

# The Food & You Survey Wave 4

**Development  
Report**

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

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# Background and purpose

## Introduction

Our food system is complex and, over the next few decades, global population growth is set to make huge demands on food production around the world. This impacts on the food supply in the UK and the challenge is to ensure that our food remains safe, authentic, nutritious, affordable and sustainable.

The role of the Food Standards Agency (FSA) is to protect the interests of the 'consumer' and it does this through a range of activities including regulation of food businesses and developing and targeting messages and initiatives for the public. The FSA's Strategy and Strategic Plan 2015-2020<sup>1</sup> renews its commitment to put 'consumers' first. This is against a rapidly changing landscape in terms of the production, distribution and consumption of food, nationally and globally.

The Food and You survey is the FSA's principal source of methodologically robust and representative evidence on consumers' self-reported food-related activities and attitudes. Understanding the UK population's reported behaviour, attitudes and knowledge in relation to food issues is key to measuring the FSA's progress towards its strategic objectives, providing evidence that supports the FSA's communication activities, identifying topics for further research or action and identifying 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).

## Role of the FSA

The FSA was created in 2000 as an independent non-ministerial government department, governed by a Board whose members have extensive knowledge and experience in a wide range of sectors relevant to the FSA. The FSA was set up to protect public health from risks which may arise in connection with the consumption of food (including risks caused by the way in which it is produced or supplied), and otherwise to protect the interests of 'consumers' in relation to food.

The FSA is responsible for food safety and hygiene in England, Wales and Northern Ireland, and is committed to ensuring the general public can have trust and confidence in the food they buy and eat.<sup>2</sup> The FSA also enforces standards through its regulatory responsibilities. The FSA provides guidance to consumers on best practices for food safety and hygiene in order to minimise the risk of food poisoning.<sup>3,4</sup> This includes advice on cleaning, cooking, cross-contamination and chilling (collectively known as the '4 Cs'). 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 safety of food eaten at home.

1 [http://www.food.gov.uk/sites/default/files/FSA%20strategy%20document%202015-2020\\_April%202015\\_interactive%20%282%29.pdf](http://www.food.gov.uk/sites/default/files/FSA%20strategy%20document%202015-2020_April%202015_interactive%20%282%29.pdf)

2 In April 2015, the FSA's responsibilities in Scotland were transferred to the new non-ministerial government department of the Scottish Government, Foods Standards Scotland (FSS).

3 Responsibility for food safety and nutrition in Scotland is the responsibility of Food Standards Scotland (FSS), a non-ministerial government department of the Scottish Government established by the Food Act 2015.

4 In 2010, responsibility for nutrition in England and Wales transferred to the Department of Health. From 1 April 2013, responsibility in England transferred to the Department of Health's Executive Agency, Public Health England (PHE) and in Wales, responsibility transferred to the Welsh Government. Responsibility for nutrition and healthy eating practices in Northern Ireland remain the responsibility of the FSA in NI.

# The Food and You survey

## Background

Since its inception in 2000, the FSA has commissioned surveys to collect quantitative data on the public's reported behaviour, attitudes and knowledge relating to food and food safety. Between 2000 and 2007 the FSA ran the Consumer Attitudes Survey (CAS).<sup>5</sup> In 2008 FSA's Social Science Research Committee (SSRC) recommended that a new survey – Food and You – be developed.<sup>6</sup>

Food and You was set up as a biennial, cross-sectional survey of adults aged 16 years and over living in private households. Random probability sampling ensures that everyone in the included countries has an equal chance of being selected to take part, so the results are representative of the population. The first three waves of the survey were carried out by TNS BMRB (in 2010, 2012 and 2014 respectively). NatCen Social Research (NatCen), in collaboration with the Northern Ireland Statistics and Research Agency (NISRA), have been contracted to carry out Waves 4, 5 and 6 of the survey.

Topics have reflected the priorities and interests of the FSA and the survey has been an important means of measuring progress against the FSA's Strategic Plan 2010-2015,<sup>1</sup> providing evidence to assess delivery across the FSA's strategic objectives.<sup>7</sup> The first wave of Food and You (2010) assessed consumer attitudes and behaviour to food-related issues falling under the FSA's remit. Following Wave 1, the questionnaire was reviewed extensively in light of responsibility for nutrition in England and Wales being transferred from FSA in 2010.<sup>4</sup>

Wave 2 (2012) focussed on food safety and hygiene issues and was carried out in 2012 and Wave 3 (2014) was designed to monitor changes since the previous two waves in attitudes and reported behaviour about food issues, to identify at-risk groups for food safety issues, and to explore public understanding of issues regarding the FSA's targets. For the first time at Wave 3, results from Food and You were published as an official statistic, reflecting the robust methodology of the survey and the development of a regular time series of data. Wave 4 of the Food and You Survey included new questions to cover affordability of food, choice, security and sustainability.

New questions and modifications to the Wave 4 questionnaire were tested using cognitive testing techniques. The questionnaire was piloted prior to the start of mainstage fieldwork.

5 Further information about the CAS can be found at: <http://tna.europarchive.org/20111116080332/http://www.food.gov.uk/science/socsci/surveys/foodsafety-nutrition-diet/>.

6 See SSRC 2008 report, *Monitoring Public Attitudes and Behaviour – A Review of the Agency's Consumer Attitudes Surveys* [http://ssrc.food.gov.uk/sites/default/files/mnt/drupal\\_data/sources/files/multimedia/pdfs/ssrc0822v1.pdf](http://ssrc.food.gov.uk/sites/default/files/mnt/drupal_data/sources/files/multimedia/pdfs/ssrc0822v1.pdf)

7 See the FSA Strategy to 2015 <http://webarchive.nationalarchives.gov.uk/20120206100416/http://food.gov.uk/multimedia/pdfs/strategy20102015.pdf>

## Aims

Food and You provides data about the prevalence of different attitudes, reported behaviour and knowledge about ways in which food is purchased, stored, prepared and eaten. The aims of Wave 4 were to provide the FSA with data on food hygiene and food safety and other food-related issues in order to:

- explore public understanding and engagement with food safety
- assess knowledge of messages and interventions aimed at raising awareness and changing behaviour
- describe public attitudes to food production and the food system
- monitor trends in reported behaviour, attitudes and knowledge (compared with data from the previous three waves or from other sources)
- identify 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)
- provide indicators and evidence for tracking the FSA's strategic plans<sup>1</sup>

## About this report

This report documents the development of the Food and You Wave 4 questionnaire, including the testing of new questions and the modification of some existing questions from previous waves. In order to ensure that these modifications would achieve unbiased and valid responses they were rigorously tested by NatCen's specialist Questionnaire Development Hub (QDT) using cognitive testing techniques. Additionally the questionnaire content was piloted before being finalised for mainstage fieldwork. The below outlines the procedures and findings from these stages of testing.

A Technical Report documenting the full procedures employed in administering Wave 4 of the Food and You survey has been published alongside this report. The final content of the Wave 4 questionnaire is provided as an appendix to the Technical report.

Separate reports are published on the key findings for England, Wales and Northern Ireland combined, and the findings for Northern Ireland and Wales.

Full data are available in the UK Data Archive.<sup>8</sup>

<sup>8</sup> <http://data-archive.ac.uk/>

# 1 Cognitive testing

NatCen's specialist Questionnaire Development Hub (QDT) employs cognitive testing techniques to test the validity of survey questions. New questions suggested for inclusion in Wave 4, and existing questions identified for wording changes, were subjected to cognitive testing. The primary aim of the cognitive testing was to assess participants' comprehension of the proposed questions. This enabled the researchers to identify issues with question wording and content and to make informed decisions regarding the content of the mainstage questionnaire. The cognitive testing methods broadly aimed to explore four stages of participants' engagement with the questions: how they understood and interpreted the questions; how they recalled information relevant for answering the questions; the judgements they made in evoking information to answer a question; and their response-mapping processes.

The following sections detail the questions tested, the key findings and the recommendations made for further questionnaire development.

## Protocol

The cognitive testing incorporated think aloud and probing techniques. The think aloud method requires participants to explain their thought process they use in responding to a question. This allows the researcher to assess whether the participant comprehends the question, and that this is captured by the response. Probing involves administering the survey question followed by additional exploratory questions which assess the participant's understanding of the question and response option. Overall, the testing explored:

- participants' comprehension of key terms within the questions
- whether participants were able to select a suitable response option
- sensitivity of questions

The cognitive testing was conducted in two rounds, with appropriate adjustments made to the questions before they were re-tested. Participants were interviewed in a neutral venue and interviews were recorded with their consent. Participants were given £20 in cash as compensation for their time.

Audio recordings of each interview were summarised by interviewers in a structured template and subsequently transferred to an analytical matrix. Responses to each test question were recorded, along with observations made by interviewers, any think aloud comments and each of the scripted probes. The data in the matrix were reviewed thematically. The recommendations outlined below were based on a debrief discussion between the interviewers, NatCen researchers and the FSA as well as a full analysis of the data.



# Participant recruitment

Participants were recruited by a specialist agency and interviews were carried out in central London and Bexleyheath. The aim was to carry out a sufficient number of interviews to represent a range of key socio-demographic characteristics. As a result, eight interviews per round were conducted in each area with a total of 16 participants (per round) being interviewed. Table 1 shows the socio-demographic composition of the cognitive interviewees in each round.

**Table 1 Socio-demographics of the cognitive interviewees in Rounds 1 and 2**

| Socio-demographic characteristics                     |                   | No. with characteristic |         |
|---|-------------------|-------------------------|---------|
|   |                   | Round 1                 | Round 2 |
| Gender  | Male              | 8                       | 8       |
|   | Female            | 8                       | 8       |
| Age (years)   | 18-29             | 3                       | 3       |
|   | 30-49             | 5                       | 6       |
|   | 50-64             | 3                       | 4       |
|   | 65+               | 5                       | 3       |
| Main Food Provider                                    | Yes               | 11                      | 15      |
|   | No                | 5                       | 1       |
| Highest qualification                                 | A levels or above | 10                      | 10      |
|   | GCSEs or below    | 6                       | 6       |
| Participant or child under 16 has a food intolerance? | Yes               | 3                       | 5       |
|   | No                | 13                      | 11      |
| Owns a microwave and uses it to heat ready meals?     | Yes               | 13                      | -       |
|   | No                | 3                       | -       |

# 2 Pilot testing protocol

A pilot study was conducted for Wave 4 of the Food and You survey. The pilot study used a version of the questionnaire that incorporated recommendations made in the cognitive testing. The purpose of this was to test various practical and design elements of the survey in preparation for the mainstage. In particular we aimed to retest participants' comprehension of the questionnaire, test the efficacy of the participants' and interviewers' documents and briefings, the running of the questionnaire program including appropriate question routing, and the length of the questionnaire. Additionally the pilot assessed the effectiveness of strategies for engaging respondents.

