The 2014 Food and YOU Survey

England Bulletin 4
Experience of food poisoning and attitudes towards food safety and food production
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Official Statistics

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

Further information on Official Statistics can be found on the UK Statistics Authority website².

Foreword

This bulletin presents a descriptive overview of selected findings for England from Wave 3 of the Food and You survey, 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. In total 1,951 interviews were conducted in England, on which this report is based. Wave 3 builds on and extends the previous findings.

The key findings for England from Wave 3 have been published in four 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

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

This bulletin provides a descriptive overview of the key findings for England from Wave 3 in relation to experience of food poisoning and attitudes towards food safety and food production.

Background and objectives

Role of the FSA

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.

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 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
website³. Specific examples of use of the findings include results from Wave 1 being used to determine the theme of the 2012 FSA Food Safety Week⁴ 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 practices⁵ and the relationships between nutrition and food safety⁶. 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. Waves 2 and 3, therefore, focussed solely on food safety issues for respondents in England and Wales. This bulletin covers the UK wide food safety questions asked to respondents living in England. Separate bulletins have been published for each UK country, as well as a bulletin of the UK results as a whole⁷.

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.

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 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

⁴ http://www.food.gov.uk/news-updates/campaigns/germwatch/
⁵ http://www.food.gov.uk/science/research/ssres/fs409012
⁶ http://www.food.gov.uk/science/research/ssres/crosscutss/fs307014
⁷ www.food.gov.uk/food-and-you
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 in general and to the changed context resulting from removing the ‘healthy eating’ questions in particular. 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 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 among those living in England at this initial stage of data analysis. The identified variables were: age, gender, English region and Index of Multiple Deprivation (IMD). Variation by age and gender has been considered across the three waves, while only Wave 3 data was examined for variation by English region and IMD. Full data are available in the UK Data Archive and at data.gov.uk for further analysis.

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9. English region is the geographical unit formerly referred to as Government Office Region (GOR). It comprises the following nine regions, built up of complete counties/unitary authorities: North East, North West, Yorkshire and the Humber, East Midlands, West Midlands, East of England, London, South East and South West.

10. IMD is a measure of area deprivation which considers deprivation across income, employment, health and disability, education, crime, barriers to housing and services, and living environment. Areas are grouped into quintiles based on their 2010 Index of Multiple Deprivation (IMD) score, with quintile 1 the most deprived areas across England and quintile 5 the least deprived areas.


1. Food poisoning

1.1 Experience of food poisoning

Figure 1.1 Incidence of food poisoning and whether respondents saw a doctor / went to hospital (Waves 1, 2 and 3)

<table>
<thead>
<tr>
<th>Incidence of food poisoning</th>
<th>Wave 1</th>
<th>Wave 2</th>
<th>Wave 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes once</td>
<td>23</td>
<td>21</td>
<td>17</td>
</tr>
<tr>
<td>Yes more than once</td>
<td>24</td>
<td>17</td>
<td>16</td>
</tr>
<tr>
<td>I think so but I'm not sure it was food poisoning</td>
<td>54</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>No</td>
<td>56</td>
<td>56</td>
<td>55</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Whether respondents saw a doctor or went to hospital as a result of food poisoning (Wave 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

Source: Q4_28 Have you personally ever had food poisoning? & Q4_28a Thinking about the most recent occasion you had food poisoning, did you see a doctor or go to hospital because of it?

Base: Q4_28 All England respondents – Wave 1 (2,025); Wave 2 (2,116); Wave 3 (1,951); Q4_28a All England respondents who have had food poisoning in the past year – Wave 3 (133) (Q4_28a not asked at Waves 1 and 2)

- Overall, 40% of respondents reported that they had ever had food poisoning (23% once and 17% more than once).
- Fifty-four per cent of respondents reported they had never had food poisoning and six per cent said that they were not sure.
- Six per cent of respondents said they had experienced food poisoning in the last year, with one per cent reporting they had experienced it more than once during this time.
Of those who reported that they had experienced food poisoning in the last year, 19% said they had visited a doctor or gone to hospital as a result. Of those visiting a doctor, 66% (18 respondents) said that their food poisoning had been medically diagnosed. When expressed as a proportion of all respondents who said they had food poisoning in the past year, this is 12%.

