.3 gives the full breakdown.

Table 5.3 How respondents know about the hygiene standards of places they eat out at or buy food from

	<b>Scotland</b>	England & Wales	Northern Ireland
	%	%	%
<b>General appearance of premises</b>	<b>61</b>	71	73
<b>Appearance of staff</b>	<b>48</b>	55	56
<b>Reputation</b>	<b>40</b>	38	43
Word of mouth	38	31	38
Hygiene certificate	16	36	25
Hygiene sticker	9	11	11
Source: Q2.38			
Base (unweighted):	118	569	140



## 6. Eating and health

### Summary

- Nearly all respondents (93%) 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' (89%) and almost seven out of ten disagreed with 'I don't really think about what I eat' (67%).
- Opinions about experts were mixed, with three-quarters (74%) agreeing with the statement 'Experts contradict each other over what foods are good for you', and half (50%) agreeing with 'I am fed up with experts telling me what I should eat'.
- Four-fifths (83%) felt their overall diet was healthy, and the same proportion thought that the food they tend to eat at home was healthy.
- Three-fifths (61%) 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, six out of ten (61%) reported having made a change to their diet in the previous six months. The most common changes were eating more fruit and vegetables (30%) and eating smaller portions (25%).
- The most common reason respondents gave for changing their diet was to lose or maintain weight (mentioned by 35% of respondents who had made changes to their diet) and to be more healthy (20%).
- 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 (15%) and time constraints (8%). Twenty three per cent 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 for respondents in Scotland are shown in summary in Table 6.1.

Table 6.1 Attitudes towards healthy eating

	<b>Agree</b> %	<b>Neither</b> %	<b>Disagree</b> %
Even if you don't have a really healthy diet, it's worth making small changes	<b>93</b>	4	<b>3</b>
What you eat makes a big difference to how healthy you are	<b>89</b>	6	<b>5</b>
People think more about their weight than about how healthy they are	<b>84</b>	9	<b>7</b>
I enjoy eating healthy foods	<b>83</b>	11	<b>6</b>
Experts contradict each other over what foods are good for you	<b>74</b>	14	<b>11</b>
The tastiest foods are the ones that are bad for you	<b>50</b>	15	<b>35</b>
I am fed up with experts telling me what I should eat	<b>50</b>	26	<b>24</b>
The main reason for people to eat a more healthy diet is to lose weight	<b>44</b>	14	<b>42</b>
I get confused over what's supposed to be healthy	<b>33</b>	12	<b>55</b>
As long as you take enough exercise you can eat whatever you want	<b>28</b>	10	<b>62</b>
I don't really think about what I eat	<b>24</b>	9	<b>67</b>
Good health is just a matter of good luck	<b>16</b>	10	<b>73</b>
If you are not overweight you can eat whatever you like	<b>16</b>	9	<b>74</b>

Source: Q2.16  
Base (unweighted): 511

Over nine out of ten respondents agreed with the statements 'What you eat makes a big difference to how healthy you are' (89%), and 'Even if you don't have a really healthy diet, it's worth making small changes' (93%). One in four (24%) agreed with the statement 'I don't really think about what I eat'. One in six (16%) 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' (74%), and 'As long as you take enough exercise you can eat whatever you want' (62% disagreed), although sizeable minorities agreed with both of these statements (16% and 28% respectively).

Over eight out of ten respondents (83%) agreed with the statement 'I enjoy eating healthy foods', and 6% disagreed. However, half (50%) agreed with the statement 'The tastiest foods are the ones that are bad for you', and a third (35%) disagreed.

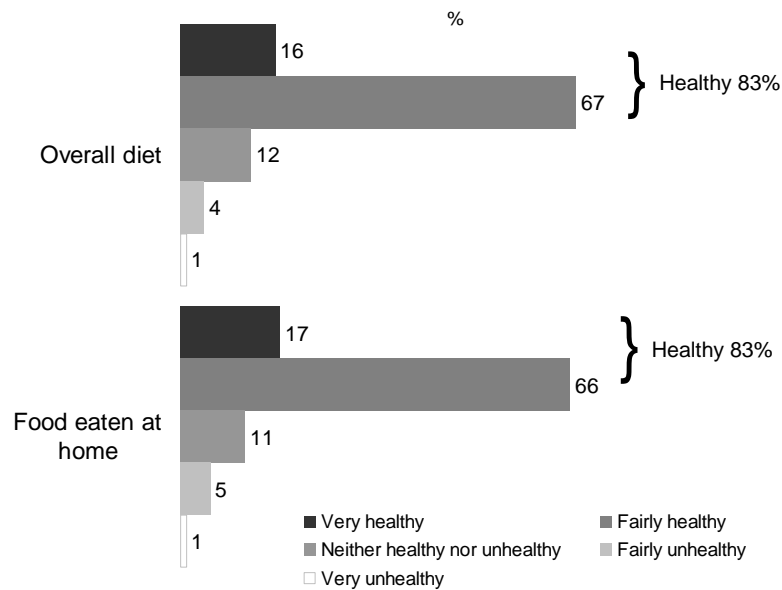
There was some evidence of confusion over messages about healthy eating. Opinions about experts were mixed, with half of respondents (50%) agreeing that 'I am fed up with experts telling me what I should eat'. Three-quarters of respondents (74%) agreed with the statement 'Experts contradict each other over what foods are good or bad for you', and a third (33%) agreed with 'I get confused over what's supposed to be healthy'.