Interviewers attended a briefing which covered the following elements of the fieldwork process:

- the aims of and background to Food and You
- the sample and participant recruitment
- the questionnaire
- participant engagement strategies

## Recruitment of the pilot sample

The aim was to recruit males and females, across the age range, from all three countries. Eleven interviewers were required to recruit 10 participants each (from within a pre-assigned postcode sector) according to the following quota specifications:

- at least 3 males and 3 females
- at least 1 participant aged 16 - 24
- at least 1 participant aged  $\geq 65$

Exclusion criteria were:

- households where the interviewer knew the inhabitants
- households who had previously taken part in a survey conducted by that interviewer

In total, 110 individuals were recruited for the pilot study. Tables 2 and 3 show their characteristics. Participants were offered a £10 gift voucher as compensation for their time.

Table 2 Number of productive pilot interviews, by age and sex

| Number of productive pilot interviews, by age and sex |             |       |       |       |       |     |              |
|---|-------------|-------|-------|-------|-------|-----|--------------|
|   | Age (group) |       |       |       |       |     | <i>Total</i> |
|   | 16-24       | 25-34 | 35-44 | 45-54 | 55-64 | 65+ |              |
| Male  | 7           | 2     | 9     | 6     | 7     | 14  | 45           |
| Female  | 7           | 11    | 7     | 12    | 7     | 21  | 65           |
| <i>Total</i>  | 14          | 13    | 16    | 18    | 14    | 35  | <b>110</b>   |

Table 3 Number of participants, by country

| Number of productive pilot interviews, by country |    |
|---|----|
| England   | 67 |
| Wales   | 21 |
| Northern Ireland                                  | 22 |

# 3 Findings and recommendations

The questions that were tested during cognitive testing and piloting are shown below with the associated findings and recommendations made for further questionnaire development. The variable names used during testing are shown, and where questions were included in the final Wave 4 questionnaire, the final variable names are shown in brackets.

## Shopping, cooking and eating

The questions outlined in this section relate to the 'Shopping, cooking and eating' chapter of the Food and You Wave 4 report. The 'Shopping, cooking and eating' chapter explores people's eating habits in the home (in terms of behaviours related to cooking and shopping), their dietary restrictions, attitudes towards cooking and food shopping, and food security.

### Cooking and eating at home

These questions explored participants' level of responsibility within the household for preparing and cooking food and were tested at both rounds of cognitive testing and during piloting.

#### Questions as tested at cognitive testing round 1

##### NewCooking1 (SHOW CARD)

##### (CkRes)

Which of these best describes the level of responsibility you have for preparing and cooking food in your household?

##### SINGLE CODE

- Each person is responsible for preparing/cooking their own food.
- Responsible for all or most of the preparing/cooking of food.
- Responsible for about half of the preparing/cooking of food.
- Responsible for less than half of the preparing/cooking of food.
- Not responsible for any of the preparing/cooking of food.

**NewCooking2****(CkOth)**

IF 'Responsible for about half', 'less than half', OR 'Not responsible for any'

Who else is responsible for preparing and cooking food in your household?

INSERT NAMES OF OTHERS IN HOUSEHOLD \_\_\_\_\_

And does anyone outside the household prepare or cook food for the household? Someone else outside the household (e.g. meals on wheels, visiting carer)

**NewCooking3 (SHOW CARD)****(CkResO)**

FOR EACH INDIVIDUAL NAMED AT **CkOth**

Which of these best describes <<INSERT NAMES>>'s level of responsibility for preparing and cooking food in your household?

- Responsible for all or most of the preparing/cooking of food.
- Responsible for about half of the preparing/cooking of food.
- Responsible for less than half of the preparing/cooking of food.
- Not responsible for any of the preparing/cooking of food.

| Findings   | Recommendations  |
|--|--|
| <ul style="list-style-type: none"> <li>• Questions were easy to answer. A range of responses were given.</li> <li>• One participant's responses did not add up: they reported that three people were responsible for half of the cooking/ preparing of food.</li> <li>• Participants who were living alone were unable to differentiate between 'each person is responsible for...' and 'responsible for all or most...' at <b>NewCooking1</b>.</li> <li>• Two participants mentioned variability in cooking responsibility within the household. At the debriefing it was agreed that participants should only think about who within and outside of their household typically prepares and cooks food.</li> <li>• Most participants understood 'preparing and cooking food' as someone deciding what will be eaten, preparing for the meal (e.g. chopping vegetables or getting meat out of the freezer) and cooking it as appropriate.</li> <li>• Some participants also included purchasing food within their definition.</li> </ul> | <ul style="list-style-type: none"> <li>• Move option 5 of <b>NewCooking1</b> to the top to clarify appropriate options for house shares.</li> <li>• Add a soft check if answers to <b>NewCooking1</b> do not add up across the household.</li> <li>• Move the response option 'each person is responsible for...' to the final option in order to deter incorrect use by participants living alone. Include a short interview note to explain when this code should be used.</li> <li>• Include 'on a typical week' to clarify appropriate response where within household variability exists.</li> <li>• Include clarification of cooking, as opposed to purchasing, in questions.</li> </ul> |

### Questions as tested at cognitive testing round 2

#### Q2\_14 (test version) (SHOW CARD)

#### (Q2\_14)

Do you eat any of the following foods at least once a month?

- Cuts or portions of beef, lamb or pork (e.g. joints, steak, chops)
- Burgers
- Sausages
- Chicken or turkey
- Duck/goose
- Pre-cooked meats, like ham or meat pâté
- Cooked or smoked fish, excluding shellfish
- Cooked shellfish (e.g. crab, prawns, lobster, mussels)
- Raw fish or shellfish (e.g. in sushi, sashimi, raw oysters)

| Findings   | Recommendations   |
|--|---|
| <ul style="list-style-type: none"> <li>• <b>Q2_14</b> Easy to understand and answer. Some participants suggested that they consume some items less than once per month.</li> </ul> | <ul style="list-style-type: none"> <li>• Keep as worded.</li> </ul> |

**Questions as tested at pilot**

**CkRes (SHOW CARD)**

Over a typical week, which of these best describes the level of responsibility you have for preparing and cooking food in your household?

SINGLE CODE

INTERVIEWER NOTE: THIS IS ONLY ABOUT PREPARING AND COOKING FOOD, WE WILL BE ASKING ABOUT SHOPPING FOR FOOD SEPARATELY LATER ON.

1. Responsible for all or most of the preparing/cooking of food
2. Responsible for about half of the preparing/cooking of food
3. Responsible for less than half of the preparing/cooking of food
4. Not responsible for any of the preparing/cooking of food
5. Each person is responsible for preparing/cooking their own food

| Findings  | Recommendations   |
|---|---|
| <ul style="list-style-type: none"> <li>• Vegetarians were routed to the questions about meat consumption. This caused some irritation.</li> </ul> | <ul style="list-style-type: none"> <li>• Consider whether vegetarians should be routed around some of these questions, as determined by response to <b>Q2_7</b>. An additional question following <b>Q2_7</b> to confirm meat or fish (or in the case of pescatarians, eat any meat) eating would be beneficial. However some later questions (<b>Q3_5a</b> and <b>Q4_1</b>) refer to purchasing or preparing meat and fish and remain relevant for vegetarians.</li> </ul> |

## Food allergy and intolerance

These questions explored the experience and diagnosis of food allergies and intolerances. New questions were tested in the first round of cognitive testing then revised and retested in round 2.

### Questions as tested at cognitive testing round 1

#### NewAllergies1

##### (AdReac)

Do you ever suffer from an adverse reaction after consuming certain foods?

1. Yes I do
2. No I don't

#### NewAllergies2

##### (AvoidFd)

Do you avoid particular foods because of the reaction they might cause?

1. Yes
2. No

#### NewAllergies3 (SHOW CARD)

##### (FdReac)

IF YES TO EITHER **NEWALLERGIES1** OR **NEWALLERGIES2**

To which of the following foods do you experience an adverse reaction?

CODE ALL THAT APPLY

1. Peanuts
2. Other nuts such as brazil nuts, hazelnuts, walnuts and pecans
3. Cow's milk, butter, cheese or other products made with cow's milk
4. Cereals containing gluten – wheat, rye, barley or oats
5. Eggs
6. Fish
7. Crustaceans (e.g. prawns, lobster, crabs and crayfish)



8. Molluscs (e.g. clams, mussels, whelks, oysters, snails and squid)
9. Soya
10. Celery
11. Mustard
12. Lupin
13. Sesame
14. Sulphur dioxide
15. Other, please specify

**NewAllergies4 (SHOW CARD)****(ReacTyp)**

How would you best describe your problem with <INSERT FOOD >? SINGLE CODE

- Food allergy
- Food intolerance
- Coeliac disease
- Non-coeliac gluten sensitivity
- Gluten intolerance
- Lactose intolerance
- Cow's milk intolerance
- Irritable bowel syndrome
- Food protein-induced enterocolitis syndrome (FPIES)
- Other (please specify)

**NewAllergies5 (SHOW CARD)****(Diagnose)**

How have you arrived at a diagnosis for your condition?

- I was formally diagnosed by an NHS or private medical practitioner (e.g. GP, dietician, allergy specialist in a hospital or clinic)
- I have been diagnosed by an alternative or complementary therapist (e.g. homeopath, reflexologist, online or walk-in allergy testing service)
- I have diagnosed myself based on the foods which cause me problems
- Other (please specify)

**NewAllergies7**

IF RESPONDENT HAS A CHILD/CHILDREN UNDER 16

Do any of your children under 16 in your household suffer from adverse reactions after eating certain foods?