Of the 18 respondents in the survey saying their food poisoning was medically diagnosed, four reported having *Escherichia coli* (*E. coli*), four reported having viral food poisoning, and two reported having campylobacter. Three respondents reported having something else. The remainder said that they did not know what it was.
As a consequence of having had food poisoning, a third (33%) of respondents reported that they had stopped eating at certain food establishments and 17% reported that they had stopped eating certain foods. Seven per cent said that they had started reading food labels more carefully.

Forty-two per cent of respondents who had experienced food poisoning reported that they had taken no action as a consequence. There were no statistically significant changes from Wave 2 in any of the actions reported.
1.2 Variation in experience of food poisoning by different groups in the population\textsuperscript{13}

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

\begin{itemize}
  \item Variation by gender in reported experience of food poisoning was apparent, with men more likely than women to report having had food poisoning more than once (21\% compared with 14\%). Similar findings were observed at Waves 1 and 2.
  
  \item There was some variation by age. Respondents aged 75 and over were least likely to report having ever experienced food poisoning (23\%)\textsuperscript{14} followed by those aged 16-24 (30\%), while 46\% of respondents aged 25-64 reported ever having had food poisoning. Similar findings were observed at Wave 1.
  
  \item Of those who reported having ever experienced food poisoning, older respondents were more likely to say they had taken no action as a result (57\% of those aged 65 and over compared with 36\% of those aged 16-44).
\end{itemize}

Other variation at Wave 3

\begin{itemize}
  \item No statistically significant variation was observed by Index of Multiple Deprivation.
  
  \item Variation was observed by region. Respondents living in London were more likely to report ever having had food poisoning (48\%) compared with those living in the North East (28\%), North West (36\%), and East Midlands (30\%).
  
  \item Among those who had ever experienced food poisoning, those living in London were least likely to say they had taken no action as a result (27\%) compared with those in the North West, the West Midlands, the East, the South East and the South West (44\% to 51\%) who were most likely to report this.
\end{itemize}

\textsuperscript{13} The following variables were analysed to identify statistically significant differences: age, gender, index of multiple deprivation and region.

\textsuperscript{14} It is thought that this may be an artefact of lower recall, whereby older respondents do not remember having had food poisoning, or association, whereby they do not think that what they experienced would be classed as food poisoning.
2. Attitudes towards food safety

2.1 Level of agreement with statements about food safety

**Figure 2.1 Attitudes towards food safety (Wave 3)**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Definitely agree</th>
<th>Tend to agree</th>
<th>Neither agree nor disagree</th>
<th>Tend to disagree</th>
<th>Definitely disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am unlikely to get food poisoning from food prepared in my own home</td>
<td>43</td>
<td>34</td>
<td>9</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Restaurants and catering establishments should pay more attention to food safety and hygiene</td>
<td>39</td>
<td>36</td>
<td>17</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>I always avoid throwing food away</td>
<td>21</td>
<td>37</td>
<td>11</td>
<td>20</td>
<td>11</td>
</tr>
<tr>
<td>A little bit of dirt won’t do you any harm</td>
<td>17</td>
<td>39</td>
<td>11</td>
<td>18</td>
<td>14</td>
</tr>
<tr>
<td>If you eat out a lot you are more likely to get food poisoning</td>
<td>10</td>
<td>32</td>
<td>23</td>
<td>25</td>
<td>9</td>
</tr>
<tr>
<td>People worry too much about getting food poisoning</td>
<td>11</td>
<td>29</td>
<td>22</td>
<td>26</td>
<td>11</td>
</tr>
<tr>
<td>It’s just bad luck if you get food poisoning</td>
<td>4</td>
<td>19</td>
<td>14</td>
<td>33</td>
<td>29</td>
</tr>
<tr>
<td>I often worry about whether the food I have is safe to eat</td>
<td>6</td>
<td>16</td>
<td>13</td>
<td>38</td>
<td>26</td>
</tr>
</tbody>
</table>

Source: Q4_27 And now I will read out a few statements people have made and would like you to tell me whether or not you agree with them?