The majority of respondents (84%) agreed with 'People think more about their weight than about how healthy they are'. About four out of ten (44%) agreed with the statement 'The main reason for people to eat a more healthy diet is to lose weight', while a similar proportion (42%) disagreed 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 for respondents in Scotland are shown in Chart 6.1.

Chart 6.1 Perceptions of food usually eaten



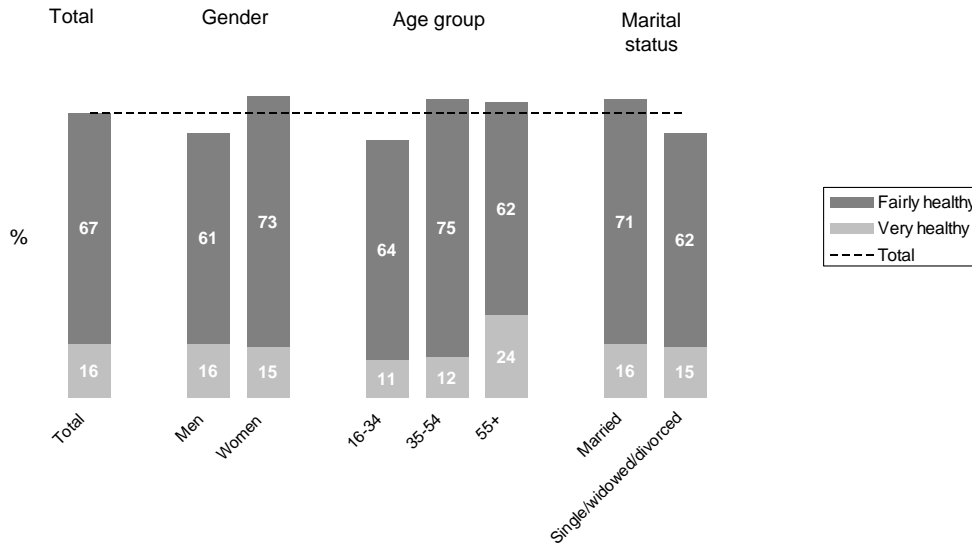
Source: Q2.1, Q2.15  
 Base: All respondents in Scotland, (511 unweighted)

Eight out of ten respondents (83%) felt that their overall diet was healthy – about one in six (16%) that it was ‘very healthy’, and a further 67% ‘fairly healthy’.

Respondents were equally likely to say that the food they ate at home was healthy (83%) compared with their overall diet. One in six (17%) said that the food eaten at home was ‘very healthy’, with a further 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

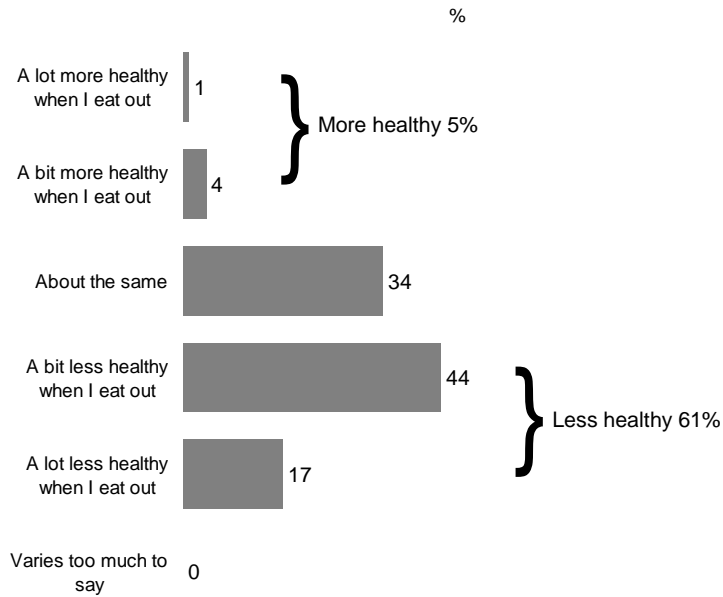


Source: Q2.1  
 Base (unweighted): Total (511), Men (206), Women (305), 16-34 (114), 35-54 (182), 55+ (215), Married/living as married (250), Single/widowed/divorced (261)

