

The 2014

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Survey

Scotland Bulletin 5  
Advice on healthy eating

The 2014

# Scotland Bulletin 5 Advice on healthy eating

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# Official Statistics

The statistics presented in this bulletin meet the requirements of the UK Code of Practice for Official Statistics.<sup>1</sup>

Further information on Official Statistics can be found on the UK Statistics Authority website.<sup>2</sup>

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<sup>1</sup> <http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html>

<sup>2</sup> <http://www.statisticsauthority.gov.uk/national-statistician/types-of-official-statistics/index.html>

# Foreword

This bulletin presents a descriptive overview of selected findings from Wave 3 of the Food and You survey for Scotland, commissioned by the Food Standards Agency (FSA or the Agency). Much of the Agency's work with the public is concerned with informing and influencing the ways in which food is purchased, stored, prepared and consumed. Food and You provides data about the prevalence of different reported behaviours, attitudes and knowledge relating to these topics.

Waves 1 and 2 of the Food and You survey were carried out in 2010 and 2012 respectively. Wave 3 was conducted in 2014 and consisted of 3,453 interviews from a representative sample of adults aged 16 and over across the UK, including 475 interviews in Scotland on which this report is based. Wave 3 builds on and extends the previous findings.

The key findings for Scotland from Wave 3 have been published in six separate bulletins, one for each of the following main topics:

- Eating, cooking and shopping
- Food safety in the home
- Eating outside the home
- Experience of food poisoning and attitudes towards food safety and food production
- Advice on healthy eating
- Eating and health

In addition to the bulletins, an executive summary has been published which presents key findings for Scotland from across the entire survey.

This bulletin provides a descriptive overview of the key findings for Scotland from Wave 3 in relation to advice on healthy eating.

## Background and objectives

### Role of the FSA and FSAS

The FSA was created in 2000 as a non-ministerial, independent government department governed by a Board whose members have extensive knowledge and experience in a wide range of sectors relevant to the FSA. 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.

The FSA is responsible for food safety and hygiene across the UK, and is committed to ensuring the general public can have trust and confidence in the food they buy and eat. The FSA in Scotland is additionally responsible for nutrition policy and food labelling.

In providing guidance on food safety to consumers, the Agency aims to minimise the risk of food poisoning. Advice generally relates to four aspects of food hygiene: cleaning, cooking, avoiding cross-contamination and chilling (collectively known as the '4 Cs'), with advice provided on each aspect. Guidance is also given on the use of date labels (such as 'use by' and 'best before' dates) and storage instructions on foods to help ensure the safety of food eaten at home.

The Food Standards Agency in Scotland is also tasked with the provision of diet and nutrition advice to encourage healthier eating. The FSA in Scotland will become a devolved public food body for Scotland on 1 April 2015, and will be renamed Food Standards Scotland. Its remit will remain broadly the same but with a particular focus on the needs of the Scottish nation.

## The Food and You survey

In 2009, the FSA commissioned a consortium comprising TNS BMRB, the Policy Studies Institute (PSI) and the University of Westminster to carry out Wave 1 of Food and You. The main aim of this survey was to collect quantitative information as a baseline on the UK public's reported behaviour, attitudes and knowledge relating to food issues (such as food safety and healthy eating). The results from this survey provided an extensive evidence base to support policy making at the FSA and across other government departments.

Waves 1 and 2 of the Food and You survey were conducted by the same consortium in 2010 and 2012 respectively. Reports of the findings and methodological details are available on the FSA website<sup>3</sup>. Specific examples of use of the findings include results from Wave 1 being used to determine the theme of the 2012 FSA Food Safety Week<sup>4</sup> and findings from Wave 2 informing FSA public campaigns on food safety. Secondary analysis of the Waves 1 and 2 data has explored domestic food safety practices<sup>5</sup> and the relationships between nutrition and food safety<sup>6</sup>. Wave 3 was carried out in 2014 by TNS BMRB.

Prior to 2010, the FSA was responsible for food safety and nutrition policy across the UK. Accordingly, Wave 1 of the Food and You survey contained questions covering both healthy eating and food safety, and the findings were reported together. During Wave 1, responsibility for nutrition policy (healthy eating) was transferred in England and Wales to the Department of Health (DH) and the Welsh Government respectively. Nutrition policy in Scotland and Northern Ireland remains the responsibility of the Agency. Waves 2 and 3, therefore, included a question module on healthy eating for respondents in Scotland and Northern Ireland, but focussed solely on food safety issues for respondents in England and Wales.

The objectives for Wave 3 of the Food and You survey were to collect quantitative information to enable the Agency to:

- Explore public understanding of, and engagement with, the Agency's aim of improving food safety
- Identify specific target groups for future interventions (e.g. those most at risk or those among whom FSA policies and initiatives are likely to have the greatest impact)
- Monitor changes over time (compared with data from Waves 1 and 2 or from other sources) in reported attitudes and behaviour
- Broaden the evidence base and develop indicators to assess progress in fulfilling the Agency's strategic plans, aims and targets.
- Assess differences between, and areas for increased focus, across the national agencies in Scotland, Wales, Northern Ireland and England.

## About this bulletin

### Self-reported behaviours

Interviews as a data collection method do not necessarily capture people's actual practices. What respondents say in interviews about what they do and think is necessarily *reported* for a number of reasons, including recall not being accurate, certain behaviours being habitual and therefore possibly difficult to recall, and desirability bias – described further below. Here self-reported behaviour is used as a proxy for actual behaviour. Where the report refers to behaviour, attitudes or knowledge, the fact that the data refer to reported behaviour must always be borne in mind.

When developing the Food and You questionnaire, it was apparent that the risk of social desirability bias was high i.e. respondents tended to answer questions based on what they thought they ought to say, rather than reflecting what they actually do, know or think. In particular, there were a number of

<sup>3</sup> The Wave 1 report can be found at: [http://www.foodbase.org.uk/admintools/reportdocuments/641-1-1079\\_Food\\_and\\_You\\_Report\\_Main\\_Report\\_FINAL.pdf](http://www.foodbase.org.uk/admintools/reportdocuments/641-1-1079_Food_and_You_Report_Main_Report_FINAL.pdf) and the Wave 2 report can be found at: [http://www.foodbase.org.uk/admintools/reportdocuments/805-1-1460\\_Wave\\_2\\_Main\\_Report.pdf](http://www.foodbase.org.uk/admintools/reportdocuments/805-1-1460_Wave_2_Main_Report.pdf)

<sup>4</sup> <http://www.food.gov.uk/news-updates/campaigns/germwatch/>

<sup>5</sup> <http://www.food.gov.uk/science/research/ssres/fs409012>

<sup>6</sup> <http://www.food.gov.uk/science/research/ssres/crosscutss/fs307014>

topics in the questionnaire for which respondents might be reluctant to report behaviour which goes against a generally well known 'best practice' (for example, not washing their hands before cooking or preparing food). The Food and You questionnaire was carefully designed to limit this as far as possible by asking questions about behaviour in specific time periods (e.g. asking whether a respondent did something 'in the last seven days' rather than 'usually') and framing questions in a neutral way.

### **Questionnaire changes between waves**

To reflect the changing responsibilities of the FSA, the focus of the survey content was changed between Wave 1 and Wave 2. To minimise any effects caused by changing the order of the questions attempts were made to keep the structure of the questionnaire as similar as possible between the waves. Despite this, the removal of the healthy eating questions in England and Wales, and further revisions of the food safety questions introduced unavoidable differences between the two waves of the survey. As the context in which survey questions are asked is known to influence the way respondents reply we cannot rule out the possibility that differences in responses between Waves 1 and 2 may have been partly or wholly because of changes to the questions. Further changes were made to the questionnaire at Wave 3. Again, whilst efforts were made to keep the structure of the questionnaire as similar as possible to the Wave 2 questionnaire, unavoidable differences were introduced between these two waves of the survey. That observed differences could be an effect of changes to the questionnaire should be kept in mind when considering the findings.

Where questions have remained consistent across the waves of the survey, statistical analysis has been used to determine whether results have changed significantly over time. Although having three data points now means it is possible to see trends starting to emerge, doing so is inevitably still tentative, whereas further waves of data collection would allow greater confidence in identifying trends.