1. Yes
2. No

**NewAllergies8**

Do any of your children under 16 in your household avoid particular foods because of the reaction they might cause?

1. Yes
2. No

**NewAllergies9 and NewAllergies10**

Repeat **NewAllergies3** and **NewAllergies4** for children identified with allergies.

| Findings  | Recommendations  |
|---|--|
| <ul style="list-style-type: none"> <li>• Questions identified participants with allergies and intolerances ranging in severity.</li> <li>• For <b>NewAllergies3</b> some participants highlighted just one option from a category (e.g. specific allergy to 'cow's milk'). Bread was a common allergen which is not currently listed.</li> <li>• Many participants were unaware of Lupin or Sulphur Dioxide in foods. In the absence of allergies to these substances this should not be problematic for this question.</li> <li>• For <b>NewAllergies4</b> 'Other' was chosen when the reaction was not listed. This included heart burn or stomach upset. Such symptoms were not sufficient for people to select 'food intolerance'.</li> <li>• At <b>NewAllergies4</b>, Crohn's disease and colitis was suggested as an additional option.</li> <li>• At <b>NewAllergies5</b> participants suggested the word 'diagnosis' presented intolerances as more severe than they had imagined when reporting them.</li> <li>• Questions worked well for parents reporting on children.</li> <li>• No participants reported the questions sensitive or intrusive.</li> <li>• Participants understood the terms 'food allergy' and 'food intolerance' and identified a difference in severity. Allergies were considered more severe and would always cause a reaction. Intolerances were described not always causing a reaction. Participants could list possible effects of both (e.g. rashes and face swelling regarding allergies and upset stomachs regarding intolerances).</li> </ul> | <ul style="list-style-type: none"> <li>• Consider bread as an option at <b>NewAllergies3</b>.</li> <li>• Consider Crohn's disease or Colitis as option at <b>NewAllergies4</b>.</li> <li>• Consider rewording <b>NewAllergies5</b>.</li> </ul> |

### Question as tested at cognitive testing round 2

#### FdReac (SHOW CARD)

Do you experience an adverse reaction to any of the following foods?

MULTICODE

INTERVIEWER: ONLY CODE 1-14 IF RESPONDENT EXPERIENCES AN ADVERSE REACTION TO THE GENERAL FOOD TYPE. IF ONLY A SINGLE ITEM WITHIN A FOOD GROUP (E.G. ALMONDS, BREAD) THEN CODE OTHER.

PROMPT: And do you ever experience an adverse reaction to any other type of food not listed here?

IF MULTIPLE ITEMS UNDER 'OTHER', CODE AS SEPARATE ITEMS.

1. Peanuts
2. Other nuts e.g. almonds, hazelnuts, walnuts, cashew nuts, pecans
3. Cow's milk and products made with cow's milk e.g. butter, cheese, cream, yoghurt
4. Cereals containing gluten e.g. wheat, rye, barley, oats
5. Eggs
6. Fish
7. Crustaceans e.g. crabs, lobster, prawns, scampi
8. Molluscs e.g. mussels, snails, quid, whelks, clams, oysters
9. Soya
10. Celery/celeriac
11. Mustard
12. Lupin
13. Sesame
14. Sulphur dioxide/sulphites
15. Other (please specify)

IF (**FdReac**= 'Other') THEN

**FdReacO**

ASK AND SEPARATELY RECORD OTHER FOOD TYPES THE RESPONDENT EXPERIENCES AN ADVERSE REACTION TO.

**Diagnose**

How did you find out about your condition relating to <INSERT ITEM FROM **FdReac** AND **FdReacO**>?

MULTI CODE FOR EACH ITEM

1. I have been formally diagnosed by an NHS or private medical practitioner (e.g. GP, dietician, allergy specialist in a hospital or clinic)
2. I have been diagnosed by an alternative or complementary therapist (e.g. homeopath, reflexologist, online or walk-in allergy testing service)
3. I have noticed that this food causes me problems, but I have not been formally diagnosed with a specific condition.
4. Other (please specify)

| Findings  | Recommendations   |
|---|---|
| <ul style="list-style-type: none"> <li>• Questions were easy to answer and participants were confident that they knew whether they have an 'allergy' or 'intolerance.'</li> <li>• Participants did not find these questions intrusive.</li> <li>• At <b>ReactTyp</b> some overlap between understanding of categories (e.g. 'non coeliac' and gluten intolerance; 'lactose intolerance' and 'cow's milk intolerance').</li> <li>• Allergies were considered more severe than intolerances. Examples of reactions included: swelling, anaphylactic shock and rash. Two participants said that allergies present themselves more externally and intolerances internally.</li> <li>• The 'other' response category was easily selected when an allergy was not listed.</li> <li>• When participants avoided particular foods because of a dislike they correctly answered 'no'.</li> <li>• One participant was allergic to all fish and seafood and follow up questions would have been repetitive if asked about everything from <b>FdReac</b> items 6, 7 and 8.</li> </ul> | <ul style="list-style-type: none"> <li>• Consider making <b>ReactTyp</b> a multi-code list rather than a single code list.</li> <li>• Consider capping the number of loops of <b>FdReac</b>.</li> </ul> |

## Shopping

These questions explore household food purchasing habits and were tested during the first round of cognitive testing, and some observations were noted during piloting.

### Questions as tested at cognitive testing round 1

#### **NewShopping3 (SHOW CARD)**

Roughly how often <do you/does your household> shop for food? Please include all shopping, including your main shopping, top-up shopping in between your main shopping trips, other shopping trips, as well as online food shopping.

1. At least once a day
2. 5-6 times a week
3. 3-4 times a week
4. Once or twice a week
5. Once a fortnight
6. Less often

**NewShopping4**

Do you/does your household tend to do a ‘main food shopping trip’?

READ OUT: By ‘main food shopping trip’ we mean when you buy a large amount of food for the household in one go, including online shopping, rather than doing lots of smaller shops?

- 1. Yes
- 2. No

**Q3.7 (old) (SHOW CARD)**

**(Q3\_7)**

Roughly how often do you <(or someone else)> do a main shop for your household food shopping?

SINGLE CODE

- 1. Every day
- 2. 2-3 times per week
- 3. About once a week
- 4. 2-3 times a month
- 5. Once a month
- 6. Less often

**Findings**

**Recommendations**

- Questions were easy to answer, even for those not responsible for shopping.
- Participants could distinguish between a ‘main’ shop where they would purchase many items and ‘top-up’ shops where they would pick up a small number of items.
- Participants included shopping online and shopping in person when answering these questions.

- Retain current wording.

**Pilot findings (question Q3\_7 as above)**

**Pilot recommendations**

- **Q3\_7** does not apply to those who do not do a main shopping trip (determined by **Q3\_4**).

- Consider routing participants who do not do a main shop out of **Q3\_7**.

## Shopping bags

These questions concern carrier bag use and were tested during the first round of cognitive testing. Note that these questions were not considered high enough priority to be included in the main questionnaire.

### Question as tested at cognitive testing round 1

#### NewShopping7 (SHOW CARD)

Thinking about your most recent food shop, which of the following bags or containers did you use for your shopping? MULTICODE

1. Plastic 'bag for life'
2. Cloth or hessian 'bag for life'
3. 'Normal' plastic bag (by normal we mean a thinner plastic bag, not a 'bag for life')
4. Paper bag
5. Insulated plastic 'cool bag'
6. Packed items loose in another bag e.g. handbag, backpack, shopping bag on wheels
7. Cardboard box or plastic crate
8. Home delivery SINGLE CODE ONLY
9. Other (specify)
10. I did not use any bags or containers for my most recent food trip SINGLE CODE ONLY

#### PlasBFL

IF NewShopping7=Plastic 'bag for life'

You said that for your most recent food shop, you used a plastic 'bag for life'. Did you buy a new one, did you re-use one from before, or did you do both?

1. Bought new one
2. Re-used one from before
3. Both



**CloBFL**

IF **NewShopping7**=Cloth or hessian 'bag for life'

You said that for your most recent food shop, you used a cloth or hessian 'bag for life'. Did you buy a new one, did you re-use one from before, or did you do both?

1. Bought new one
2. Re-used one from before
3. Both

**PlasBag**

IF **NewShopping7**= 'Normal' plastic bag

You said that for your most recent food shop, you used a normal plastic bag. Did you buy or were you given a new one, did you re-use one from before, or did you do both?

PROMPT: BY NORMAL, WE MEAN A THINNER PLASTIC BAG, AS OPPOSED TO A 'THICKER BAG FOR LIFE'

1. Bought new one/given new bag free by the shop
2. Re-used one from before
3. Both

**PaperBag**

IF **NewShopping7**= Paper bag

You said that for your most recent food shop, you used a paper bag. Did you buy or were you given a new one, did you re-use one from before, or did you do both?

1. Bought new one/given new bag free by the shop
2. Re-used one from before
3. Both

**CoolBag**

IF **NewShopping7**= Insulated plastic 'cool bag'

You said that for your most recent food shop, you used an insulated plastic 'cool bag'. Did you buy a new one, did you re-use one from before, or did you do both?

1. Bought new one
2. Re-used one from before
3. Both

| Findings  | Recommendations   |
|---|---|
| <ul style="list-style-type: none"> <li>• Questions were considered easy to answer</li> <li>• Participants had no problems remembering the bag/container type and found it easy to remember purchasing new or reusing a bag. Some participants thought in terms of food shopping generally rather than specifically the last shop.</li> <li>• Some participants suggested removing the 'Home delivery' option at <b>NewShopping7</b>.</li> <li>• Most participants mentioned 'normal' carrier bags costing 5p at <b>NewShopping7</b>. Some were unable to describe what a plastic 'bag for life' was.</li> </ul> | <ul style="list-style-type: none"> <li>• Suggest that <b>NewShopping7</b> is reworded to cover shopping in general.</li> <li>• Suggest removing the 'Home delivery' option at <b>NewShopping7</b>. The types of bags and/or containers are covered.</li> <li>• Include reference to the cost of a 'normal' carrier bag.</li> <li>• Keep follow- up questions (<b>PlasBFL, CloBFL, PlasBag, PaperBag, CoolBag</b>) as worded.</li> </ul> |

## Attitudes towards food and cooking

The question highlighted below was included in the previous wave (wave 3) of Food and You and was not included in cognitive testing; however the following observations were highlighted during piloting.