Women (88%) were more likely than men (76%) to say that the food they usually eat is healthy. Older respondents were more likely than younger ones to say they eat healthily – 86% of respondents aged 55+, and the same proportion of those aged 35-54, said that what they usually eat is healthy, compared with 74% of those aged 16-34. Respondents who were married/living as married (87%) were more likely than those who were single/widowed/divorced (77%) to say they eat healthily. 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 those who said that they never eat out. As Chart 6.3 shows, the majority of these respondents (61%) 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 one in twenty (5%) 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*



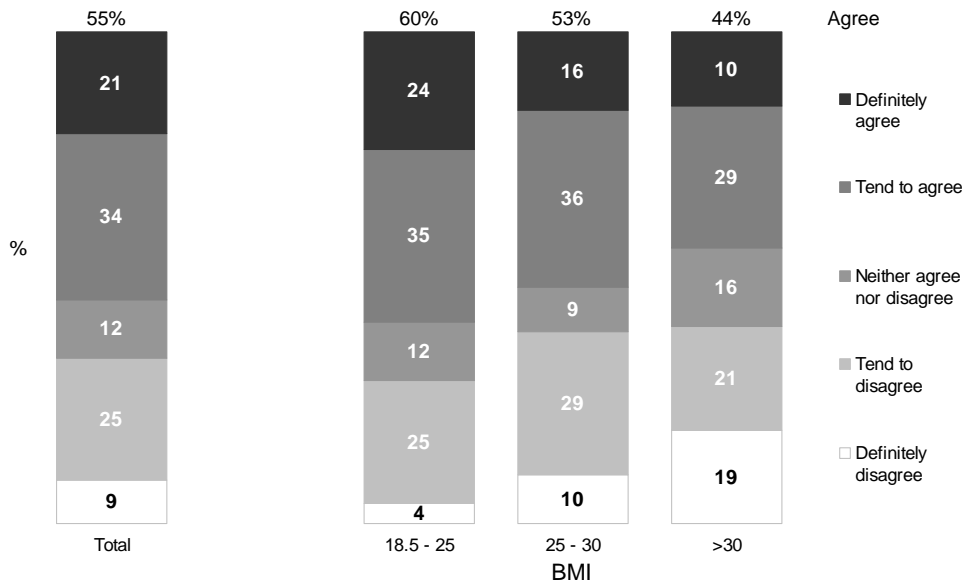
Source: Q2.39  
 Base: Respondents who eat out in Scotland from one third of sample, (146 unweighted)

## 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'. Fifty five per cent agreed and a 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



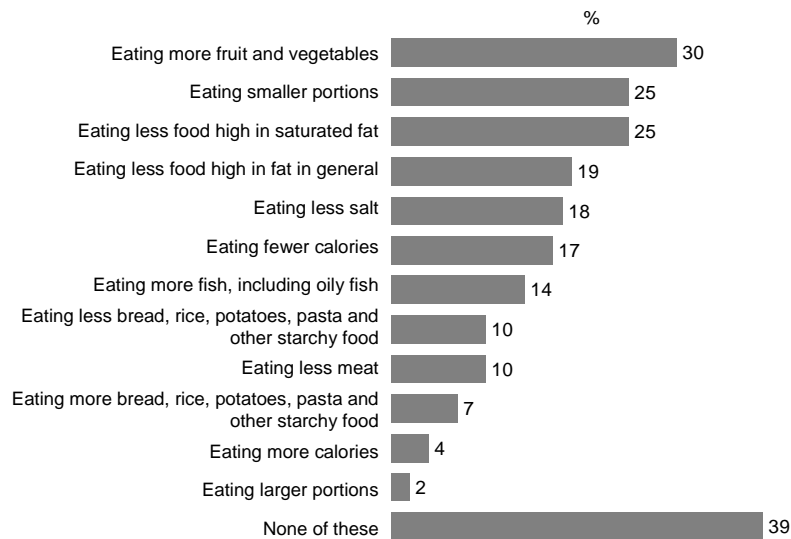
Source: Q2.24  
 Base (unweighted): Total (511), 18.5-25 (213), 25-30 (177), >30 (88)  
 Note: BMI <18.5 not shown due to small base size

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

- Aged 65+ (83% agreed with this statement)
- No children aged under 16 in the household (59%)
- Had a healthy (between 18.5 and 25) BMI (60%).

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 (30%), eating smaller portions (25%) and eating less food high in saturated fats (also 25%). About a fifth were eating less salt (18%) and eating less food high in fat in general (19%), and eating fewer calories (17%). Four out of ten (39%) had not made any of these changes to their diet, while the remaining 61% 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: All respondents in Scotland, (511 unweighted)

Younger respondents were more likely than older respondents to have made a change to the food they eat in the last six months; 57% of those aged 65+ answered 'none of these' compared with 25% of those aged 16-34 and 40% of those in the 35-64 age group.