At Wave 1 of the survey, in order to cover additional topics without over-burdening respondents, three question modules (eating arrangements, eating out and shopping patterns) were each asked of a random third of respondents. At Waves 2 and 3, all question modules were asked of all respondents. The larger sample sizes for these modules at Waves 2 and 3 mean that smaller differences observed between Waves 2 and 3 are statistically significant compared with differences between Wave 1 and Waves 2 or 3.

The Food and You Technical Report<sup>7</sup> provides a summary of questionnaire changes between Wave 2 and Wave 3.

### **Reporting conventions**

Unless stated otherwise, where comparisons are made in the text between different population groups or variables, only those differences found to be statistically significant at the five per cent level are reported. In other words, differences as large as those reported have no more than a five per cent probability of occurring by chance.

Percentages may not add to 100% as a result of rounding.

### **Topics covered**

The Food and You survey collected data on a wide range of topics. As a result it is not feasible for this series of bulletins to present detailed analysis of all of the questions. In particular, only selected socio-demographic variables have been analysed to uncover statistically significant differences. These variables were identified by the FSA as of key interest, providing the most useful information about sub-group variation at this initial stage of data analysis. The identified variables were: age, gender, and the Scottish Index of Multiple Deprivation (SIMD).<sup>8</sup> Variation by age and gender has been

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<sup>7</sup> <http://www.food.gov.uk/sites/default/files/food-and-you-2014-uk-bulletin-technical-report.pdf>

<sup>8</sup> The Scottish Index of Multiple Deprivation (SIMD) is the official measure of area deprivation in Scotland which considers deprivation across income, employment, health, education, skills and training, housing, geographic access and crime. Areas are grouped into quintiles based on their 2012 SIMD score, with quintile 1 the most deprived areas across Scotland and quintile 5 the least deprived areas.

considered across all three waves, while only Wave 3 data was examined for variation by SIMD. Full data are available in the UK Data Archive<sup>9</sup> and at data.gov.uk<sup>10</sup> for further analysis.

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<sup>9</sup> <http://www.data-archive.ac.uk/>

<sup>10</sup> <http://data.gov.uk/>

## Key Findings

- Respondents were shown a picture of 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 recommended sections on the plate to represent what they thought was the recommended balanced diet. Sixteen per cent of respondents placed all five food groups in the recommended sections of the eatwell plate. Two-thirds (67%) placed three of the five food groups in the recommended sections, nine per cent placed two food groups in the recommended sections, five per cent placed one food group in the recommended section and two per cent placed none of the food groups in the recommended sections. The foods least frequently placed in their recommended sections were protein (33%) and starchy foods (32%).
- A number of measures were included in the survey related to the Government's '8 tips for eating well' advice. Eating fruit and vegetables (82%), drinking plenty of water (81%) and eating breakfast every day (71%) were the factors most commonly rated as being very important for a healthy lifestyle. Between 60% and 70% of respondents said that it was very important to limit foods high in sugar, fat and saturated fat. Around six in ten respondents said keeping to a healthy weight (63%) or eating less salt (62%) was very important. Forty-five per cent thought that it was very important to eat fish and 26% said this about starchy foods.
- In terms of awareness of dietary guidelines, around three in ten (29%) stated that the recommended daily intake of calories for women was 2,000 calories per day, and 27% said this was 2,500 calories per day for men. Younger respondents aged 16-34 were more likely to give an answer in line with the FSA recommendations than those aged 35 or over.
- Overall, 71% of respondents stated that the recommended number of portions of fruit and vegetables to eat per day was five, compared with 86% at both Waves 1 and 2. At least six in ten respondents identified that frozen vegetables (93% compared with 82% at Wave 1), pure fruit juice (84%), dried fruit (84% compared with 77% at Wave 1), tinned fruit or vegetables (79%), fruit smoothies (75%), baked beans (63% compared with 53% at Wave 1) and pulses (62%) count towards the recommended minimum of five portions of fruit and vegetables per day, in line with FSA guidance.
- Eight per cent of respondents stated that the recommended daily intake of salt was 6g, in line with FSA recommendations. Similarly, a small proportion of respondents said that the maximum daily intake of total fat is 95g for men (reported by two per cent of male respondents) and 70g for women (seven per cent of female respondents), in line with guidance. After being told the recommended maximum daily intake of total fat, six per cent of male respondents and 12% of female respondents said the maximum daily intake for saturated fat was 30g or 20g respectively, in line with Agency recommendations.

# 1. Background

The Food Standards Agency in Scotland provides healthy eating advice through the eatwell Scotland<sup>11</sup> and eatwell every day website<sup>12</sup>.

Healthy eating advice centres on the eatwell plate<sup>13</sup> and '8 tips for eating well', including advice on eating at least five portions of fruit and vegetables a day and the recommended maximum daily intake of salt for adults. There are also guidelines on recommended maximum intakes for fat and calories.

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<sup>11</sup> [www.eatwellscotland.org](http://www.eatwellscotland.org)

<sup>12</sup> [www.eatwelleveryday.org](http://www.eatwelleveryday.org)

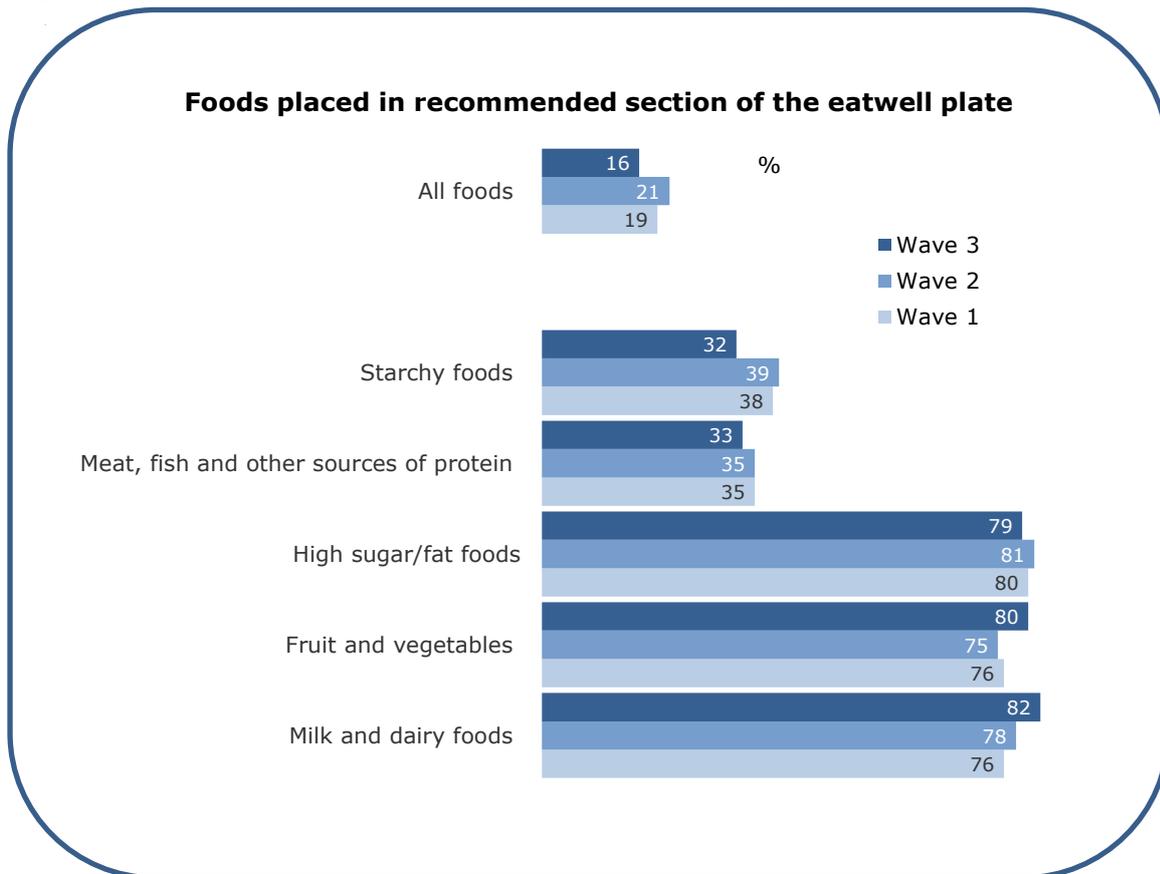
<sup>13</sup> The eatwell plate is a pictorial representation of the main food groups and their recommended proportions for a healthy and well balanced diet.