Base: All England respondents (1,951)

- Around four in ten respondents said they definitely agreed that they were unlikely to get food poisoning from food prepared in their own home (43%), and that restaurants and catering establishments should pay more attention to food safety and hygiene (39%). Around three in four agreed\(^\text{15}\) with each statement (77% and 75% respectively).

- Around a fifth of respondents said they definitely agreed that they always avoid throwing food away (21%) and 17% definitely agreed that a little bit of dirt will not do you any harm. Over half agreed with each of these statements (58% and 56% respectively).

\(^{15}\) ‘Agreed’ includes those who responded either ‘Definitely agree’ or ‘Tend to agree’. This definition applies throughout this bulletin.
One in ten respondents (10%) definitely agreed that if you eat out a lot you are more likely to get food poisoning. Forty-two per cent of respondents agreed with this statement and 34% disagreed.\(^\text{16}\) Around a quarter (23%) agreed that it is just bad luck if you get food poisoning while 62% said they disagreed.

Around one in four (23%) agreed that they often worry about whether the food they have is safe to eat, with six per cent saying that they definitely agreed. Respondents were more likely to agree that people worry too much about getting food poisoning (40%).

\(^{16}\) ‘Disagreed’ includes those who responded either ‘Definitely disagree’ or ‘Tend to disagree’. This definition applies throughout this bulletin
Figure 2.2 Attitudes towards food safety (Waves 1, 2 & 3)

- I am unlikely to get food poisoning from food prepared in my own home: Wave 3 (77%), Wave 2 (74%), Wave 1 (72%)
- Restaurants should pay more attention to food safety and hygiene: Wave 3 (75%), Wave 2 (76%), Wave 1 (76%)
- I always avoid throwing food away: Wave 3 (58%), Wave 2 (52%), Wave 1 (48%)
- A little bit of dirt won’t do you any harm: Wave 3 (56%), Wave 2 (58%), Wave 1 (58%)
- If you eat out a lot you are more likely to get food poisoning: Wave 3 (42%), Wave 2 (43%), Wave 1 (43%)
- People worry too much about getting food poisoning: Wave 3 (41%), Wave 2 (41%), Wave 1 (40%)
- It's just bad luck if you get food poisoning: Wave 3 (23%), Wave 2 (24%), Wave 1 (28%)
- I often worry about whether the food I have is safe to eat: Wave 3 (23%), Wave 2 (28%), Wave 1 (28%)

Source: Q4_27 And now I will read out a few statements people have made and would like you to tell me whether or not you agree with them?

Base: All England respondents - Wave 1 (2,025), Wave 2 (2,116), Wave 3 (1,951)

- These statements were also included at Waves 1 and 2 of the Food and You survey, allowing changes in attitudes over time to be monitored. Whilst some changes were statistically significant, the changes were generally small in size.

- The proportion of respondents agreeing that they are unlikely to get food poisoning in their own home was higher at Wave 3 (77%) than at Wave 1 (72%).

- Agreement with the statement ‘I always avoid throwing food away' was higher at Wave 3 (58%) than at Wave 1 (48%) and Wave 2 (52%). The difference was greatest in the proportion of respondents who definitely agreed with this statement (21% at Wave 3 compared with 15% at Wave 1).

- The proportion at Wave 3 agreeing that restaurants and catering establishments should pay more attention to food safety and hygiene was similar to that at Wave 2 (75% and 76% respectively), compared with 82% at Wave 1. Definite agreement in particular was lower at Wave 3 (39%) than at Wave 1 (47%).

- The proportion of respondents who agreed that it's just bad luck if you get food poisoning was also similar to that seen at Wave 2 (23% compared with 24%) but lower than that at Wave 1 (28%).
2.2 Variation in attitudes towards food safety by different groups in the population

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

- There was little variation in attitudes towards food safety by gender, although men were more likely than women to agree that people worry too much about food poisoning (44% compared with 37%). This variation was similar to that observed at Waves 1 and 2.