### Questions as tested at pilot

#### H2\_16

Please tell me how much you agree or disagree with the following statements.

Scale: definitely agree; tend to agree; neither agree nor disagree; tend to disagree; definitely disagree; don't know  
code not shown; n/a code not shown

#### RANDOMISE LIST

- Good health is just a matter of good luck
- I'm not generally interested in food and cooking
- The experts contradict each other over what foods are good or bad for you
- What you eat makes a big difference to how healthy you are
- The price of food doesn't really matter as long as I know that the quality is good
- I enjoy cooking and preparing food
- I don't have time to spend preparing and cooking food
- When preparing food for myself I could be more careful about hygiene

#### Findings

- For the statement 'I'm not generally interested in food and cooking', these were considered two separate statements.

#### Recommendations

- As the cooking element is covered in the statement 'I enjoy cooking and preparing food' it may be beneficial to narrow **Q2\_16** to refer to food rather than cooking.

# Food safety in the home

The following questions relate to the 'Food Safety in the Home' chapter of the Food and You Wave 4 report. The 'Food Safety in the Home' chapter includes exploration of people's adherence to the FSA's best practice guidelines on cleanliness, cooking, chilling, and cross contamination, as well as how people tell whether food is safe to eat and where they get information on food safety practices.

## Food safety behaviours

The following findings relate to a question regarding food safety behaviours. This question was not included in cognitive testing, but the following observations were gathered during piloting.

**Questions as tested in pilot**

**Q4\_1 (SHOW CARD)**

I would like you to tell me whether you do any of the following things, and if so how frequently:

INTERVIEWER: If respondent says they never have responsibility for doing this, e.g. they never use raw chicken, then code as 'Not applicable' and NOT 'Never'.

**SINGLE CODE**

Scale: never, sometimes, most of the time, always, not applicable, don't know (code not shown)

- Store open tins in the fridge
- Use different chopping boards for different foods
- Wash raw meat or poultry *other than* chicken
- Wash raw chicken
- Wash raw fish or seafood
- Wash fruit which is going to be eaten raw
- Wash vegetables (including salad) which are going to be eaten raw
- Wash fruit which is going to be cooked
- Wash vegetables which are going to be cooked
- Wash hands before starting to prepare or cook food
- Wash hands immediately after handling raw meat, poultry or fish
- Cook food until it is steaming hot throughout
- Eat chicken or turkey if the meat is pink or has pink or red juices
- 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
- Eat duck if the meat is pink or has pink or red juices
- Eat burgers if the meat is pink or has pink or red juices
- Eat sausages if the meat is pink or has pink or red juices
- Eat whole cuts of pork or pork chops if the meat is pink or has pink or red juices

**Findings**

**Recommendations**

- Randomised order of statements at Q4\_1 created confusion as they swapped between washing foods and eating foods.

- Group statements for randomisation to aid clarity.

## Packaging and transportation of raw meat and fish

The following questions asked about the types of raw meat/fish purchased, how often the participant packs raw meat/fish separately from other food items and what they do with both the bag and packaging once they have used the meat/fish. They were tested during both rounds of cognitive testing and in the pilot.

### Questions as tested at cognitive testing round 1

#### 3\_5a (SHOW CARD)

Which, if any, of the following types of raw meat, fish or shellfish do you/does your household usually buy?

MULTICODE

1. Minced or diced
2. Meat portion (e.g. steak, chops or chicken breast)
3. Processed (e.g. sausages or bacon)
4. Fish fillets
5. Whole fish
6. Raw shellfish (e.g. prawns, crabs, mussels, oysters, scallops)
7. Joints of meat (e.g. of beef, lamb, pork, etc.)
8. Whole chicken or other poultry
9. Whole chicken in a roasting bag (cooked in bag and not opened beforehand)
10. Other type of raw meat, fish or shellfish (specify)
11. Do not buy raw meat, fish, or shellfish SINGLE CODE- MOVE ON TO NEXT SECTION

**NewRawMeat1 (SHOW CARD)**

FOR THOSE WHO BUY RAW MEAT, FISH OR SHELLFISH

When you/your household buys raw meat, fish or shellfish, how often would you pack these separately from other general food items?

CODE ONE

1. I never do this
2. I rarely do this
3. I sometimes do this
4. I often do this
5. I always do this
6. DK CODE NOT SHOWN

**NewRawMeat2 (SHOW CARD)**

After having unpacked a bag which you used to carry raw meat, fish or shellfish what do you generally do with the bag?

CODE ONE

1. Dispose of bag along with general rubbish
2. Dispose of bag in recycling bin
3. Wash bag and put away with other bags for re-use
4. Keep bag for re-use but keep separate from other bags and re-use specifically for raw meat, fish or shellfish
5. Put away bag along with other bags for re-use
6. I do not use bags to carry raw meat, fish or shellfish
7. DK CODE NOT SHOWN

**NewRawMeat3 (SHOW CARD)**

After having used packaged or wrapped raw meat, fish or shellfish, what do you generally do with the packaging afterwards?

## SINGLE CODE

1. Put it in a recycling bin without washing it
2. Put it in a refuse/ non-recycling bin without washing it
3. Wash it and then put it in a recycling bin
4. Wash it and then put it in a refuse/ non-recycling bin
5. Wash it and re-use it
6. Other (Specify)
7. DK CODE NOT SHOWN

**Findings**

- **3\_5a** was easy to answer and participants gave a range of answers, but there was variation in thinking about fresh and frozen meat/ fish. One participant queried the time frame.
- For **NewRawMeat1** a number of participants reported rarely packing meat separately due to good existing packaging (except in cases of leaking or poor packaging). Participants answered based on purchasing meat which is usually well packaged (for example a vacuum sealed steak). Some participants believed this question was telling them what they should be doing, however they answered honestly.
- Those who order their meat online are not responsible for packaging.
- For **NewRawMeat2**, a number of participants reflected on packaging rather than carrier bags. When thinking about carrier bags participants gave a number of answers including reusing the bag to carry goods back from allotments. The 'Other' category was chosen when this was the case.
- A number of participants said 'it would depend' [on the type of meat or whether there was a recycling sign on the packaging or not] to **NewRawMeat3**. Participants generally found this question easy to answer and were thinking about the plastic or Styrofoam packaging around different types of meat.

**Recommendations**

- Include a statement to remind participants to think of both fresh and frozen meat for **3\_5a**. The word 'uncooked' could also be added to the question to prompt thinking of uncooked meat in a ready meal.
- Interviewers should prompt participants to think of a typical shop for **3\_5a**.
- Swap order of **NewRawMeat1** and **NewRawMeat2**, and change both to multi code.



### Questions as at cognitive testing round 2

#### Q3\_5a

Prompt included:

“PROMPT: This could include both fresh and frozen raw meat.”

ASK ALL

#### PackRaw (SHOW CARD)

I would like you to tell me whether you do or don't do the following things at all, and if so how frequently. How often do you...:

SINGLE CODE

Scale: Never; Sometimes; Most of the time; Always; Not applicable; Don't know

INTERVIEWER NOTES:

- CODE AS NOT APPLICABLE IF RESPONDENT DOESN'T PERSONALLY BUY RAW MEAT OR FISH, OR USE BAGS

INTERVIEWER NOTE: CODE AS NOT APPLICABLE IF RESPONDENT DOESN'T PERSONALLY USE PACKAGED MEAT OR NEVER/ONLY EVER RECYCLES PACKAGING.

1. Pack food items in separate bags to non-food items
2. Pack raw meat or fish in separate bags to other food items
3. Pack food items in a bag that had previously been used on another shopping trip
4. Pack food items in a bag that had previously been used to pack raw meat or fish
5. Wash packaging from raw meat or fish before putting into a recycling bin
6. Wash packaging from raw meat or fish before putting into a non-recycling bin

| Findings  | Recommendations   |
|---|---|
| <ul style="list-style-type: none"> <li>• <b>Q3_5a</b> was easy to answer.</li> <li>• Some statements at <b>PackRaw</b> were problematic. When answering about packing food items into separate bags and reusing bags, a number of participants considered packing foods into their fridge or freezer rather than during shopping.</li> <li>• Some participants could not explain the difference between the 'never' and 'not applicable' response options, however, those who selected 'never' were able to explain their reasons for doing so and selected the response option appropriately.</li> </ul> | <ul style="list-style-type: none"> <li>• Recommend maintaining <b>Q3_5a</b> as currently worded.</li> <li>• Suggest that the first four statements of <b>PackRaw</b> focus on food shopping, and the last two statements focus on within the home. This could be done by breaking <b>PackRaw</b> down into two separate questions, and making small refinements to how the statements are phrased.</li> <li>• A soft check allowing interviewers to confirm whether the person has correctly selected 'never' and 'not applicable' could be included for <b>PackRaw</b>.</li> <li>• The last two statements of <b>PackRaw</b> could be revised to cover separately washing and recycling raw meat packaging.</li> </ul> |

### Questions as tested at pilot

#### PackRaw

I would like you to tell me whether you do or don't do the following things at all, and if so how frequently:

SINGLE CODE

[include interviewer notes for all statements]

INTERVIEWER NOTES:

- CODE AS NOT APPLICABLE IF RESPONDENT DOESN'T PERSONALLY BUY RAW MEAT OR FISH, OR USE BAGS

- CODE AS NOT APPLICABLE IF RESPONDENT DOESN'T PERSONALLY USE PACKAGED MEAT OR NEVER/ ONLY EVER RECYCLES PACKAGING.

SCALE: Never; Sometimes; Most of the time; Always; Not applicable; Don't Know code not shown

- Pack food items in separate bags to non-food items
- Pack raw meat or fish in separate bags to other food items
- Pack food items in a bag that had previously been used on another shopping trip
- Pack food items in a bag that had previously been used to pack raw meat or fish
- Wash packaging from raw meat or fish before putting into a recycling bin
- Wash packaging from raw meat or fish before putting into a non-recycling bin

| Findings  | Recommendations   |
|---|---|
| <ul style="list-style-type: none"><li>Confusion regarding how participants should respond to the questions about washing packaging and putting it in a recycling/non recycling bin. Interviewers did not understand the interviewer note.</li></ul> | <ul style="list-style-type: none"><li>These statements could be simplified, asking separately about (a) washing and (b) recycling packaging for raw meat or fish.</li></ul> |

## Microwave use

These questions measured microwave use and knowledge about safe microwave use and were tested at cognitive testing round 1 only.