## 2. The eatwell plate

The eatwell plate illustrates the types and proportions of foods which are recommended to come from each food group 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 a small amount of foods and drinks high in fat and / or sugar. The eatwell plate is shown below:



**Figure 2.1 Eatwell plate exercise (Waves 1, 2 and 3)**



Source: H2\_17 Eatwell plate exercise

Base: All Scotland respondents - Wave 1 (511); Wave 2 (507); Wave 3 (475)

- Respondents were shown a picture of 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 sections on the plate to represent the respective proportions they thought represented the recommended balanced diet.
- Overall, 16% of respondents in Scotland placed all five food groups in the recommended sections of the eatwell plate.
- Sixty-seven per cent placed three of the five food groups in the recommended sections, and nine per cent placed two of the five food groups in the recommended sections of the eatwell plate.
- Five per cent of respondents placed one of the five food groups in the recommended section, and two per cent did not place any food groups in the recommended sections.
- Respondents were most likely to place milk and dairy foods in the recommended section of the eatwell plate (82%), this was higher than the proportion at Wave 1 (76%).
- Four-fifths of respondents (80%) placed fruit and vegetables in the recommended sections, and 79% of respondents placed high sugar or fat foods in the recommended sections.

- The foods most commonly positioned outside the recommended sections were starchy foods (68% did not place this in the recommended section, compared with 62% at Wave 1) and meat, fish and other sources of protein (67% did not place this in the recommended section).

## 3. Foods for a healthy lifestyle

### 3.1 The 8 tips for eating well<sup>14</sup>

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

#### **Tip 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'**

- Seventy-three per cent of respondents reported eating starchy foods at least once a day<sup>15</sup>. Six per cent reported eating them once or twice a week or less often.
- Twenty-six per cent said that eating foods such as bread, rice, pasta and potatoes was very important for a healthy lifestyle and a further 54% that it was fairly important<sup>16</sup>.

#### **Tip 2 - 'Eat lots of fruit and vegetables: Try to eat at least 5 portions of a variety of fruit and vegetables every day. It might be easier than you think.'**

- Sixty-five per cent of respondents reported that they ate fruit and vegetables at least once a day. Eleven per cent reported eating them once or twice a week or less often.
- Eighty-two per cent said that eating fruit and vegetables was very important for a healthy lifestyle.
- Forty-one per cent of respondents reported eating five or more portions of fruit and vegetables on the day before the interview<sup>17</sup>.

#### **Tip 3 - 'Eat more fish: Aim for at least two portions of fish a week, including a portion of oily fish.'**

- Forty per cent of respondents reported eating oily fish, 14% shellfish, and 61% other fish (excluding shellfish), at least once a week.
- Forty-five per cent reported that eating fish was very important for a healthy lifestyle, and a further 44% said it was fairly important.

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<sup>14</sup> Base for questions in this section at Wave 3: all respondents (475), all men (205), all women (270)

<sup>15</sup> QH2\_14/Q2\_14: At the moment, how often do you eat...?

<sup>16</sup> QH2\_18: Thinking about adults, how important do you think the following are for a healthy lifestyle?

<sup>17</sup> QH2\_11: Thinking just about YESTERDAY can you tell me how many portions of vegetables – including salad, fresh, frozen or tinned vegetables you ate?; QH2\_12: Thinking just about YESTERDAY did you have a portion of fruit juice (pure juice / 100% freshly squeezed / fruit smoothies / juice from concentrate BUT NOT juice based on drinks such as squash); QH2\_13: Thinking just about YESTERDAY can you tell me how many portions of fruit – fresh, frozen, tinned or dried you ate?

**Tip 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’**

- Seventy per cent of respondents reported that limiting food and drinks high in sugar was very important for a healthy lifestyle.
- Sixty-five per cent of respondents said limiting foods high in saturated fat was very important for a healthy lifestyle and 60% said this for total fat.
- Thirty per cent of respondents reported eating biscuits, pastries and cakes at least once a day, and 15% reported eating fried chips or roast potatoes at least three or four times a week.
- Seven per cent of women and two per cent of men stated a maximum recommended daily intake for total fats that was in line with Agency guidance (95g for men and 70g for women)<sup>18</sup>.

**Tip 5 - ‘Try to eat less salt: No more than 6g a day for adults’**

- Sixty-two per cent of respondents said eating less salt was very important for a healthy lifestyle.
- Respondents were asked what the maximum recommended intake of salt per day is for adults<sup>19</sup>. Eight per cent of respondents stated a maximum daily intake of salt for adults in line with Agency guidance (6g). Sixteen per cent stated a maximum daily intake which was above Agency guidance. Just under a half (48%) gave an answer below Agency guidance and 27% said that they did not know what the recommended maximum daily intake of salt was.

**Tip 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.’**

- Sixty-three per cent of respondents said keeping to a healthy weight was very important for a healthy lifestyle.
- Twenty-nine per cent stated the recommended maximum daily intake of calories for women was 2000 calories per day, and 27% said this was 2500 calories per day for men, in line with FSA guidance<sup>20</sup>.

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<sup>18</sup> QH2\_27: It is recommended that we should eat no more than a certain amount of fat each day. How much fat – in grams – do you think an average [CHANGE TEXT DEPENDING ON GENDER OF RESPONDENT] man / woman should eat per day?

<sup>19</sup> QH2\_30: It is recommended that we should eat no more than a certain amount of salt each day. How much salt do you think this is for adults?

<sup>20</sup> QH2\_25: Health experts make recommendations about the number of calories the average person should eat. Can you tell me what you think is the recommended number of calories average women should eat a day?;  
QH2\_26: Health experts make recommendations about the number of calories the average person should eat. Can you tell me what you think is the recommended number of calories average men should eat a day?

**Tip 7 - 'Drink plenty of water: We should aim to drink at least 6 to 8 glasses (1.2 litres) of water per day'**

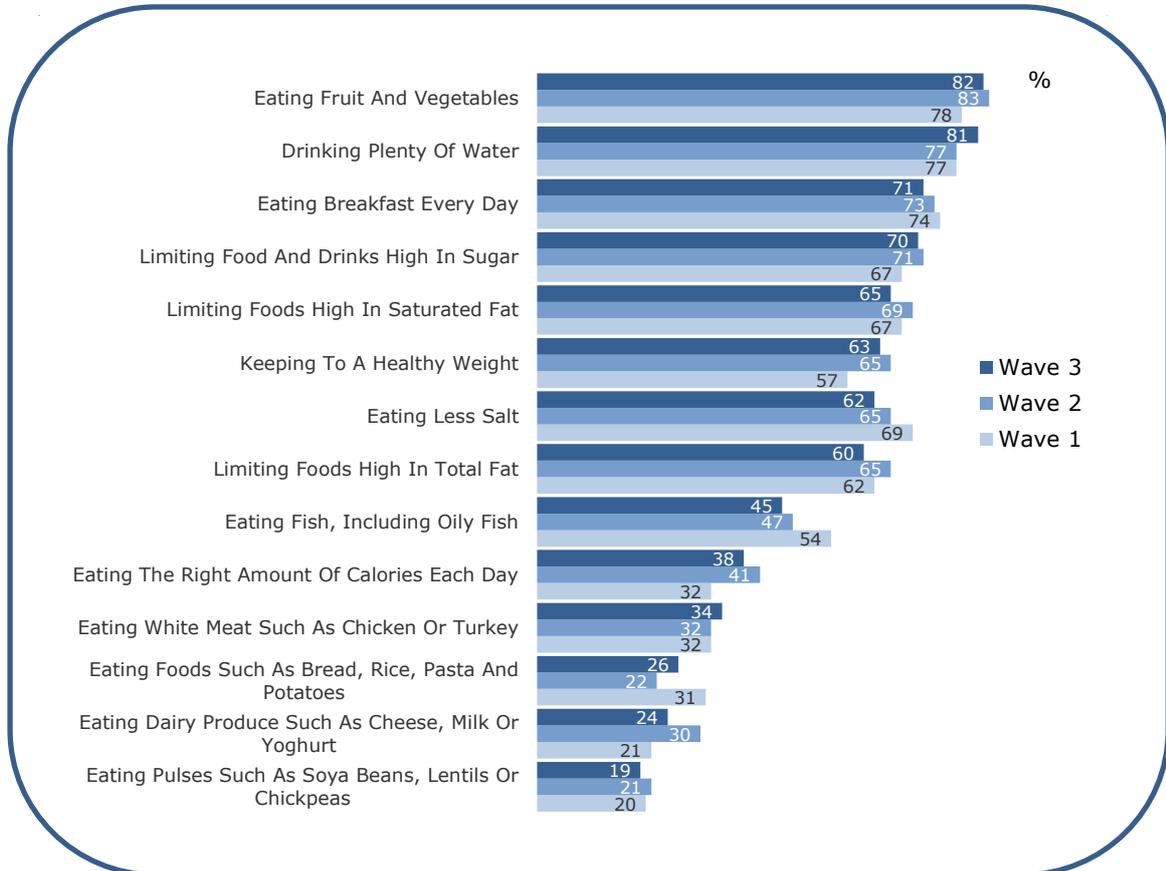
- Eighty-one per cent of respondents said that it was very important to drink plenty of water for a healthy lifestyle.