- The proportion of men agreeing that ‘you are unlikely to get food poisoning at home’ was higher at Wave 3 (78%) than Wave 1 (68%).

- There was also variation in attitude by age. In general, respondents aged 75 and over were less likely than other age groups to provide responses that could suggest they were concerned about food safety, especially compared with the youngest respondents (aged 16-24). In particular, those aged 75 and over were more likely than those aged 16-24 to agree that you are unlikely to get food poisoning from food prepared in their own home (90% compared with 63%), more likely to agree that it is just bad luck if you get food poisoning (47% compared with 16%), less likely to agree that they often worry about whether food is safe to eat (14% compared with 30%), and more likely to agree that a little dirt would not do you any harm (62% compared with 51% of 16-24 year olds). These were similar to findings at Waves 1 and 2.

- There was also variation by age in the proportion of respondents agreeing that you are more likely to get food poisoning if you eat out a lot: 36% of 16-34 year olds and 41% of those aged 35-64 agreed with this statement compared with 51% of those aged 65 and over.

- Agreement with the statement ‘I always avoid throwing food away’ also differed by age, with 45% of 16-24 year olds agreeing with this statement compared with 59% of those aged 25-74 and 68% of those aged 75 and over. There were differences in levels of agreement with this statement between Wave 3 and Wave 1 for all age groups, with the greatest difference being among those aged 35-74, where 60% agreed at Wave 3 compared with 48% at Wave 1.

Other variation at Wave 3

- Variation was observed by Index of Multiple Deprivation. Respondents living in the most deprived areas (quintile one) were more likely than those living in less deprived areas to agree that restaurants should pay more attention to food safety and hygiene (81% compared with 73% of those in quintiles three to five) and to agree that they often worry about food poisoning (35% compared with 24% in quintiles two to three, and 16% in quintiles four to five). They were less likely to agree that ‘a little bit of dirt won’t do you any harm’ (45% compared with 61% in quintiles three to five).

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17 The following variables were analysed to identify statistically significant differences: age, gender, index of multiple deprivation and region.
Differences were also observed by region. Respondents living in London differed from those in other regions in a number of reported attitudes. They were more likely to agree with the statements:

- ‘I always avoid throwing food away’ (70%) particularly compared with those in the North East (41%) but also compared with all other regions except for the North West (61%) and Yorkshire and the Humber (61%).

- ‘It’s just bad luck if you get food poisoning’ (26%) along with respondents in the North East (29%), the North West (26%) and the South East (25%) compared with those in the East Midlands (14%).

- ‘I am unlikely to get food poisoning from food prepared in my own home’ (84%) along with those in Yorkshire and the Humber (82%) compared with those in the East Midlands (71%) and the South West (69%).

- ‘If you eat out a lot you are more likely to get food poisoning’ (52%) along with those in the North West (46%) and Yorkshire and the Humber (50%) compared with respondents in the East Midlands (31%), the South West (32%) and the South East (35%).

As well as being more likely to agree that if you eat out a lot you are more likely to get food poisoning, and that you are unlikely to get food poisoning from food prepared in your own home, as described above, respondents in Yorkshire and the Humber were also more likely to agree that restaurants should pay more attention to food safety and hygiene (83%) compared with those in the East Midlands (69%) and the South East (72%).