### Questions as tested at cognitive testing round 1

#### NewMicrowave1

Did you know that microwaves have a specific maximum power level (or wattage) depending on the model?

1. Yes
2. No

#### NewMicrowave2

Do you know what the power of your microwave is, in watts?

ENTER NUMERICAL VALUE \_\_\_\_\_

Don't know/Not sure

#### NewMicrowave4 (SHOW CARD)

What food and drink-related activities do you ever use your microwave for?

1. Cooking food you have prepared yourself (i.e. home-prepared meals, raw vegetables, baked potatoes)
2. Re-heating chilled leftovers
3. Re-heating frozen leftovers
4. Cooking chilled ready meals
5. Cooking frozen ready meals
6. Heating/re-heating beverages
7. Defrosting frozen raw meat, fish or shellfish
8. Defrosting frozen vegetables, fruit or bread
9. Other (specify)

**Questions as tested at cognitive testing round 1**

**NewMicrowave8**

ASK IF **NewMicrowave4**= ‘Cooking chilled ready meals’ or ‘Cooking frozen ready meals’

If the wattage on your microwave differs from that stated in the instructions on the packaging, how do you make sure that the food is cooked properly?

SPONTANEOUS – DO NOT SHOW SCREEN OR READ OUT, CODE ALL THAT APPLY

MULTICODE

1. Adjust timing
2. Steam coming from it
3. Taste it
4. Stir it
5. Check the middle is hot
6. Check it’s an even temperature throughout
7. Put hand over it/touch it
8. Use a thermometer/probe
9. It looks hot
10. Do nothing
11. Not applicable

**Findings**

**Recommendations**

- In general, questions were considered easy to answer.
- Most people knew the wattage of their microwave (**NewMicrowave2**). Those who didn’t were comfortable selecting ‘don’t know’ and knew where to look to find the wattage. This question is a test of memory rather than knowledge about microwave wattage.
- Interviewers were able to code responses from the list available.

- Consider removing **NewMicrowave1** and **NewMicrowave2**.
- Suggest simplifying wording at question **NewMicrowave4**.
- Recommend amendments to question **NewMicrowave8** to clarify subject of ready meal packaging.

## Use by dates

The following observations about the questions regarding use-by-dates were gathered during piloting.

| Questions as tested at pilot   |   |
|--|---|
| <p><b>Q11_6</b></p> <p>What is the maximum time after the &lt;&lt;USE BY/BEST BEFORE END&gt;&gt;date that you would &lt;&lt;INSERT&gt;&gt;?</p> <p>SPONTANEOUS</p> <p>Scale: never; less than 1 day; between 1 and 2 days; between 3 and 4 days; between 5 and 6 days; between 1 and 2 weeks; more than 2 weeks; don't know code not shown; don't eat code not shown</p> <p>ROTATE LIST</p> <ol style="list-style-type: none"> <li>1. Use raw meat (i.e. cook then eat) (USE BY)</li> <li>2. Eat cooked meat (USE BY)</li> <li>3. Eat dairy foods like cheese and yoghurt (USE BY)</li> <li>4. Eat eggs (BEST BEFORE END)</li> <li>5. Eat bread (BEST BEFORE END)</li> </ol> |   |
| Findings   | Recommendations   |
| <ul style="list-style-type: none"> <li>• Participants found <b>Q11_6</b> difficult to answer if they didn't judge by a use-by date but rather by the state of the product.</li> <li>• Participants noted that they would treat cheese and yoghurt differently.</li> </ul>  | <ul style="list-style-type: none"> <li>• Add a spontaneous code such as 'I do not judge based on the use-by/ sell-by date'</li> <li>• Separate cheese and yoghurt.</li> </ul> |

# Eating outside the home

The questions outlined in this section relate to the 'Eating Outside the Home' chapter of the Food and You Wave 4 report. This chapter includes questions regarding how frequently and where people eat out, and how they decide where to eat out. It also explores people's attitudes to food hygiene when eating out, how they assess the hygiene of the establishments in which they eat, and whether they recognised the FSA's Food Hygiene Rating scheme.

## Eating out

The 'Eating Out' questions explore the frequency, information sources and perceived hygiene of dining away from the home and were tested during the second round of cognitive testing.

### Questions as tested at cognitive testing round 2

#### **EatOut (SHOW CARD)**

I'm going to move on now to talk about when you eat out. Have you done any of the following things in the last month?

CODE ALL THAT APPLY

1. Eaten in a restaurant
2. Eaten takeaway food from a restaurant or takeaway outlet
3. Eaten in a fast food restaurant
4. Got food to take away from a fast food restaurant
5. Eaten in a pub/ bar/ nightclub
6. Eaten in a café or coffee shop
7. Bought food or drink from a café, coffee shop or sandwich bar to take away
8. Eaten food from a canteen (e.g. at work, school, university, or hospital)
9. Eaten in a hotel, B&B or guesthouse
10. Eaten food from a mobile food van or stall
11. None of these (SINGLE CODE ONLY)

**EatOutOf (SHOW CARD)**

At the moment, how often do you eat in a restaurant or other food outlet?

1. At least once a day
2. 5-6 times a week
3. 3-4 times a week
4. Once or twice a week
5. Once a fortnight
6. Once a month
7. Less than once a month
8. Never
9. It varies too much to say (CODE NOT SHOWN)
10. Don't know (CODE NOT SHOWN)

**TAwayOf (SHOW CARD)**

At the moment, how often do you buy food to take away from a restaurant or other food outlet?

1. At least once a day
2. 5-6 times a week
3. 3-4 times a week
4. Once or twice a week
5. Once a fortnight
6. Once a month
7. Less than once a month
8. Never
9. It varies too much to say (CODE NOT SHOWN)
10. Don't know (CODE NOT SHOWN)



IF (**EatOutOf** = NOT 'Never') AND (**TAwayOf** = NOT 'Never') THEN:

**EatOutInf (SHOW CARD)**

Over the last 12 months, when deciding where to eat out or get food to take away, have you got any information from any of the following sources?

1. Own experience of the place
2. Appearance of the place
3. Word of mouth
4. Recommendations from friends/family
5. Customer reviews on websites or mobile apps
6. Newspaper/magazine features or reviews
7. Television programmes
8. Books (e.g. restaurant guides)
9. Leaflets/flyers
10. Media advertising (e.g. television/radio/magazines/newspapers)
11. Other (please specify)

| Findings  | Recommendations   |
|---|---|
| <ul style="list-style-type: none"> <li>• Generally easy to answer.</li> <li>• For <b>EatOut</b>, some participants considered one year rather than the previous month.</li> <li>• Response options for <b>EatOut</b> were found to be mutually exclusive, although two participants indicated that responses 1 and 2 ('eating in' versus 'takeaway') overlapped, as did 3 and 4 ('eating in' versus 'takeaway from fast food restaurants'). Participants recommended shortening the option list.</li> <li>• Some participants suggested additional options for <b>EatOut</b> such as eating at a friend's house, and buying takeaway food from petrol stations, supermarkets and shopping complexes. However, such options could inadvertently encourage participants to include home-prepared food or grocery shopping when answering these questions.</li> <li>• For <b>EatOutOff</b> and <b>TAwayOff</b> there was variability in participants' interpretation of 'at the moment'.</li> <li>• Some variability in the definition of 'food outlet' at <b>EatOutOff</b>.</li> <li>• <b>TAwayOff</b> was easily understood: takeaway food was interpreted as food consumed immediately.</li> <li>• For <b>EatOutInf</b> participants suggested that options 'word of mouth' and 'recommendations from friends/ family' overlapped. Additionally participants suggested 'money-off vouchers', 'social media' and 'none' as options.</li> </ul> | <ul style="list-style-type: none"> <li>• Rephrase <b>EatOut</b> with reference period at the start of the question. Collapse categories on the show card into relevant groupings.</li> <li>• Clarify timescale for <b>EatOutOff</b> and <b>TAwayOff</b>.</li> <li>• Include more examples at <b>EatOutOff</b> to encourage broad thinking about types of outlet.</li> <li>• Collapse responses 'word of mouth' and 'recommendations' for <b>EatOutInf</b>.</li> <li>• Consider including 'social media' and 'none' options for <b>EatOutInf</b>, or broaden categories to include these possibilities.</li> </ul> |

# Food production and the food system

The questions tested in this section relate to the 'Food production and the food system' chapter of the Food and You Wave 4 report. This chapter explores people's concerns regarding food authenticity, chemicals that may be present in foods, new food technologies, the future of food production, and food provenance issues.

## Food authenticity

These questions explored participants' concerns regarding food and labelling authenticity, and any action taken in cases of concern. These questions were tested at both rounds of cognitive testing.

### Questions as tested at cognitive testing round 1

#### 11\_3 (new)

Please tell me the extent to which you are concerned or unconcerned by the following food-related issue?

SINGLE CODE

READ OUT

SCALE: Very concerned; Fairly concerned; Neither concerned nor unconcerned; Fairly unconcerned; Very unconcerned; DK code not shown

- Food or drink not being what it says it is on the label or menu

**11\_4 (new) (SHOW CARD)**

ASK IF 11\_3 IS 'Very concerned' OR 'Fairly concerned'

You have indicated that you are concerned about food or drink not being what it says it is on the label or menu. In response, have you done any of the following over the past year?

**MULTICODE**

1. Tried to get more information about the issue
2. Read about the issue when you saw it but did not seek out information
3. Read food labels/menus more carefully
4. Changed the way you cook food
5. Changed the way you prepare food
6. Changed the places where you shop for food
7. Stopped buying/eating certain foods
8. Stopped eating at certain places / food establishments
9. Other (specify)
10. Took no action (SINGLE CODE ONLY)

**NewFoodProduction2**

In general, how confident would you say you are, when buying or consuming food and drink, that it is always what it says it is on the label or the menu?