**Tip 8 - 'Don't skip breakfast'**

- Seventy-one per cent of respondents said that it was very important for a healthy lifestyle to eat breakfast every day.

### 3.2 Importance of different factors for a healthy lifestyle

**Figure 3.1 Percentage of respondents answering that listed factors were ‘very important’ for a healthy lifestyle (Waves 1, 2 and 3)**



Source: H2\_18 Thinking about adults, how important do you think the following are for a healthy lifestyle...

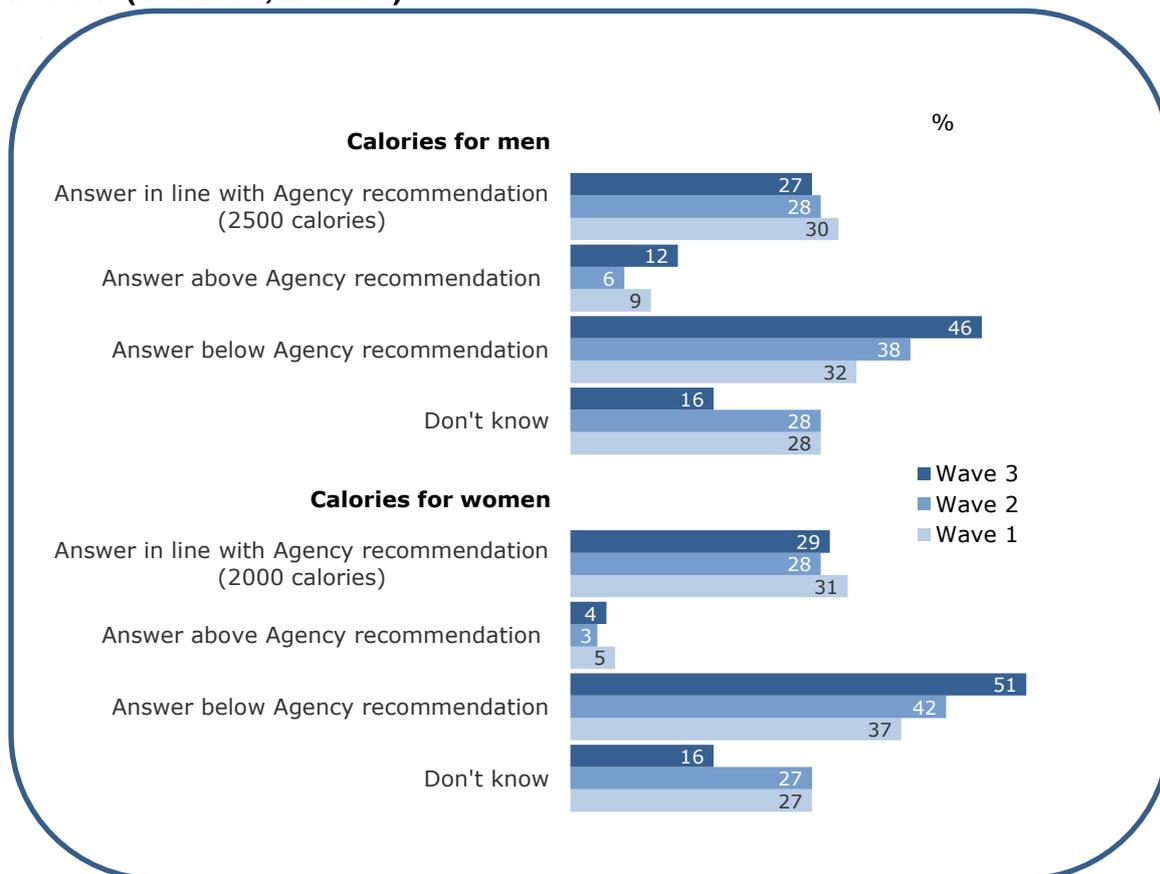
Base: All Scotland respondents - Wave 1 (511); Wave 2 (507); Wave 3 (475)

- All respondents were asked, in turn, to say how important they thought a variety of factors were for a healthy lifestyle. These covered eating different foods such as fruit and vegetables, as well as other lifestyle factors such as keeping to a healthy weight.
- Eating fruit and vegetables (82% of respondents) and drinking plenty of water (81%) were the factors most commonly rated as being very important for a healthy lifestyle.
- Respondents were less likely to rate eating other particular groups of food as being very important, such as eating fish (45%), eating white meat (34%) and eating dairy produce (24%).
- For most factors, there was little statistically significant difference across the waves. However, respondents at Wave 3 were less likely than those at Wave 1 to report that eating fish, including oily fish, was an important factor for a healthy lifestyle (54% at Wave 1 compared with 45% at Wave 3).

# 4. Awareness and understanding of recommended daily amounts

## 4.1 Calories

**Figure 4.1 Awareness of recommended number of daily calories for men and women (Waves 1, 2 and 3)**



Source: H2\_25 Can you tell me what you think is the recommended number of calories average women should eat a day? & H2\_26 Can you tell me what you think is the recommended number of calories average men should eat a day?

Note: responses were given spontaneously, with no prompted response list shown to respondents

Base: All Scotland respondents - Wave 1 (511); Wave 2 (507); Wave 3 (475)

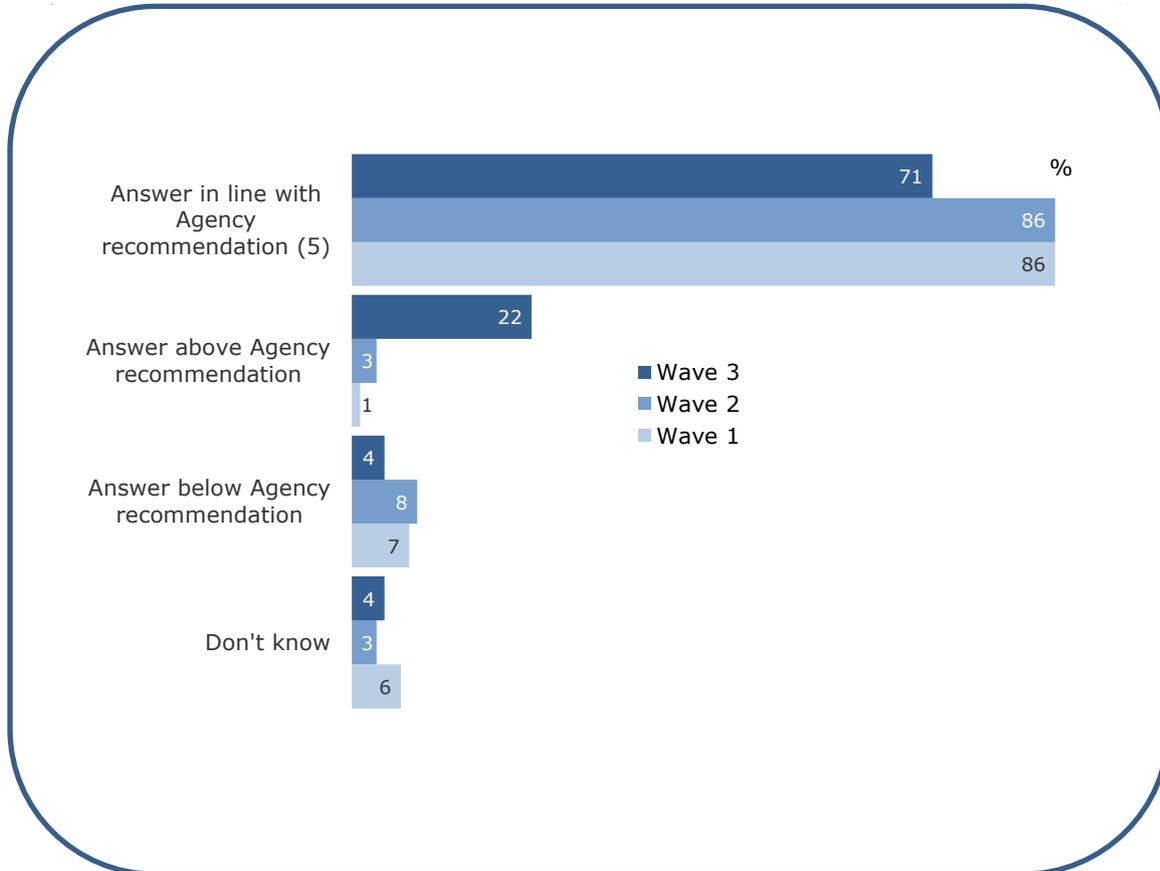
**The FSA recommends that the average man should consume around 2,500 calories a day and the average woman around 2,000 calories a day.**