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 (24%, 17% and 35% respectively)
- Eating less fat in general (23%, 22% and 20%)
- Eating smaller portions (36%, 24% and 27%)
- Eating fewer calories (20%, 16% and 25%)
- Eating more fruit and vegetables (28%, 29% and 48%).

### 6.3.2 Barriers and motivations to change

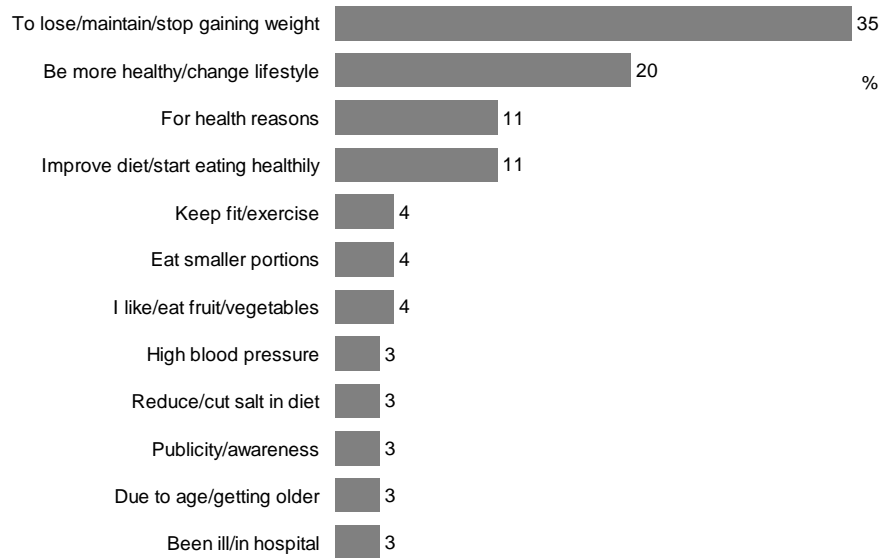
Respondents who had made a change to their diet in the last six months were asked to say, in an open question, what the reasons for this change were.

A wide range of reasons was given by respondents. The most common reason (given by 35%) was to lose, maintain or stop gaining weight. Other common reasons given were to be more healthy (mentioned by 20%), 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



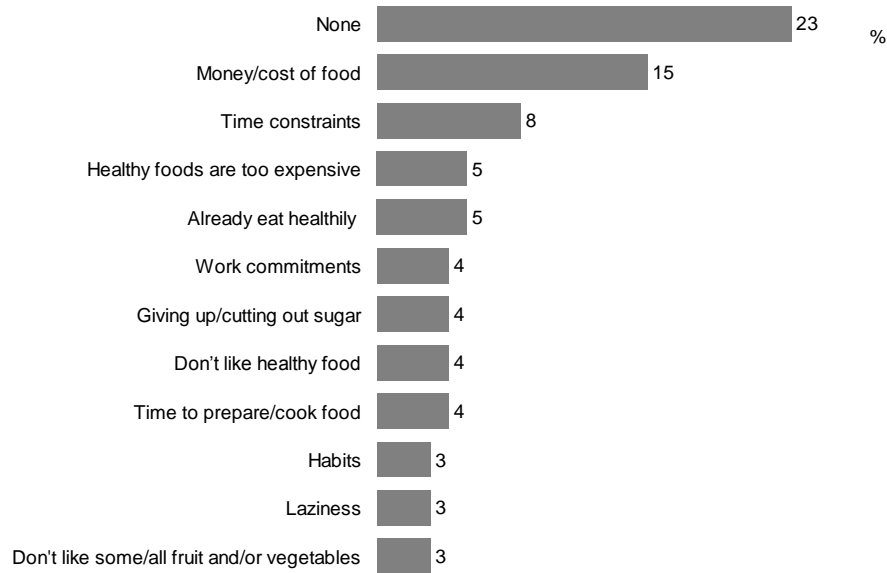
Source: Q2.21 – responses mentioned by 3% or over  
 Base: Respondents in Scotland who have made changes to the food they eat over the last 6 months, (292 unweighted)

Women were more likely than men to have made changes to lose weight (44% compared with 23%). Respondents aged 55+ were more likely than younger groups to have made a change for health reasons (19%) and were less likely to have made a change to have a healthier lifestyle (14%).