**SINGLE CODE READ OUT**

1. Not at all confident
2. Slightly confident
3. Somewhat confident
4. Confident
5. Very confident
6. DK CODE NOT SHOWN

**NewFoodProduction3 (SHOW CARD)**

I'm now going to ask you about a number of places where you can buy food and drink. For each place, how confident would you say you are that the food and drink is always what it says it is on the label or the menu? Would you say you were not at all confident, slightly confident, somewhat confident, confident, or very confident?

SCALE: Not at all confident; Slightly confident; Somewhat confident; Confident; Very Confident;

DK (DO NOT READ OUT)

1. Supermarkets
2. Independent butchers
3. Independent greengrocers
4. Independent fishmongers
5. Markets (including stalls or farmers' markets)
6. Restaurants
7. Fast food restaurants
8. Takeaway restaurants
9. Cafés/ coffee shops
10. Pubs

**NewFoodProduction4**

In the last 12 months, have you ever suspected that food you bought or ate was not what it said it was on the label or the menu?

SINGLE CODE READ OUT

1. Never
2. Rarely
3. Sometimes
4. Often
5. Always

| Findings   | Recommendations   |
|--|---|
| <ul style="list-style-type: none"> <li>At question <b>11_3</b>, a number of participants selected 'fairly concerned'. However, they had taken no action and, at question <b>NewFoodProduction2</b>, reported never suspecting mislabelling.</li> <li>At <b>11_4</b> participants were easily able to list action taken and felt comfortable saying they had not taken action. Some participants suggested 'reporting someone to the FSA or environmental health organisation' as a response option.</li> <li>At <b>NewFoodProduction3</b> participants generally thought about the same types of places when defining 'take away' compared to 'fast food'. For take away they were thinking of pizza, Indian, Chinese and fish and chips. When talking about fast food they mentioned chain restaurants such as McDonald's, KFC, Burger King and Wimpy. One participant mentioned that sometimes you can eat in at a restaurant that also does take away food.</li> <li>Participants identified overlap in response options at <b>NewFoodProduction3</b>. For example, participants compared an independent butcher on the high street to a butchers counter within a supermarket. They also noted the same food that is eaten in a restaurant may also be available as take away food.</li> <li>Participants suggested a 'not applicable' response option should be added to <b>NewFoodProduction3</b> as they would, for example, never shop at a fish mongers.</li> </ul> | <ul style="list-style-type: none"> <li>Suggest removing question <b>11_3</b> and retaining <b>NewFoodProduction4</b> as it is more specifically about how often people have been concerned in practice, rather than how concerned they are about the general idea of mislabelling.</li> <li>Recommend routing question <b>11_4</b> from <b>NewFoodProduction2</b> (the order of the two questions could be reversed). Modify wording of <b>NewFoodProduction2</b> to: "You have indicated that you are not confident that food or drink is always what it says it is on the label or the menu..."</li> <li>Include 'not applicable' for <b>NewFoodProduction3</b>.</li> <li>Consider level of detail necessary between categories at <b>NewFoodProduction3</b>. Consider adding explanations for some of the terms. Alternatively, these categories could be collapsed into a single response.</li> </ul> |

**Questions as asked at cognitive testing round 2****Label (SHOW CARD)**

In general, when buying or eating food, how often do you feel confident that it is what it says it is on the label or the menu?

## SINGLE CODE

1. Always
2. Most of the time
3. Some of the time
4. Rarely
5. Never
6. DK (CODE NOT SHOWN)

ASK IF Label= 'Most of the time' OR 'Some of the time' OR 'Rarely' OR 'Never'

### **FdAuthCon**

You indicated that you are not always confident that food is what it says it is on the label or the menu. What specific issues were you thinking of, if any?

SPONTANEOUS – DO NOT READ OUT, CODE ALL THAT APPLY. PROMPT- What else?

1. Horsemeat sold as beef
2. Other species of meat sold as another species
3. Species of fish sold as another species
4. Undeclared added water to meat or fish
5. False labelling/description of organic fruit/vegetables
6. False labelling/description of free-range/organic meat
7. False labelling/description of free-range/organic/Lion Mark eggs
8. False labelling/description of organic/free-range foods (not specific)
9. False labelling of other quality assurance standards (e.g. Red Tractor, Lion Mark)
10. Misleading dietary claims e.g. low fat, low sugar
11. Appearance (e.g. does not appear as advertised on packaging/marketing)
12. Taste (e.g. does not taste as expected)
13. Failure to declare potential allergens e.g. traces of peanuts
14. Presence of meat/meat-derived products in non-meat products
15. Counterfeit alcohol (e.g. counterfeit vodka passed off as a branded type)
16. False declaration of origin (e.g. not from the country it said it was)
17. Diluted/adulterated fruit juice
18. Diluted/adulterated oils (extra virgin olive oil diluted with lesser grade oil)
19. Other (please specify)
20. Nothing in particular (SINGLE CODE ONLY)



ASK IF Label= 'Most of the time' OR 'Some of the time' OR 'Rarely' OR 'Never'

**11\_4** (SHOWCARD)

As above in round 1.

ASK ALL

**Label12Of** (SHOW CARD)

In the last 12 months, how often would you say you suspected that food you bought or ate was not what it said it was on the label or the menu?

SINGLE CODE

1. Never
2. Once or twice
3. Three or four times
4. More often than this
5. DK (CODE NOT SHOWN)

| Findings   | Recommendations  |
|--|--|
| <ul style="list-style-type: none"> <li>• Questions easy to answer and on the whole worked well.</li> <li>• <b>Label</b> worked as a routing question and those who routed to <b>FdAuthCon</b> were able to provide an answer.</li> <li>• Participants who answered <b>FdAuthCon</b> were easily able to provide an open verbal answer; however it was difficult for the interviewer to match the answer to a code in a short space of time. This finding was replicated in the pilot, with interviewers pointing out that participants were describing things that did not neatly categorise into one of the response options available. The number of available response options also made coding difficult.</li> <li>• Participants answered <b>11_4</b> honestly if they had taken no action. Those who had taken actions easily chose the things they had done from the list. A range of responses were given including: shopping elsewhere, cooking food differently and reading labels.</li> <li>• There was consistency between answers given at <b>Label</b> and <b>Label12Oft</b> with participants generally saying once or twice at <b>Label12Oft</b> after selecting 'Most of the time' at <b>Label</b>. This indicates that either could be used as routing questions.</li> </ul> | <ul style="list-style-type: none"> <li>• Either <b>Label</b> or <b>Label12Oft</b> could be used as routing questions to <b>FdAuthCon</b>. The pilot suggested that stricter routing criteria may be useful to minimise the likelihood of participants being routed to <b>FdAuthCon</b> in the absence of specific issues.</li> <li>• Condense code list at <b>FdAuthCon</b> to make it easier for interviewers to code responses, or change to self-selection using a simplified show card.</li> </ul> |

## Food production and technology

These questions explore participants' knowledge of, and attitudes to, contemporary food technologies and were testing during both rounds of cognitive testing.

### Questions as at cognitive testing round 1

#### 8.3 (new) (SHOW CARD)

The following are some technologies that have been used, or have been proposed for use, in relation to food production. Have you ever heard of any of these?

1. Genetic modification (GM)
2. Irradiation
3. Nanotechnology
4. Products made using edible insects
5. Laboratory-grown meat (meat grown from animal cells in a production facility, also known as 'in-vitro' meat)
6. Reclaimed/recycled water (purified wastewater or sewage that is reused for human consumption)
7. None of these
8. DK code not shown

#### NewFoodProduction1 (SHOW CARD)

SCALE: Definitely agree; Tend to agree; Neither agree nor disagree; Tend to disagree; Definitely disagree; Don't know

To what extent would you agree or disagree with each of the following statements? I would be willing to...

- consume food or drink containing genetically modified products
- consume food or drink that had involved the use of irradiation
- consume food or drink that had involved the use of nanotechnology
- eat food products made using edible insects
- eat laboratory-grown meat or meat products
- drink reclaimed/recycled water

| Findings   | Recommendations   |
|--|---|
| <ul style="list-style-type: none"> <li>• Participants were comfortable answering <b>8.3</b> and only listed technologies they had heard of.</li> <li>• <b>NewFoodProduction1</b> was difficult due to the lack of information provided about the technologies.</li> <li>• For unfamiliar technologies at <b>NewFoodProduction1</b> participants either: selected 'don't know'; selected 'definitely disagree' because they would not try something they knew nothing about; selected 'neither agree nor disagree' because they couldn't make a decision; or imagine what the process would involve and make a decision on this assumption.</li> <li>• Participants were frustrated by the lack of explanations.</li> </ul> | <ul style="list-style-type: none"> <li>• Add short explanations to response options at <b>NewFoodProduction1</b> as has been done for 'laboratory-grown meat'.</li> </ul> |

### Questions as asked at cognitive testing round 2

(Note that these questions were not retained in the final version of the questionnaire).

#### 8.3 (SHOW CARD)

Which of the following have you heard of in relation to food production?

MULTICODE

1. Genetic modification (GM)
2. Irradiation
3. 'Smart packaging' for food
4. Nanotechnology
5. 3D-printed food
6. Products made using edible insects
7. Laboratory-grown or 'in-vitro' meat
8. Reclaimed/recycled wastewater
9. DK (code not shown)

**8.4 (SHOW CARD)**

How much do you agree or disagree with the following statement?

I feel knowledgeable about the use of <TECHNOLOGY> in food production

SINGLE CODE

1. Definitely agree
2. Tend to agree
3. Neither agree nor disagree
4. Tend to disagree
5. Definitely disagree
6. DK (CODE NOT SHOWN)

**TechOpin (SHOW CARD)**

To what extent do you favour or oppose the use of <TECHNOLOGY> in relation to food production?

1. Favour
2. Tend to favour
3. Neither favour nor oppose
4. Tend to oppose
5. Oppose
6. Do not have enough information to make a judgement

**Findings**

- **8\_3** was easy to answer, with participants selecting only technologies they had heard of.
- **8\_4** was easy to answer. However, probing the term 'knowledgeable' found broad and variable definitions. Some participants thought knowledge was being able to describe what it was, whilst others thought this meant having a detailed understanding of the technology and how it is used.
- Some participants who suggested they were not knowledgeable did not use option 6 for **TechOpin**. During probing they selected this option.