- Around three in ten respondents reported the recommended number of daily calories in line with Agency guidance; 29% of respondents reported the recommended number of calories for women and 27% did so for men.
- Respondents were most likely to report that the recommended number of calories was lower than that recommended by the Agency. Forty-six per cent of respondents reported that the recommended number of daily calories for men was below 2500 calories and 51% reported that the recommended number of daily calories for women was less than 2000 calories.

- The proportion of respondents giving answers below the recommended level for both men and women was higher than at Wave 1 (46% for men and 51% for women at Wave 3, compared with 32% and 37% respectively at Wave 1). The proportion at Wave 3 who said they did not know was lower than at earlier waves (16% for men compared with 28% at Waves 1 and 2, and 16% for women compared with 27% at Waves 1 and 2).

## 4.2 Fruit and vegetables

**Figure 4.2 Awareness of recommended daily intake of fruit and vegetables (Waves 1, 2 and 3)**



Source: H2\_9 How many portions of fruit and vegetables do you think that health experts recommend people should eat every day?<sup>21</sup>

Note: responses were given spontaneously, with no prompted response list shown to respondents

Base: All Scotland respondents - Wave 1 (511); Wave 2 (507); Wave 3 (475)

### **The FSA recommends that people should aim to eat at least five portions of fruit and vegetables every day.**

- Overall, 71% of respondents stated that the recommended number of portions of fruit and vegetables to consume per day was five, compared with 86% at Waves 1 and 2.
- Most of those who gave an answer that was not in line with Agency guidance said that the recommended number of portions was above five (22%), this proportion was greater at Wave 3 than at Waves 1 and 2 (one per cent and three per cent respectively). A small proportion of respondents (four per cent) said the recommended number of portions was less than five, and four per cent of respondents reported that they did not know the recommended number.

<sup>21</sup> In the questionnaire these questions were asked after the questions about awareness and consumption, in order to avoid influencing respondents' answers.

**Table 4.1 Awareness of foods that can count towards ‘5 a day’ (Waves 1, 2 and 3)**

<b>% who said food counted towards ‘5 a day’</b>	<b>Wave 1</b>	<b>Wave 2</b>	<b>Wave 3</b>
<b>Foods that count as a portion of fruit and vegetables:</b>			
Frozen vegetables	82%	90%	93%
Pure fruit juice	92%	93%	84%
Dried fruit	77%	85%	84%
Tinned fruit or vegetables	75%	85%	79%
Fruit smoothies	77%	78%	75%
Baked beans	53%	70%	63%
Pulses	54%	64%	62%
<b>Foods that do not count as a portion of fruit and vegetables:</b>			
Jacket potato	68%	68%	69%
Rice	25%	28%	20%
Jam	16%	21%	17%

Source: H2\_10 Do you think these foods can be counted towards the daily fruit and vegetable intake?

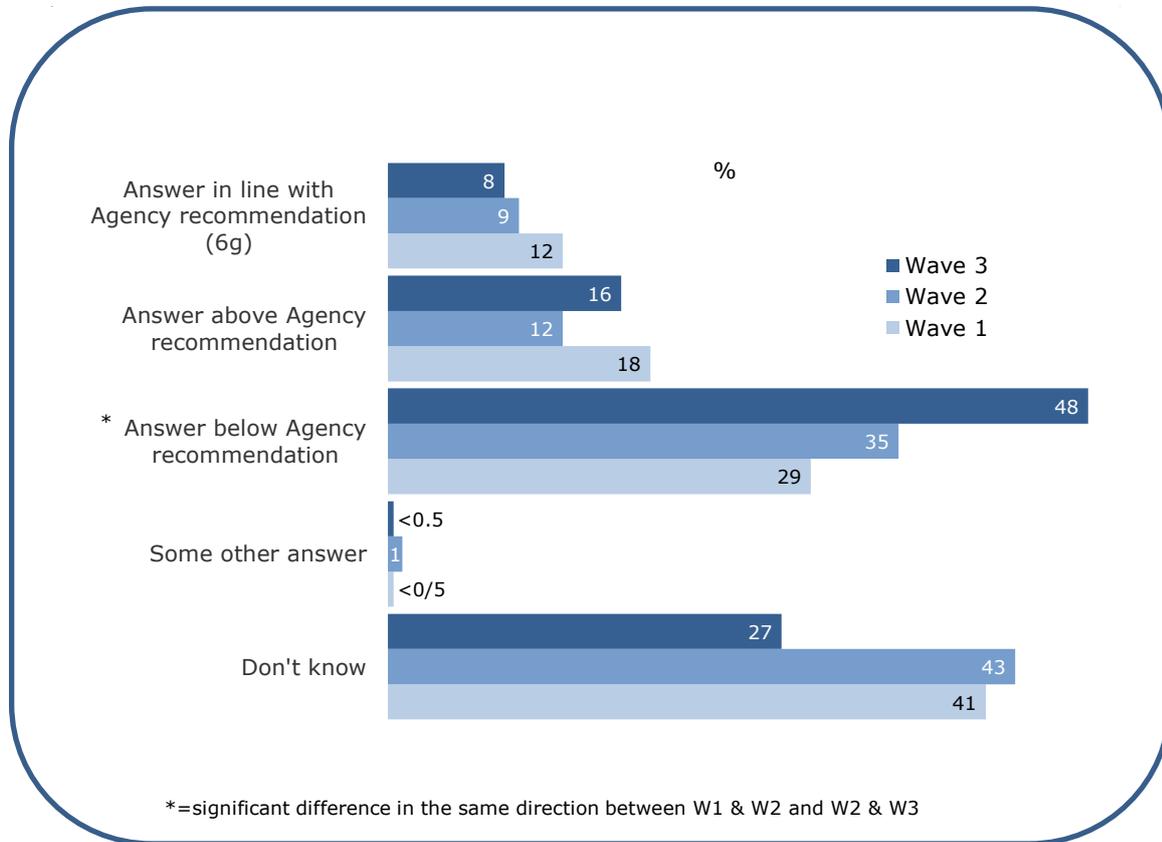
Note: respondents were able to give multiple answers at H2\_10

Base: All Scotland respondents - Wave 1 (511); Wave 2 (507); Wave 3 (475)

- The majority of respondents said, in line with FSA guidance, that frozen vegetables (93%), pure fruit juice (84%), dried fruit (84%) tinned fruit or vegetables (79%), fruit smoothies (75%), baked beans (63%) and pulses (62%) could count towards ‘5 a day’.
- Sixty-nine per cent of respondents said that a jacket potato would count towards the ‘5 a day’. This, along with jam and rice, are not items classified as portions of fruit and vegetables (they do not count towards ‘5 a day’).
- Twenty per cent of respondents reported that rice, and 17% reported that jam would count towards the recommended daily intake.
- At Wave 3 a greater proportion of respondents stated, in line with Agency recommendations, that baked beans, frozen vegetables and dried fruit can count towards the five a day target compared with respondents at Wave 1.