Respondents in the East and South East were more likely to agree that ‘a little bit of dirt won’t harm you’ (62% and 64% respectively) compared with those in the West Midlands (48%).
3. Concern about where food is produced

3.1 Levels of concern about where food is produced

Figure 3.1 Concern about the safety of food produced in the UK and imported from outside the UK (Wave 3)

<table>
<thead>
<tr>
<th>Product</th>
<th>Very concerned</th>
<th>Fairly concerned</th>
<th>Neither concerned nor unconcerned</th>
<th>Fairly unconcerned</th>
<th>Very unconcerned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat imported from outside the UK</td>
<td>28</td>
<td>38</td>
<td>14</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>Food imported from outside the UK</td>
<td>24</td>
<td>40</td>
<td>16</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Fruit and vegetables imported from outside the UK</td>
<td>11</td>
<td>31</td>
<td>21</td>
<td>27</td>
<td>10</td>
</tr>
<tr>
<td>Food produced in the UK</td>
<td>9</td>
<td>34</td>
<td>20</td>
<td>27</td>
<td>11</td>
</tr>
<tr>
<td>Meat produced in the UK</td>
<td>9</td>
<td>30</td>
<td>17</td>
<td>29</td>
<td>14</td>
</tr>
<tr>
<td>Fruit and vegetables produced in the UK</td>
<td>5</td>
<td>21</td>
<td>19</td>
<td>34</td>
<td>22</td>
</tr>
</tbody>
</table>

Source: Q9_2 Please tell me the extent to which you are concerned or unconcerned by each of the following issues...

Base: All England respondents (1,951)

Respondents were most likely to report concern about the safety of food imported from outside the UK, especially meat. Around two in three respondents were concerned\(^\text{18}\) about each type of import (65% about food, 66% about meat) and 28% were very concerned about the safety of imported meat. Less concern was reported about the safety of imported fruit and vegetables (42%, with 11% very concerned).

\(^{18}\) ‘Concerned’ includes those who responded either ‘Very concerned’ or ‘Fairly concerned’. This definition applies throughout this bulletin.
Around four in ten respondents were concerned about the safety of food produced in the UK (43%) with nine per cent reporting being very concerned. As with imported food, there was greater concern reported about the safety of meat produced in the UK (39%, with nine per cent very concerned) than about fruit and vegetables (26% concerned). Over half (55%) said they were unconcerned\(^\text{19}\) about the safety of fruit and vegetables produced in the UK.

\(^{19}\) ‘Unconcerned’ includes those who responded either ‘Very unconcerned’ or ‘Fairly unconcerned’. This definition applies throughout this bulletin.
Concern about the safety of food produced in the UK and imported from outside the UK (Waves 2 and 3)

Compared with Wave 2, there was some variation in concern at Wave 3 about the safety of food, especially meat, imported from outside of the UK (66% were concerned about imported meat compared with 62% at Wave 2, 65% were concerned about imported food in general compared with 61% at Wave 2). Variation was observed in the proportions saying they were very concerned: 28% reported being very concerned about imported meat compared with 23% at Wave 2, and 24% were very concerned about imported food more generally compared with 20% at Wave 2.

There were no statistically significant differences compared with Wave 2 in concern about imported fruit and vegetables.

Some variation was observed compared with Wave 2 in concern about the safety of food, especially meat, produced in the UK. At Wave 3, 39% of respondents reported that they were concerned about meat produced in the UK, compared with 34% at Wave 2. Respondents at Wave 3 were also more likely to express concern about all food produced in the UK (43%) than at Wave 2 (35%).

Source: Q9_2 Please tell me the extent to which you are concerned or unconcerned by each of the following issues...
Base: All England respondents - Wave 2 (2,116), Wave 3 (1,951) (Question not asked at Wave 1)
3.2 Variation in concern about where food is produced by different groups in the population\textsuperscript{20}

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

- Variation by gender was observed at both Wave 3 and Wave 2. At Wave 3, similar to Wave 2, women were more likely than men to be concerned about the production of meat in the UK (42% compared with 36%) and imported meat (69% compared with 63%). The variation in levels of concern compared with Wave 2 was seen equally for both men and women.

- Variation was also observed by age. Younger respondents aged 16-24 were generally less likely to report concern about the safety of food produced in and outside the UK than other age groups, and these findings were mostly similar to that at Wave 2. For example, 31% of those aged 16-24 said they were concerned about food produced in the UK (compared with 44% of respondents aged 25 and over), and this was similar to the level at Wave 2 (29%); among those aged 25 and over, however, 44% reported concern compared with Wave 2 (36%).