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 (15%) and time constraints (8%). Almost 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: All respondents in Scotland, (511 unweighted)

## 6.4 Diet, physical activity and physical measurements

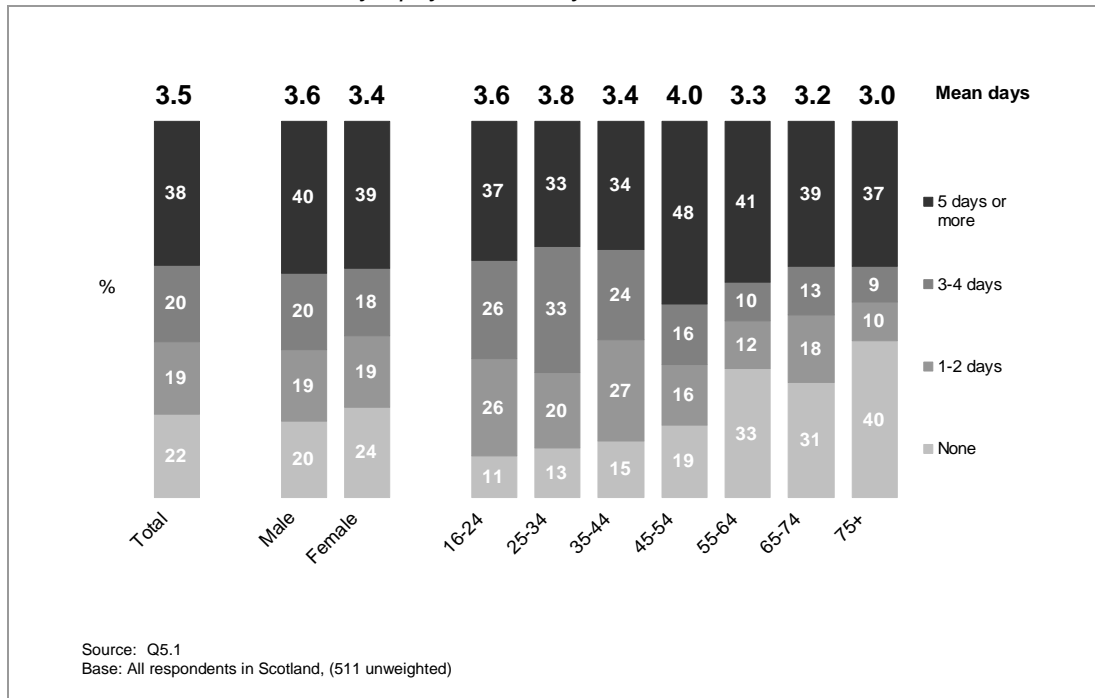
Respondents were asked about a range of other factors related to a healthy lifestyle, including:

- 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)<sup>22</sup> – 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 slightly higher among men (80%) than women (75%). Physical activity participation was highest among those aged 45-54, where the mean number of days of physical activity was 4.0. (Chart 6.8).

<sup>22</sup> 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.

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



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 5 or more days of the week<sup>23</sup>. Thirty eight per cent of respondents in Scotland reported that they had taken part in 30 minutes or more moderate physical activity on five or more days in the last week<sup>24</sup>.

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. All respondents provided a height measurement, and 97% gave a weight measurement, so BMI was calculated for 97% of respondents. Where BMI was calculated, 3% of respondents had a BMI of less than 18.5 (underweight), 41% had a BMI between 18.5 and 25 (healthy weight), 35% had a BMI of 25-30 (overweight), and 21% had a BMI over 30 (obese).

<sup>23</sup> 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](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4080994)

<sup>24</sup> 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 Scottish Health Survey (SHeS) be used for national estimates of physical activity.

## 6.5 Comparisons between Scotland and the rest of the UK

Levels of agreement with statements about healthy eating were similar across the UK, with no significant differences between Scotland and England and Wales. There were a few key exceptions in Northern Ireland. Table 6.2 gives the summary of the percentages agreeing (either 'definitely agree' or 'tend to agree') across the four regions.

Table 6.2 *Attitudes towards healthy eating in Scotland and the rest of the UK*

% agreeing	<b>Scotland</b>	England	Wales	Northern Ireland
	%	%	%	%
Even if you don't have a really healthy diet, it's worth making small changes	<b>93</b>	94	92	95
What you eat makes a big difference to how healthy you are	<b>89</b>	92	89	92
People think more about their weight than about how healthy they are	<b>84</b>	85	83	87
I enjoy eating healthy foods	<b>83</b>	83	87	85
Experts contradict each other over what foods are good for you	<b>74</b>	72	84	79
The tastiest foods are the ones that are bad for you	<b>50</b>	48	56	69
The main reason for people to eat a more healthy diet is to lose weight	<b>44</b>	44	49	62
I get confused over what's supposed to be healthy	<b>33</b>	30	38	41
I am fed up with experts telling me what I should eat	<b>50</b>	47	56	41
As long as you take enough exercise you can eat whatever you want	<b>28</b>	27	27	31
I don't really think about what I eat	<b>24</b>	21	22	26
Good health is just a matter of good luck	<b>16</b>	15	17	22
If you are not overweight you can eat whatever you like	<b>16</b>	18	23	20

Source: Q2.16

Base (unweighted): 3136

When it comes to the perception of the diet eaten at home, a slightly smaller proportion in Scotland (83%) and Wales (82%) described it as healthy than in both Northern Ireland and England where 86% said that the food they usually eat at home was either very or fairly healthy.