### 4.3 Salt

**Figure 4.3 Awareness of recommended maximum adult daily intake of salt (Waves 1, 2 and 3)**



Source: H2\_30 It is recommended that we should eat no more than a certain amount of salt each day. How much do you think this is for adults?

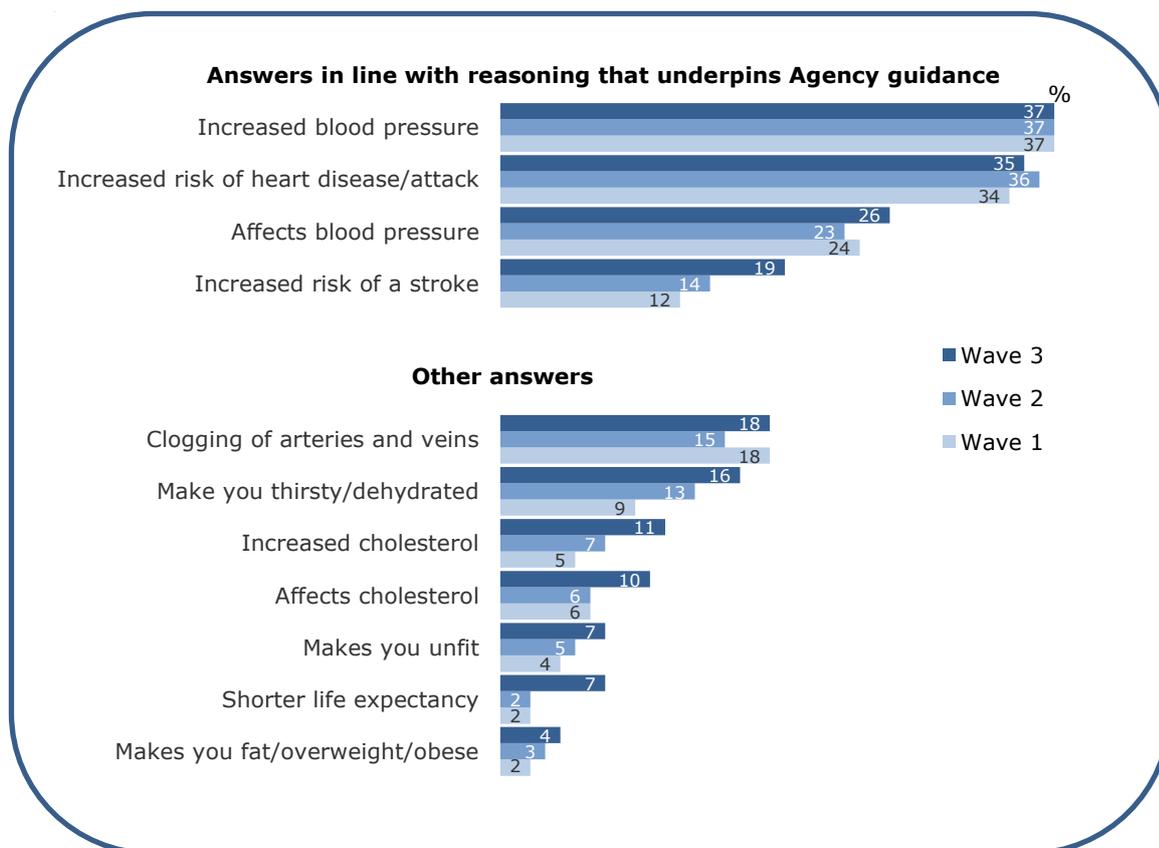
Note: responses were given spontaneously, with no prompted response list shown to respondents

Base: All Scotland respondents - Wave 1 (511); Wave 2 (507); Wave 3 (475)

#### **The FSA recommends that adults should consume no more than 6g of salt a day.**

- Eight per cent of respondents stated, in line with the Agency’s recommendation, that the maximum daily intake of salt should be 6g.
- The largest proportion of respondents gave an answer that was below the Agency recommendation (48%). This was greater than the proportion that did so at Waves 1 (29%) and 2 (35%). Twenty-seven per cent said that they did not know the maximum recommended intake, compared with 41% at Waves 1 and 43% at Wave 2.
- The proportion of respondents who gave an answer above the recommended level (16%) was similar to that at Waves 1 (18%) and 2 (12%).

**Figure 4.4 Awareness of the effects eating too much salt can have on health (Waves 1, 2 and 3)**



Source: H2\_32 What effects do you think eating too much salt can have on your health? Responses given by four per cent or more at Wave 3 are shown.

Note: responses were given spontaneously, with no prompted response list shown to respondents; respondents were able to give multiple reasons.

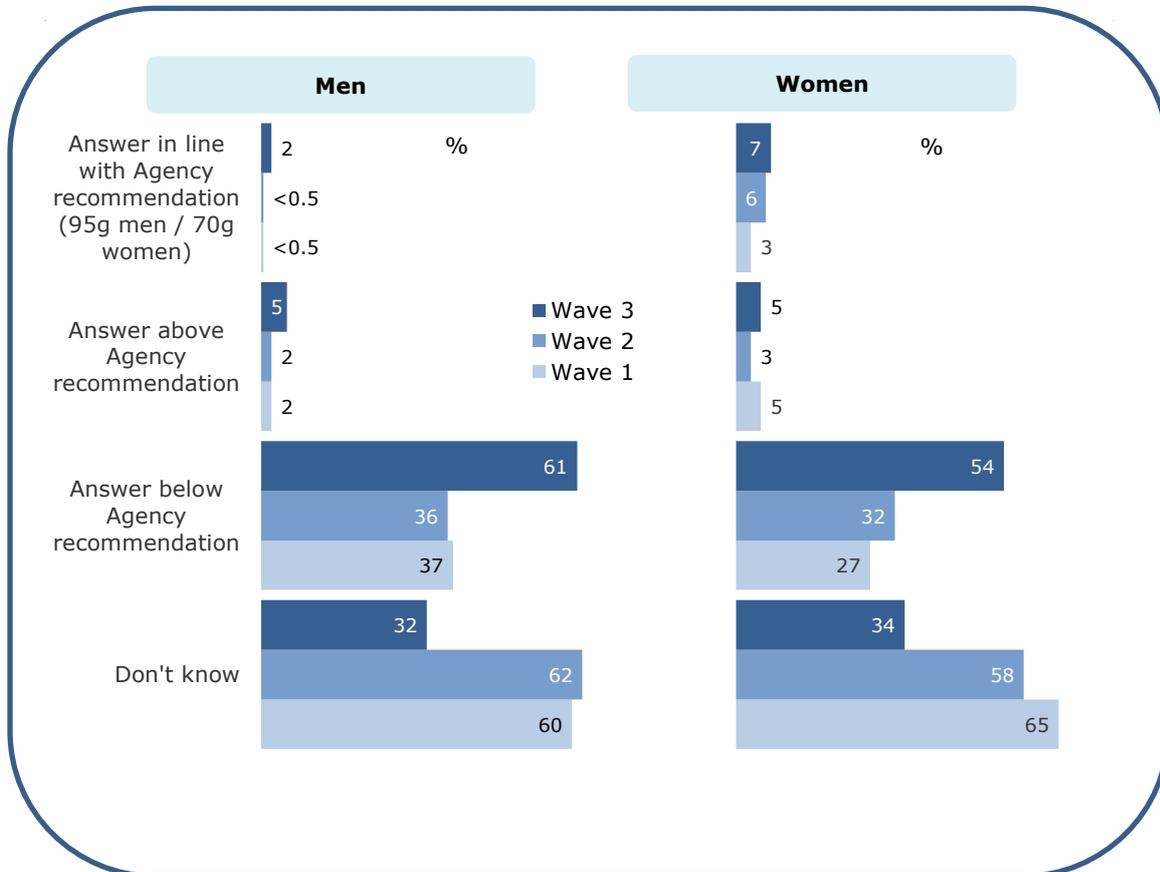
Base: All Scotland respondents - Wave 1 (511); Wave 2 (507); Wave 3 (475)

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

- Thirty-seven per cent of respondents said, in accordance with the reasoning that underpins FSA advice on daily intake of salt, that eating too much salt could increase blood pressure and a similar proportion (35%) said that it could increase the risk of heart disease.
- Around a quarter (26%) said it would affect blood pressure (without specifying that blood pressure would increase). Around a fifth (19%) reported that it could cause an increased risk of stroke (compared with 12% at Wave 1).
- Some respondents gave other answers that were not in line with the reasoning that underpins FSA advice, such as ‘affects cholesterol’ (10%) or ‘increases cholesterol’ (11%). The proportion who reported that too much salt increases cholesterol was higher than the five per cent who reported this at Wave 1.
- The most commonly reported other answer was that excess salt causes clogging of arteries and veins (reported by 18% of respondents).