- Older respondents aged 75 and over were less likely than younger groups to say they were concerned about some types of food. In particular 19% said they were concerned about fruit and vegetables produced in the UK compared with 27% of respondents aged under 75.

- The variation from Wave 2 in concern about imported food was greatest for those aged 45-54, with 71% reporting being concerned at Wave 3 compared with 58% at Wave 2. The variation in concern about imported meat was also greatest for respondents aged 45-54, with 72% reporting this concern at Wave 3 compared with 58% at Wave 2.

Other variation at Wave 3

- Variation was observed by Index of Multiple Deprivation. Respondents living in the most deprived areas (quintile one) were more likely to report concern about UK produced fruit and vegetables (31%) than those in the least deprived areas (22% in quintile five). They were also more likely to express concern about imported fruit and vegetables (49%) compared with those in all other areas (40% in quintiles two to five).

- Variation was also observed by region. Respondents in London were more likely to report concern about UK produced fruit and vegetables (34%) compared with those in the North East (19%), East (20%), South East (23%) and South West (19%).

- Respondents in the West Midlands were more likely to say they were concerned about UK produced meat (48%) compared with those in the North East, North West, East and South West (32% to 36%).

\textsuperscript{20} The following variables were analysed to identify statistically significant differences: age, gender, index of multiple deprivation and region.
Respondents living in Yorkshire and the Humber and in the South West were more likely to report concern about imported food (71% and 67% respectively) compared with those in the North East (52%).
4. Comparisons between England and the rest of the UK

Table 4.1 Incidence of food poisoning, by country (Wave 3)

<table>
<thead>
<tr>
<th>Incidence of food poisoning</th>
<th>England</th>
<th>Wales</th>
<th>Scotland</th>
<th>Northern Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes more than once</td>
<td>17%&lt;sup&gt;S, NI&lt;/sup&gt;</td>
<td>13%</td>
<td>11%</td>
<td>8%</td>
</tr>
<tr>
<td>Yes once</td>
<td>23%&lt;sup&gt;NI&lt;/sup&gt;</td>
<td>22%</td>
<td>22%</td>
<td>17%</td>
</tr>
<tr>
<td>I think so but I’m not sure it was food poisoning</td>
<td>6%</td>
<td>4%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>No</td>
<td>54%</td>
<td>61%&lt;sup&gt;E&lt;/sup&gt;</td>
<td>62%&lt;sup&gt;E&lt;/sup&gt;</td>
<td>71%&lt;sup&gt;E, W, S&lt;/sup&gt;</td>
</tr>
<tr>
<td>Total Yes</td>
<td>40%&lt;sup&gt;S, NI&lt;/sup&gt;</td>
<td>35%&lt;sup&gt;NI&lt;/sup&gt;</td>
<td>32%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Source: Q4_28 Have you personally ever had food poisoning?
Base: All respondents
NB. E / W / S / NI indicates that the result is statistically significantly higher than the result for the country indicated by the initial

- Respondents living in England were more likely to report ever having experienced food poisoning compared with those living in Scotland and Northern Ireland (40% compared with 32% and 25% respectively). They were also less likely to report never having had food poisoning compared with those living in Wales, Scotland and Northern Ireland (54% compared with 61%, 62% and 71% respectively).

- The small number of respondents within each country experiencing food poisoning within the last year means it is not feasible to conduct additional comparisons.
### Table 4.2 Attitudes towards food safety, by country (Wave 3)