# Annex A – Methodology

## Introduction

The Food and You survey comprised a total of 3,163 interviews with adults (aged 16+, with no upper age limit) across the UK. The samples were boosted in Scotland and Northern Ireland, to enable more detailed in-house analysis at a country level.

The total number of interviews achieved was:

- 2,025 in England,
- 121 in Wales,
- 511 in Scotland and
- 506 in Northern Ireland.

At the analysis stage, corrective weighting was applied so that the weighted sample was representative of the UK as a whole.

## The sample

The survey sample was a stratified random probability sample of private households in the UK. 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). The Postcode Address File (PAF) was used as a sampling frame. The PAF lists all known UK postcodes and addresses and is the sampling frame commonly used in general population surveys. 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 Primary Sample Units (PSUs) were postcode sectors. Sectors with fewer than 500 addresses were grouped with neighbouring sectors prior to stratification.

An initial sample was drawn of 170 PSUs in England and Wales, 39 in Scotland and 39 in Northern Ireland. 25 addresses were sampled per PSU. As survey response rates were lower than anticipated, an additional 16 PSUs in England and Wales, and 7 in Scotland, was subsequently selected. The final number of PSUs was therefore 186 in England and Wales, 46 in Scotland and 39 in Northern Ireland.

A total of 6,775 addresses was issued to interviewers (4,650 in England and Wales, 1,150 in Scotland and 975 in Northern Ireland).

## **Questionnaire development**

Extensive development work was carried out to develop the questionnaire and survey procedures.

Prior to commissioning the survey, the FSA undertook a scoping study to review existing research (predominately quantitative) covering food issues to assess what could be learnt from the existing research, minimise duplication and help inform question development for Food and You<sup>25</sup>.

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.

Initial qualitative work was conducted by the consortium to fill gaps in existing research around some of the subject areas to be covered in the survey (in particular, the food safety topics) and to ensure that the questionnaire would be drafted at the correct level for respondents in terms of knowledge and language. The qualitative research included eight focus groups and a depth interview and kitchen exploration with one participant from each of the focus groups.

Draft survey questions were cognitively tested to ascertain whether the questions were working as intended, and to ensure respondents were able to answer them accurately. The cognitive testing also highlighted any ambiguous question wording, which was subsequently amended. Cognitive testing was carried out with 60 respondents in two locations.

A sample of draft questions were also included on TNS's Omnibus survey to check whether measures designed to test attitudes were able to discriminate appropriately and that they produce quantitatively credible results. This led to a number of attitudinal statements being removed from the survey.

A dress-rehearsal pilot was conducted among 49 respondents in February 2010 to fully test the questionnaire and survey procedures.

## **Questionnaire content**

In order to cover more topics within the questionnaire, three sections were rotated, that is, each asked of a random third of respondents.

The topics included in the questionnaire were as follows:

- Information about household members
- Healthy eating attitudes and behaviour

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<sup>25</sup> The scoping study report can be found at <http://www.food.gov.uk/multimedia/pdfs/foodandyouscoping.pdf>

- Knowledge of dietary recommendations
- Eating patterns (asked of random third of respondents)
- Eating out (asked of random third of respondents)
- Shopping expenditure
- Shopping habits (asked of random third of respondents)
- Food safety attitudes and behaviour
- Self-reported health, physical activity, height and weight
- Demographics

Full details of the survey methodology, and a copy of the questionnaire, are included in the Technical Report<sup>26</sup>.

## **Fieldwork**

Interviews were carried out face-to-face, using computer-assisted personal interviewing (CAPI). All interviewers were personally briefed by the research team in a half day face to face briefing meeting.

All sampled addresses were sent a letter in advance of the interviewer's visit. The letter gave a brief introduction to the survey and stressed the importance of taking part. The letter also stressed that all information would be kept confidential.

For addresses in Wales, the advance letter was provided in English and Welsh.

Respondents were offered a £10 incentive to encourage participation.

Interviews took, on average, 60 minutes to complete.

Interviews were carried out between March and August 2010.

## **Survey helpline**

A freephone survey helpline was set up at TNS-BMRB; the advance letter included the freephone number, which respondents could ring if they had any queries about the research. The helpline was answered during office hours by a member of the TNS-BMRB research team, with an answer phone operating out of hours.

An email address was also set up, allowing respondents to get in touch with the survey team with any queries.

## **Response rate**

The response rate obtained was 52% of eligible households.