**Recommendations**

- Remove response option 6 from **TechOpin**. Participants often selected 'neither favour nor oppose' if they did not have enough knowledge or if they did not want to give an opinion either way. A spontaneous 'Don't know' option could be beneficial.

## Residues, additives and chemicals

These questions exploring attitudes to residues, additives and chemicals were tested for the first time in round 2 of cognitive testing, and further observations were collected during piloting.

### Questions as tested at cognitive testing round 2

#### 11\_3 (SHOW CARD)

Please tell me the extent to which you are concerned or unconcerned by each of the following issues? READ OUT...

SINGLE CODE FOR EACH ITEM

SCALE: Very concerned; Fairly concerned; Neither concerned nor unconcerned; Fairly unconcerned; Very unconcerned; Don't know

- Residues of pesticides in food
- Residues of veterinary medicines in products of animal origin, such as meat, eggs and milk
- The use of additives (such as preservatives and colouring) in food products

#### 11\_4 (SHOW CARD)

You have indicated that you are concerned about <TEXTFILL ONE ISSUE FROM 11.3>. In response, have you done any of the following over the past year?

MULTICODE

- Tried to get more information about the issue
- Read about the issue when you saw it but did not seek out information
- Read food labels more carefully
- Changed the way you cook food
- Changed the way you prepare food
- Stopped shopping for food at certain places
- Stopped eating certain foods
- Other (specify)
- Took no action (SINGLE CODE ONLY)

**ChemKnw (SHOW CARD)**

I'm now going to ask you some further questions about chemicals in food. Chemicals can be present in food for a number of different reasons. To what extent would you say you feel informed about each of the following issues. READ OUT...

SCALE: Very well informed; Well informed; Not well informed; Not at all informed; Don't know

- Chemicals deliberately added to food by producers (e.g. as colouring, sweeteners, preservatives)
- Chemicals from the food production process (e.g. pesticide residues, veterinary medicine residues)
- Chemicals that can occur naturally in food (e.g. fungal toxins, heavy metals)
- Chemicals that can be formed during the cooking process (e.g. through cooking at high temperatures, smoking of food)

**ChemOpin (SHOW CARD)**

The following are a number of statements that people have made in relation to chemicals and food production. To what extent do you agree or disagree with each of the following statements:

SCALE: Definitely agree; Tend to agree; Neither agree nor disagree; Tend to disagree; Definitely disagree; Don't know

1. The benefits of using chemicals in food production outweigh any risks.
2. Man-made chemicals in food are more dangerous than naturally-occurring chemicals.

| Findings  | Recommendations   |
|---|---|
| <ul style="list-style-type: none"> <li>• Question <b>11_3</b> and <b>11_4</b> were easy to answer.</li> <li>• Participants were honest at <b>11_4</b> when no action was taken. The types of action people had taken were; finding out more information, reading labels and changing the way they prepare or cook food. A number of participants also mentioned buying organic food as a course of action because they believed this food would not contain pesticides or veterinary medicine.</li> <li>• Most participants thought about crops being sprayed with chemicals when thinking about pesticides at <b>11_3</b>.</li> <li>• For the statement 'Residues of veterinary medicines' participants thought about treatment of animals for health conditions, injections for building body mass for more meat and lethal injections <b>11_3</b>.</li> <li>• For 'additives' at <b>11_3</b>, participants thought of sugars, e-numbers and preservatives.</li> <li>• Participants found <b>ChemKnw</b> and <b>ChemOpin</b> more difficult due to the specificity of the chemicals concerned and their perceived lack of knowledge. A number of participants were unable to describe the chemicals spoken about at these questions during probing.</li> <li>• Participants answered <b>ChemKnw</b> with 'Not at all informed' when they lacked knowledge.</li> <li>• Participants did not have enough knowledge to answer <b>ChemOpin</b>. They recommended a response option which reflected lack of knowledge (a spontaneous 'don't know' code was available but this was not overtly offered to participants).</li> </ul> | <ul style="list-style-type: none"> <li>• Add a response option to <b>11_4</b> to include 'buy organic food'.</li> <li>• Consider removal of these questions due to possibility of high item non-response (or high use of the spontaneous 'don't know' codes) and lack of differentiation between items (participants answering all statements in the same way based on a generalised opinion about chemicals rather than a specific opinion on each type of chemical mentioned).</li> </ul> |



### Questions as asked at pilot

#### Q11\_3 (SHOW CARD)

Please tell me the extent to which you are concerned or unconcerned by each of the following issues?

SCALE: Very concerned; Fairly concerned; Neither concerned nor unconcerned; Fairly unconcerned; Very unconcerned; DK code not shown

- Food poisoning (such as Salmonella, E.Coli, Campylobacter and Listeria)
- Genetically Modified (GM) foods
- Residues of pesticides in food
- Residues of veterinary medicines in products of animal origin, such as meat, eggs and milk
- The use of additives (such as preservatives and colouring) in food products
- Food hygiene when eating out
- Food hygiene at home
- Food or drink not being what it says it is on the label or menu

#### ChemKnw (SHOW CARD)

I'm now going to ask you some further questions about chemicals in food. Chemicals can be present in food for a number of different reasons. To what extent would you say you feel informed about each of the following issues:

SCALE: Very well informed; Well informed; Not well informed; Not at all informed; Don't know (CODE NOT SHOWN)

- Chemicals deliberately added to food by producers (e.g. as colouring, sweeteners, preservatives)
- Chemicals from the food production process (e.g. pesticide residues, veterinary medicine residues)
- Chemicals that can occur naturally in food (e.g. fungal toxins, heavy metals)
- Chemicals that can be formed during the cooking process (e.g. through cooking at high temperatures, smoking of food)

### ChemOpin

The following are a number of statements that people have made in relation to chemicals and food production. To what extent do you agree or disagree with each of the following statements:

SCALE: Definitely agree; Tend to agree; Neither agree nor disagree; Tend to disagree; Definitely disagree; Don't know

- The benefits of using chemicals in food production outweigh any risks.
- I worry that there could be long-term health effects of chemicals in food.
- Man-made chemicals in food are more dangerous than naturally-occurring chemicals.
- I would like more information on what I can do about the presence of chemicals in my food.
- I believe that the presence of chemicals in food is well-regulated.

| Findings  | Recommendations   |
|---|---|
| <ul style="list-style-type: none"> <li>• For the statement 'food hygiene at home' at <b>11_3</b> participants were unclear whether to interpret 'very concerned' as concerned and therefore conscientious about hygiene in the home or concerned that their home was not hygienic.</li> <li>• Responses ranged across the scales for both sets of statements, however the response profile (i.e. proportion of responses given at each point in the scale) for statements 2, 3 and 4 at <b>ChemKnw</b> were very similar. This was also observed for statements 2, 3, and 4 and 1 and 5 at <b>ChemOpin</b>. These findings suggest that whilst self-reported knowledge and opinions may vary from person to person, the statements did not demonstrate nuances in individuals' knowledge and opinions about chemicals.</li> </ul> | <ul style="list-style-type: none"> <li>• Clarify target of concern within question at <b>11_3</b>.</li> <li>• <b>ChemKnw</b> and <b>ChemOpin</b> would benefit from having broader and fewer statements.</li> </ul> |

## Food futures

The food futures question explores participants' perspectives on how eating behaviours impact the global food system and the environment. This was tested during the second round of cognitive testing.

### Questions as tested at cognitive testing round 2

#### FoodFut (SHOW CARD)

The following statements are some that people have made about the global food system and the environment. Please can you tell me the extent to which you agree or disagree with each statement:

SCALE: Definitely agree; Tend to agree; Neither agree not disagree; Tend to disagree; Definitely disagree

1. People in the UK need to be less reliant on imported food
2. People in the UK will have to change what they eat because of the pressures on global food production
3. People in the UK need to eat less or there won't be enough food to go round.
4. Eating less meat is good for the environment.

| Findings   | Recommendations   |
|--|---|
| <ul style="list-style-type: none"> <li>• Participants varied regarding how easy or difficult they found FoodFut. Difficulties arose in relation to understanding the terminology used in the question and statements, judging the basis for reporting (for example participants varied as to whether they were answering based on perceived environmental benefits only).</li> <li>• Participants who had difficulty responding to these questions selected 'neither agree nor disagree' suggesting that this option was used to indicate a lack of understanding, rather than ambivalence.</li> <li>• Participants varied in their understanding of 'Global Food System'. Participants tended to understand the term 'Global Food System' as a distribution mechanism for producing and trading food. Some did not understand the term.</li> <li>• Participants tended to understand 'imported food' as food which comes into the UK from other countries or continents.</li> <li>• Participants varied in understanding of 'Global Food Production'. Some interpreted it as food produced and distributed amongst nations to ensure adequate supply. Statements 1 and 2 appeared to conceptually overlap as people's understanding of 'global food production' and 'importing' were viewed as being the same or similar.</li> <li>• Statement 3 'People in the UK need to eat less or there won't be enough food to go round' was unclear whether it refers to enough food 'in the UK' or enough food 'globally.'</li> </ul> | <ul style="list-style-type: none"> <li>• Consider removal or simplification due to clarity issues.</li> </ul> |

# 4 Participant documents

One of the aims of the pilot study was to assess the following participant documentation:

- advance letter from the FSA and NatCen inviting people to take part in Food and You.
- leaflet containing further information about the FSA and Food and You.
- doorstep laminate used as an aid for interviewers to use on the doorstep when ‘selling’ the survey.
- thank you letter and information sheet given to participants at the end of the interview.