<table>
<thead>
<tr>
<th>% agreeing that ...</th>
<th>England</th>
<th>Wales</th>
<th>Scotland</th>
<th>Northern Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am unlikely to get food poisoning from food prepared in my own home</td>
<td>77%</td>
<td>73%</td>
<td>78%</td>
<td>77%</td>
</tr>
<tr>
<td>Restaurants and catering establishments should pay more attention to food safety and hygiene</td>
<td>75%</td>
<td>75%</td>
<td>71%</td>
<td><strong>82%</strong>&lt;sub&gt;EWS&lt;/sub&gt;</td>
</tr>
<tr>
<td>I always avoid throwing food away</td>
<td>58%</td>
<td>58%</td>
<td>54%</td>
<td>64%</td>
</tr>
<tr>
<td>A little bit of dirt won’t do you any harm</td>
<td>56%</td>
<td>54%</td>
<td>58%</td>
<td>53%</td>
</tr>
<tr>
<td>If you eat out a lot you are more likely to get food poisoning</td>
<td>42%</td>
<td>41%</td>
<td>38%</td>
<td><strong>53%</strong>&lt;sub&gt;EWS&lt;/sub&gt;</td>
</tr>
<tr>
<td>People worry too much about getting food poisoning</td>
<td>40%</td>
<td>44%</td>
<td>43%</td>
<td>44%</td>
</tr>
<tr>
<td>It’s just bad luck if you get food poisoning</td>
<td>23%</td>
<td>22%</td>
<td>23%</td>
<td>19%</td>
</tr>
<tr>
<td>I often worry about whether the food I have is safe to eat</td>
<td>23%</td>
<td>25%</td>
<td>19%</td>
<td>24%</td>
</tr>
<tr>
<td><strong>Base</strong></td>
<td>(1,951)</td>
<td>(503)</td>
<td>(475)</td>
<td>(524)</td>
</tr>
</tbody>
</table>

Source: Q4_27 And now I will read out a few statements people have made and would like you to tell me whether or not you agree with them?

Base: All respondents

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

- Respondents living in England were less likely to agree that if you eat out a lot you are more likely to get food poisoning (42%) and to agree that restaurants and catering establishments should pay more attention to food safety and hygiene (75%) compared with those living in Northern Ireland (53% and 82% respectively).
Table 4.3 Concern about where food is produced, by country (Wave 3)

<table>
<thead>
<tr>
<th>% concerned about safety of ...</th>
<th>England</th>
<th>Wales</th>
<th>Scotland</th>
<th>Northern Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat imported from outside the UK</td>
<td>66%</td>
<td>68%</td>
<td>64%</td>
<td>74%&lt;sup&gt;E S&lt;/sup&gt;</td>
</tr>
<tr>
<td>Food imported from outside the UK</td>
<td>65%</td>
<td>69%</td>
<td>64%</td>
<td>64%</td>
</tr>
<tr>
<td>Fruit and vegetables imported from outside the UK</td>
<td>42%</td>
<td>46%&lt;sup&gt;S NI&lt;/sup&gt;</td>
<td>37%</td>
<td>36%</td>
</tr>
<tr>
<td>Food produced in the UK</td>
<td>43%&lt;sup&gt;S&lt;/sup&gt;</td>
<td>46%&lt;sup&gt;S&lt;/sup&gt;</td>
<td>34%</td>
<td>40%</td>
</tr>
<tr>
<td>Meat produced in the UK</td>
<td>39%&lt;sup&gt;S&lt;/sup&gt;</td>
<td>42%&lt;sup&gt;S&lt;/sup&gt;</td>
<td>31%</td>
<td>40%&lt;sup&gt;S&lt;/sup&gt;</td>
</tr>
<tr>
<td>Fruit and vegetables produced in the UK</td>
<td>26%&lt;sup&gt;S&lt;/sup&gt;</td>
<td>27%&lt;sup&gt;S&lt;/sup&gt;</td>
<td>20%</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Base</strong></td>
<td>(1,951)</td>
<td>(503)</td>
<td>(475)</td>
<td>(524)</td>
</tr>
</tbody>
</table>

Source: Q9_2 To what extent are you concerned or unconcerned by the safety of...?

Base: All respondents

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

- Respondents living in England were less likely to report concern about the safety of meat imported from outside the UK (66%) compared with those living in Northern Ireland (74%).

- They were more likely compared with respondents living in Scotland to report concern about the safety of food produced in the UK, including food overall (43% compared with 34%), meat (39% compared with 31%), and fruit and vegetables (26% compared with 20%).