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<sup>26</sup> Available at: [http://www.foodbase.org.uk/results.php?f\\_category\\_id=&f\\_report\\_id=641](http://www.foodbase.org.uk/results.php?f_category_id=&f_report_id=641)

Table A1 shows the full breakdown of responses obtained.

Table A1 Breakdown of survey responses

	<b>n</b>	<b>UK total</b>
		<b>% of in scope</b>
<b>Addresses sampled</b>	<b>6775</b>	
<b>Ineligible addresses</b>		
Not yet built/under construction	11	
Derelict/demolished	34	
Vacant/empty housing unit	394	
Non-residential address	90	
Communal establishment/institution	16	
Not main residence	54	
Other ineligible	29	
Nobody aged 16 or above at address	3	
<b>Total ineligible</b>	<b>631</b>	
<b>Unknown Eligibility</b>		
Inaccessible/not attempted	19	
Unable to locate address	29	
<b>Total unknown eligibility</b>	<b>48</b>	
<b>In scope addresses</b>	<b>6095</b>	<b>100%</b>
<b>No contact</b>		
No contact with anyone at the address	200	
Contact made but not with responsible adult	3	
No contact with selected respondent	49	
Needed parental permission but no contact with parent	1	
<b>Total no contact</b>	<b>253</b>	<b>4%</b>
<b>Refusal</b>		
Parental permission refused	2	
Office refusal	152	
Info about dwellings or occupants refused	832	
Refusal before interview	1032	
Proxy refusal	155	
<b>Total refusal</b>	<b>2173</b>	<b>36%</b>
<b>Other unproductive</b>		
Broken appointment	108	
Person ill at home during survey period	49	
Selected person away or in hospital	102	
Physically or mentally unable	89	
Inadequate English	58	
Other unproductive	93	
<b>Total other unproductive</b>	<b>483</b>	<b>8%</b>
<b>Interview completed</b>	<b>3164</b>	<b>52%</b>



## Data preparation and outputs

As the main interviews were conducted via computer assisted personal interviewing (CAPI), there was no need for data entry. Routine data editing was also not required, since the electronic script automatically guides the interviewer to the correct questions.

Where questions allowed interviewers to enter an “other” answer, these answers were examined to determine whether they could be back-coded into one of the pre-codes. If these answers did not fit into any of the existing codes and similar themes were coming up, then new codes were raised; otherwise the answers were kept as “others”.

Respondents were asked about the industry they worked in and their occupation. For those not currently working this was asked about their most recent job. For those with more than one job, details were collected about their main job. Where the respondent was not the Household Reference Person (HRP), occupation details for the HRP were also collected.

The occupations of respondents and HRPs were coded to sub-major groups using the Standard Occupational Classification (SOC 2000).

Occupation coding was carried out using the automated coding program CASCOT<sup>27</sup>, developed by the Institute for Employment Research at the University of Warwick.

The National Statistics Socio-Economic Classification (NS-SEC) was derived and added to the dataset.

Further details of the coding system and codes can be obtained from the Office for National Statistics<sup>28</sup>.

An SPSS data file has been provided to the FSA. The dataset is archived at the UK Data Archive<sup>29</sup>.

## Weighting

Weighting was necessary to correct for unequal probabilities of selection and also to compensate differential non-response across survey sub-groups.

Weights were calculated separately for Scotland, Northern Ireland and England and Wales.

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<sup>27</sup> For more information on CASCOT see <http://www2.warwick.ac.uk/fac/soc/ier/publications/software/cascot/>

<sup>28</sup> <http://www.statistics.gov.uk/default.asp>

<sup>29</sup> <http://www.data-archive.ac.uk/>

Design weights were applied to correct for the unequal probabilities of selection introduced by selecting one adult for interview from all adults in the household. For the UK weight, the design weight corrected the over-representation of Scotland and Northern Ireland relative to England and Wales (as boost samples were drawn in those countries).

The achieved sample profile was compared within country with Labour Force Survey (LFS) data for working status by sex, age group and sex. In England and Wales, Government Office Region was also compared.

Rim weighting was applied with targets for working status by sex, age group and sex within Northern Ireland and Scotland; in England and Wales, there was an additional target for Government Office Region.

Finally the countries were scaled to their due proportion to calculate a combined UK weight.

Tables A2-A5 show the profile of the unweighted and weighted survey samples by country and in total compared with the LFS, for a range of variables.