## 4.4 Fat

**Figure 4.5 Awareness of recommended maximum daily intake of total fat (Waves 1, 2 and 3)**



Source: H2\_27 How much fat, in grams, do you think an average woman / man should eat a day?

Note: responses were given spontaneously, with no prompted response list shown to respondents

Base: Scotland Men - Wave 1 (206); Wave 2 (201); Wave 3 (205); Scotland Women - Wave 1 (305); Wave 2 (306); Wave 3 (270)

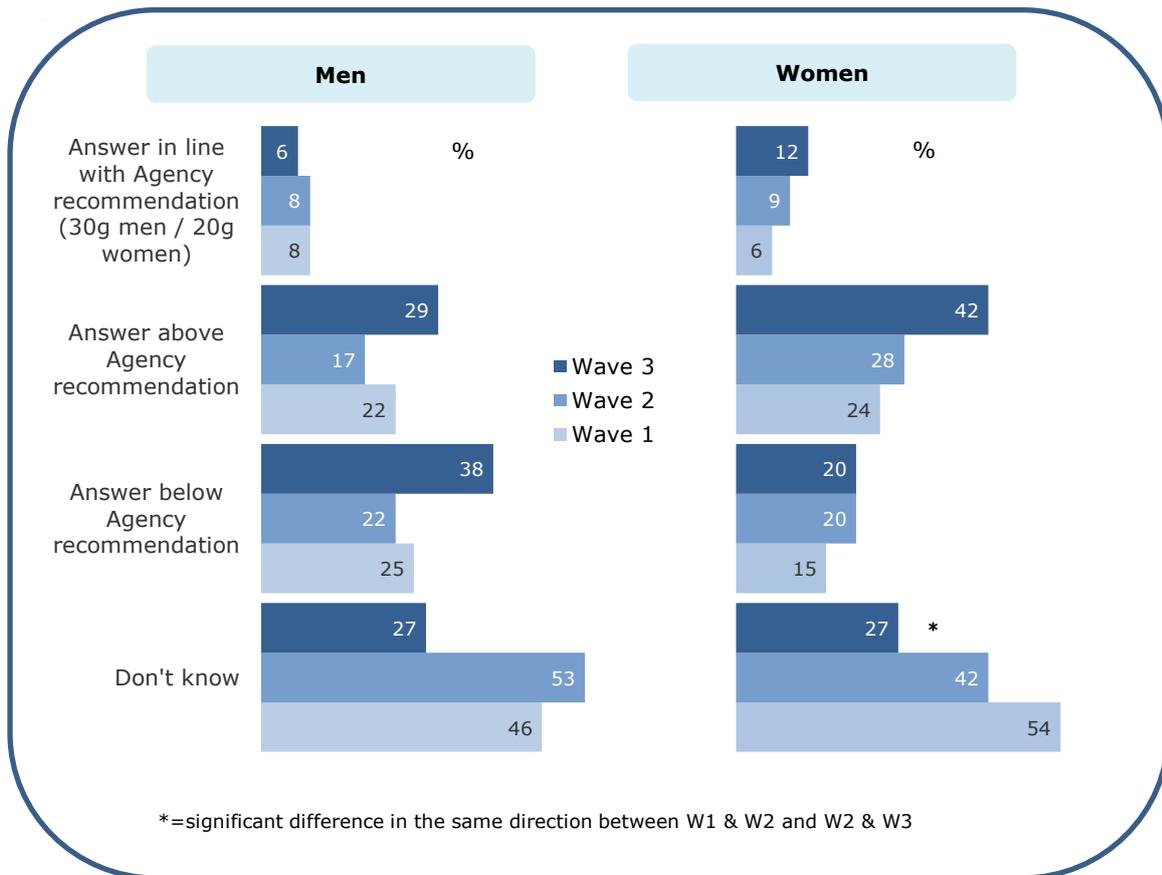
- Men were asked what they thought the recommended maximum daily intake of total fat for men was, and women were asked about the maximum daily intake of total fat for women.

**The FSA recommends that the average daily intake of total fat should not exceed 95g for a man or 70g for a woman.**

- As at Waves 1 and 2, few respondents (two per cent of men and seven per cent of women) provided answers that were in line with Agency recommendations on the recommended maximum daily intake for total fat.

- The proportion of respondents giving an answer below the Agency's recommendation was higher at Wave 3 (61% of men and 54% of women) compared with Wave 1 (37% of men and 27% of women) and Wave 2 (36% of men and 32% of women). The proportion of respondents saying that they did not know (32% of men and 34% of women) was lower at Wave 3 than at previous waves.

**Figure 4.6 Awareness of recommended maximum daily intake of saturated fat (Waves 1, 2 and 3)**



Source: H2\_28 It is recommended that the average man should eat no more than 95g of fat a day. How much of this, in grams, do you think is the maximum recommended amount of saturated fats?

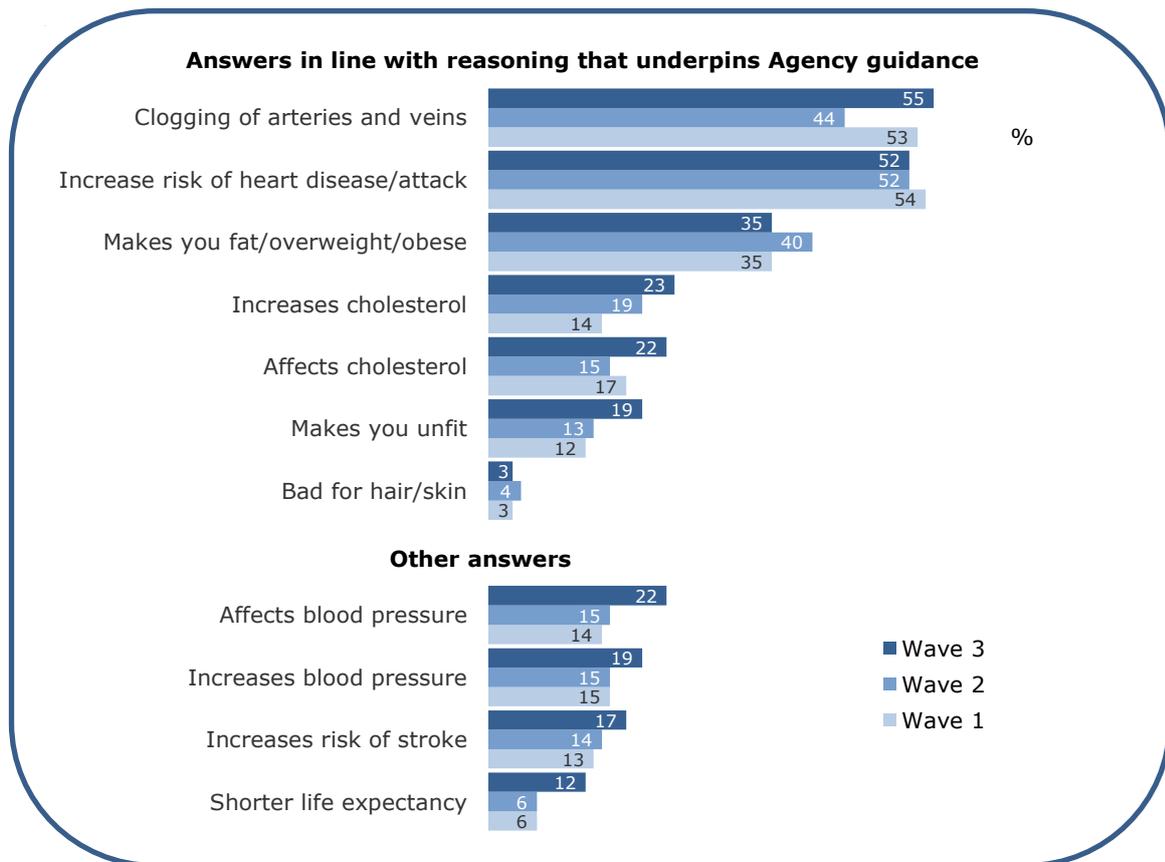
Note: responses were given spontaneously, with no prompted response list shown to respondents