Table A2 LFS targets, weighted and unweighted samples – England and Wales

	LFS data		Food and You unweighted sample		Food and You sample, weighted by Country weight	
	%	n	%	n	%	
<b>England and Wales</b>	100.0	2146	100.0	2146	100.0	
<b>Working status by sex</b>						
Men in full time work	22.7	429	20.0	486	22.7	
Men not full time in work	26.2	478	22.3	561	26.2	
Women in work	24.7	579	27.0	529	24.7	
Women not in work	26.5	660	30.8	569	26.5	
<b>Age by sex</b>						
Men aged 16-24	7.6	82	3.8	163	7.6	
Men aged 25-44	17.1	290	13.5	368	17.1	
Men aged 45-59	11.8	203	9.5	252	11.7	
Men aged 60+	12.4	332	15.5	265	12.4	
Women aged 16-24	7.3	113	5.3	156	7.3	
Women aged 25-44	17.3	424	19.8	371	17.3	
Women aged 45-59	12.1	272	12.7	259	12.1	
Women aged 60+	14.6	430	20.0	313	14.6	
<b>GOR</b>						
1.00 North East	4.8	111	5.2	103	4.8	
2.00 North West	12.6	264	12.3	271	12.6	
3.00 Yorkshire & Humberside	9.6	236	11.0	206	9.6	
4.00 East Midlands	8.2	185	8.6	176	8.2	
5.00 West Midlands	9.9	230	10.7	212	9.9	
6.00 East of England	10.5	204	9.5	224	10.5	
7.00 London	14.1	257	12.0	302	14.1	
8.00 South East	15.3	321	15.0	328	15.3	
9.00 South West	9.7	217	10.1	207	9.7	
10.00 Wales	5.5	121	5.6	118	5.5	

Table A3 LFS targets, weighted and unweighted samples – Scotland

	LFS data	Food and You unweighted sample		Food and You sample, weighted by Country weight	
	%	n	%	n	%
<b>Scotland</b>	100.0	511	100.0	511	100.0
<b>Working status by sex</b>					
Men in full time work	23.3	100	19.6	119	23.3
Men not full time in work	24.5	106	20.7	125	24.5
Women in work	26.3	141	27.6	134	26.3
Women not in work	25.9	164	32.1	132	25.9
<b>Age</b>					
16 - 24	14.6	46	9.0	74	14.6
25 - 44	32.7	162	31.7	167	32.7
45 - 59	25.5	140	27.4	130	25.5
60+	27.2	163	31.9	139	27.2
<b>Sex</b>					
Male	47.8	206	40.3	244	47.8
Female	52.2	305	59.7	267	52.2

Table A4 LFS targets, weighted and unweighted samples – Northern Ireland

	LFS data	Food and You unweighted sample		Food and You sample, weighted by Country weight	
	%	n	%	n	%
<b>Northern Ireland</b>	100.0	506	100.0	506	100.0
<b>Working status by sex</b>					
Male full time working	19.9	80	15.8	101	19.9
Male not full time	28.6	106	20.9	145	28.6
Female working	23.6	140	27.7	119	23.6
Female not working	27.9	180	35.6	141	27.9
<b>Age</b>					
16 - 24	16.8	43	8.5	85	16.8
25 - 44	35.4	171	33.8	179	35.4
45 - 59	23.8	124	24.5	121	23.8
60+	24.0	168	33.2	121	24.0
<b>Sex</b>					
Male	48.5	186	36.8	245	48.5
Female	51.5	320	63.2	261	51.5

Table A5 LFS targets, weighted and unweighted samples – UK

	LFS data		Food and You unweighted sample		Food and You sample, weighted by UK weight	
	%	n	%	n	%	
England and Wales	88.7	2146	67.8	2806	88.7	
1.00 North East	4.2	111	3.5	134	4.2	
2.00 North West	11.2	264	8.3	355	11.2	
3.00 Yorkshire and Humberside	8.5	236	7.5	269	8.5	
4.00 East Midlands	7.3	185	5.8	230	7.3	
5.00 West Midlands	8.8	230	7.3	277	8.8	
6.00 East of England	9.3	204	6.4	293	9.3	
7.00 London	12.5	257	8.1	394	12.5	
8.00 South East	13.6	321	10.1	429	13.6	
9.00 South West	8.6	217	6.9	271	8.6	
10.00 Wales	4.9	121	3.8	154	4.9	
Scotland	8.5	511	16.2	269	8.5	
Northern Ireland	2.8	506	16.0	89	2.8	
<b>Working status by sex</b>						
Male full time working	22.6	609	19.3	716	22.6	
Male not full time	26.1	690	21.8	825	26.1	
Female working	24.8	860	27.2	784	24.8	
Female not working	26.5	1004	31.7	838	26.5	
<b>Age</b>						
16 - 24	14.9	284	9.0	470	14.9	
25 - 44	34.3	1047	33.1	1085	34.3	
45 - 59	24.0	739	23.4	758	24.0	
60+	26.9	1093	34.6	850	26.9	
<b>Sex</b>						
Male	48.7	1299	41.1	1541	48.7	
Female	51.3	1864	58.9	1622	51.3	
Total	100.0	3163	100.0	3163	100.0	