Base: Scotland Men - Wave 1 (206); Wave 2 (201); Wave 3 (205); Scotland Women - Wave 1 (305); Wave 2 (306); Wave 3 (270)

**The FSA recommends that the maximum daily intake of saturated fat should not exceed 30g for a man and 20g for a woman.**

- Six per cent of men and 12% of women provided answers that were in line with Agency recommended maximum daily intake of saturated fats.
- The proportion of respondents, both men and women, who gave an answer that was above the recommended amount was higher at Wave 3 (29% of men and 42% of women) than at Wave 2 (17% of men and 28% of women). The proportion of men giving an answer that was below the recommendation was higher at Wave 3 than at Wave 2 (38% and 22% respectively). The proportion of women who said that they did not know the recommended level was lower at Wave 3 (27%) compared with Wave 2 (42%) and Wave 1 (54%). The difference between Waves 1 and 2 was also statistically significant.

**Figure 4.7 Awareness of effects of eating too much saturated fat (Waves 1, 2 and 3)**



Source: H2\_29 What effects do you think eating too much saturated fat can have on your health? All responses in line with Agency guidance and responses not in line with Agency guidance given by four per cent or more are shown.

Note: responses were given spontaneously, with no prompted response list shown to respondents; respondents were able to give multiple reasons in answer

Base: All Scotland respondents - Wave 1 (511); Wave 2 (507); Wave 3 (475)

**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.**

- Just over half of respondents reported eating too much saturated fat would increase the risk of heart disease (52%), and a similar proportion said that it would cause clogging of arteries and veins (55%). Thirty-five per cent mentioned that too much saturated fat could cause weight gain or obesity. These reasons are in line with the reasoning that underpins Agency recommendations on recommended daily intake of saturated fat.
- The most frequent other responses that were not in line with the reasoning that underpins FSA guidance were that too much saturated fat affects blood pressure (22%), increases blood pressure (19%) and increases the risk of stroke (17%).

- The proportion of respondents who stated that too much saturated fat increases cholesterol levels (23%) and makes you unfit (19%) was greater at Wave 3 than at Wave 1 (14% and 12% respectively).
- Of the other responses that were not in line with the reasoning that underpins FSA guidance, the proportion reporting that eating too much saturated fat led to a shorter life expectancy (12%) and affected blood pressure (22%) was higher than that at Wave 1 (six per cent and 14% respectively).

## 4.5 Variation in awareness of recommended daily amounts by different groups in the population<sup>22</sup>

### Variation by gender and age, including differences between the survey waves

- While at Wave 2 there was no statistically significant difference by **gender** in terms of reporting, in line with Agency recommendations, that the average recommended daily amount of calories is 2,000 for a woman and 2,500 for a man, at Wave 3 women were more likely than men to report that the recommended intake for a woman is 2,000 (37% compared with 20%). On average, men at Wave 3 gave lower values than women for the recommended amounts of calories for both genders: men gave an average value of 1,488 calories for women and 1,982 calories for men, compared with women who gave an average value of 1,684 calories for women and 2,298 calories for men.
- As at Waves 1 and 2, women were more likely than men to give the recommended daily maximum intake of fat for their gender (seven per cent compared with two per cent) but there was no statistically significant variation between men and women in awareness of the recommended daily maximum intake of saturated fat.
- There was no statistically significant variation between men and women in awareness of the recommended daily maximum intake of salt.
- At Wave 3, men were more likely than women to report that eating too much saturated fat can make you unfit (25% compared with 14%). Women were more likely to report that too much salt can affect blood pressure (31% compared with 20%). These differences were not observed at Wave 2.
- There was some variation in responses by **age**. For example, younger respondents were more likely to say that the recommended daily amount of calories for women is 2,000 (47% of those aged 16-34 gave this answer, compared with 22% of respondents aged 35 and over) and that for men it is 2,500 (41% of those aged 16-34 compared with 20% of those aged 35 and over). This observation was consistent with findings at Wave 2.
- Respondents aged 35-44 were most likely to report that excess saturated fat could cause weight gain or obesity, with 56% of this age group reporting this, compared with 32% of those aged 45 and over and 31% of those aged 16-34.
- Those aged 60 and over were more likely to say that increased blood pressure was a possible consequence of eating too much salt (41% compared with 21% of those aged 16-24), and were less likely to report an increased risk of heart disease (29% of those aged over 60 mentioned this compared with 51% of those aged 25-34).

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<sup>22</sup> The following variables were analysed to identify statistically significant differences: age, gender, Scottish Index of Multiple Deprivation.

- The proportion of respondents aged 60 and over who reported that too much saturated fat can cause 'clogging of veins and arteries' was greater at Wave 3 (56%) than at Wave 2 (42%).

### **Other variation at Wave 3**

- A small number of differences were observed by **Scottish Index of Multiple Deprivation**. Respondents from more deprived areas were less likely than those from less deprived areas to say that too much saturated fat can cause clogging of the arteries and veins (49% in quintiles one and two, compared with 63% in quintiles four and five) or obesity (24% in quintiles one and two and 42% in quintiles three to five). Those from the most deprived areas were also more likely to say that saturated fat can make you unfit (32% in quintile one, compared with 15% in quintiles two to five).
- Respondents in quintiles one and two were less likely than those in quintiles three to five to report that excess salt can increase the risk of having a stroke (13% and 23% respectively).

## 5. Comparisons between Scotland and Northern Ireland

Table 5.1 Eatwell plate exercise by country (Wave 3)

Placed in recommended section	Scotland	Northern Ireland
Starchy foods	32%	44% <sup>S</sup>
Fruit and vegetables	80%	76%
Meat, fish and other sources of protein	33%	42% <sup>S</sup>
Milk and dairy foods	82%	79%
High sugar / fat foods	79%	84%
Base	(475)	(524)

Source: H2\_17 Eatwell plate exercise

Base: All respondents

NB. S / NI indicates that the result is statistically significantly higher than the result for the country indicated by the initial

- Healthy eating questions were not included in the England and Wales surveys so comparisons in this section are only made between Scotland and Northern Ireland.
- Respondents in Scotland were less likely than those in Northern Ireland to place both starchy foods (32% compared with 44%) and meat, fish and other sources of protein (33% compared with 42%) in the recommended section of the eatwell plate.
- They were also less likely than those living in Northern Ireland to match all five foods to the recommended proportion of the eatwell plate (28% of respondents in Northern Ireland did so, compared with 16% in Scotland).
- A similar proportion of respondents in Scotland and Northern Ireland stated that the recommended daily number of portions of fruit and vegetables people should eat was five (71% and 75% respectively).
- Respondents in Scotland were more likely than those in Northern Ireland to say that dried fruit counted toward the five a day target (84% compared with 76%).
- There were no statistically significant differences between respondents in Scotland and Northern Ireland in relation to awareness of the recommended number of calories an individual should eat per day, however men in Scotland were less likely than those in Northern Ireland to say they did not know the recommended maximum intake of grams of fat (32% compared with 51%) or saturated fat (27% compared with 44%) they should eat each day.

- Respondents in Scotland were less likely than those in Northern Ireland to say that they did not know the maximum number of grams of salt that the Agency recommends per day (27% compared with 37%). The proportion of respondents in Scotland (eight per cent) who gave the recommended answer of six grams was similar to the proportion in Northern Ireland (seven per cent).