Interviewers were asked about how these documents were used, how effective they were in engaging participants, and whether they sufficiently answered all of the participants’ questions.<sup>9</sup>

| Findings  | Recommendations  |
|---|--|
| <ul style="list-style-type: none"><li>• The majority of interviewers felt that the advance letter was a good tool for answering participants’ questions and presented the study as official.</li><li>• Interviewers were unanimous in their view that the leaflet was visually appealing and conveyed the appropriate message to engage respondents with Food &amp; You. They felt it was an excellent tool for engaging participants.</li><li>• Interviewers felt the letter and leaflet worked well together to capture a range of audiences.</li><li>• The doorstep laminate divided opinion amongst interviewers; some reported that they did not use it as it did not add any extra information to that of the letter and leaflet; whereas others found it to be a useful tool and provided another way of engaging participants. On balance, interviewers agreed they would rather have the laminate for the mainstage.</li><li>• Interviewers, on the whole, thought that the thank you letter was useful but noted that there was no additional information on Healthy Eating for those in Northern Ireland.</li><li>• Interviewers noted that they sometimes forgot to give the thank you letter and would appreciate a prompt in CAPI to remind them.</li></ul> | <ul style="list-style-type: none"><li>• Minimal changes to the documents were recommended.</li><li>• Include information with the thank you letter about healthy eating for Northern Ireland participants, as well as adding a note within the CAPI questionnaire to remind interviewers to hand this out to participants.</li></ul> |

<sup>9</sup> As participants were recruited via a quota sample the advance letter was given to participants by the interviewer on the doorstep, as opposed to being posted to the participant in advance of initial interviewer contact. Nonetheless, interviewers were instructed to use the advance letter and obtain feedback from the participants where appropriate.

# 5 Interview length

An estimate of interview length was gathered from the pilot data. This served to inform questionnaire development: where specific sections were longer than expected these became candidates for revision or removal.

## Analysis

Questionnaire length was computed by the CAPI program from the start of the first question to the last. At the end of the interview, the computed length was presented to the interviewer who confirmed whether it was correct. If not, the interviewer was prompted to input the correct time.

In 81% (N=89) of cases the computed questionnaire length was corroborated by the interviewer. For the remaining 19% (N=21) the interviewers' judgement of interview length was taken instead of the computed length (with the exception of two cases where 1 minute was input mistakenly and therefore computed length was taken).

Start and end times for each module were also recorded automatically by the CAPI program.

The data were checked and cleaned to ensure that no outliers were present. Two outliers (over two standard deviations above the mean questionnaire length) were removed from analysis. Average overall questionnaire length was then computed for both versions of the questionnaire (the England/Wales version, and the longer Northern Ireland version), as well as average lengths for each module. The findings are presented below.

## Key Findings

The mean length of the England and Wales questionnaire was 58 minutes (standard deviation = 16 minutes), this was based on 87 interviews.

Twenty-two interviews were conducted in Northern Ireland and one outlier was removed from analysis. Given the smaller sample size, the mean length of the Northern Ireland-only Healthy Eating module was calculated (13.3 minutes) and added on to the mean total interview length for England/Wales (58 minutes). The mean questionnaire length in Northern Ireland was therefore 71 minutes.

## Individual module lengths

The table below shows the average time it took to complete each module (in minutes).

| Module                | Average length (minutes) |
|-----------------------|--------------------------|
| Household information | 2.88                     |
| Eating Habits         | 11.09                    |
| Shopping              | 6.11                     |
| Food Insecurity       | 1.35                     |
| Food Safety           | 17.08                    |
| Food Production       | 7.63                     |
| Health                | 1.95                     |
| Healthy Eating*       | 13.30                    |

\*Northern Ireland only

## Interviewer feedback

- Interviewers reported that the repetitive nature of some questions contributed to participant fatigue. Despite this, interviewers generally considered the questionnaire length to be acceptable and as expected.
- Interviewers in Northern Ireland noted participants' frustration with the Healthy Eating module. This was due to awkward wording of module introductions which inadvertently presented the questionnaire as being finished before this section. It was recommended that the module order be changed with the Healthy Eating module preceding the Health module.

# 6 General feedback from pilot interviewers

Interviewers were asked if they had any concerns or problems with the understanding or coding of any specific questions within the questionnaire. The following minor points were raised:

- For the **Food Security module**, interviewers noted that show cards should be used given the sensitive nature of the questions.
- For the **Food Safety module** it was unclear whether questions were being asked of the individual or the household. A short sentence in the introduction to this section would clarify this.



# 7 Final questionnaire changes for Wave 4

The following sections detail the final list of changes made to the mainstage questionnaire for Food and You Wave 4, relative to Wave 3.

Show cards were used for longer lists of response options or any questions that were deemed sensitive. In order to reduce any potential order effects, a small number of questions (B12a/B12b, B13a/B13b, B15a/B15b, E13a/E13b, H6a/H6b) had two show cards; the response options were reversed on the second card. One show card, randomly determined by the questionnaire programme, was presented to the participant. The final questionnaire and show cards are appended to the Food and You Wave 4 Technical Report.

## Eating habits

- New questions (**CkRes**, **CkOth**, **CkResEls**) were added to identify the level of responsibility the selected participant had for preparing and cooking food, and whether any other individuals, either within the household or externally, had responsibility for this also.
- Questions **Q2\_3** and **Q2\_4** were combined to into one question (**CkFreq**) “How often do you cook or prepare food for yourself, or others”, the response options remained the same.
- The following response options were removed from **Q2\_7**; ‘Avoid certain food for medical reasons other than a food allergy’, ‘Avoid certain foods for other reasons (e.g. foods that don’t seem to agree with me)’, ‘Allergic to certain food’, ‘On a diet trying to lose weight’, ‘On a diet trying to gain weight’ and ‘Other (SPECIFY)’. This was to reflect additional question on allergies and intolerances.
- Verification questions (**VegeChk**, **VeganChk**) were added to ensure that the participant, if selecting that they were completely vegetarian or vegan at **Q2\_7**, did not eat any meat, fish, or poultry (if vegetarian) or any foods of animal origin (if vegan). Those individuals that answered ‘No’ were then routed out of questions related to meat and/or dairy consumption at **Q2\_14**.
- Questions on allergies were modified and expanded to capture additional information on intolerances and other adverse reactions to food. New questions were **AdReac**, **AvoidFd**, **FdReac**, **FdReacO**, **ReacTyp**, **Diagnose** and **ReacAge**. Meanwhile questions **Q2\_7bnew** and **Q2\_7cnew** were removed.
- Changes to the list of foods asked at **Q2\_14**, and additional foods asked about.
- Question **Q2\_16** was removed. Three statements (‘Good health is just a matter of good luck’, ‘The experts contradict each other over what foods are good or bad for you’ and ‘What you eat makes a big difference to how healthy you are’) were asked of Northern Ireland respondents as part of question **H2\_16**.

- New questions (**EatOut**, **EatOutOff**, **EatOutInf** and **EatOutRev**) regarding where people 'eat out' and how often were added. Questions **Q2\_33** and **Q2\_34** were removed as a result.
- Changes to response options at **Q2\_38**: 'Hygiene sticker' and 'Hygiene certificate' were combined into one response option 'Hygiene rating/score' and 'websites' was changed to 'Customer reviews on websites/mobile apps'.
- Question **Q2\_39** was removed.
- Respondents were no longer asked about whether they had seen 'scores on the doors' images, or the Scotland FHIS at **Q12\_1**. Only respondents in Wales were shown the bilingual English/Welsh version of the FHIS.
- Questions **Q12\_1**, **Q12\_2**, **Q12\_3**, **Q12\_4** and **Q12\_5** were removed.

## Shopping

- Question wording for **Q3\_1** was amended to reflect that participants should be thinking about a 'typical week'. An additional response option was included 'Each person is responsible for their own food/grocery shopping' for households where individual members primarily cooked for themselves.
- New questions (**ShpOth**, **ShpResO**, **ShpResEIs**) were added to assess the level of responsibility other people in the household, or non-resident individuals might have for shopping.
- Questions **Q3\_5a**, **Q3\_5b**, **Q3\_5c**, **Q3\_5d**, **Q3\_5e**, **Q3\_5f** and **Q3\_12** were removed.
- Seven new questions about food provenance were added. Participants in England/Wales were asked **ProvFood**, the equivalent for those in Northern Ireland was **ProvFoodNI**.
- Three new questions (**FoodFut**) about 'food future' were added.

## Food security

- A new 'Food Security' module was introduced in Wave 4. This was based on the 10-item 'US Household Food Security Survey Module'<sup>10</sup>. Showcards were used for all questions due to their sensitive nature.

10 [http://www.ers.usda.gov/datafiles/Food\\_Security\\_in\\_the\\_United\\_States/Food\\_Security\\_Survey\\_Modules/hh2012.pdf](http://www.ers.usda.gov/datafiles/Food_Security_in_the_United_States/Food_Security_Survey_Modules/hh2012.pdf)

- Question **Q3\_13** was moved to the end of the food security module, the time frame asked about was altered from 6 months to 12 months and two additional response options were added: 'Changed the places you buy food for cheaper alternatives' and 'Changed the food you buy to cheaper alternatives'

## Food safety

- The following response option was added to **Q4\_3**: 'To prevent cross contamination'.
- 'Don't know' response options were added to **Q4\_11** and **Q4\_12**.
- The following response option was added to **Q4\_14**: 'Don't buy or store meat or poultry at all'.
- The following response option was added to **Q4\_21**: 'Do not buy food (spontaneous only)'.
- The following response option was added to **Q4\_22**: 'Do not cook or prepare food (spontaneous only)'.
- Question **Q11\_6** was removed.
- New questions on microwave usage were added (**MWPwr**, **MaxPwr**, **MWUses**, **MWRMeal**, **MWDiff**). These were only asked of participants who reported having use of a microwave oven at question **Q4\_8c**.
- The following statements were removed from question **Q4\_27**: 'It's just bad luck if you get food poisoning', 'People worry too much about getting food poisoning', 'a little bit of dirt won't do you any harm', 'I enjoy reading articles about food in newspapers or magazines', 'The price of food means I often don't buy the food I would like to', 'I enjoy making new things to eat'. Additionally, the following statements were added: 'I like trying new things to eat', 'I enjoy preparing and cooking food', 'I'm not generally interested in food', 'I don't have time to spend preparing and cooking food', 'When preparing food I could be more careful about hygiene'.
- Questions **Q4\_29**, **Q4\_29b**, **Q4\_30**, **Q4\_30b**, **Q11\_8c** and **Q9\_2** were removed.

## Food issues

- A new module was introduced looking at food authenticity and chemical use.

## Healthy eating (Northern Ireland participants)

- This module was moved to appear before the 'health' module in order to improve the flow of the questionnaire.
- The following additional food items were asked about at question **H2\_14**; 'sweets and chocolate' and 'savory snacks (e.g. crisps)'.
- An amendment was made to one response option at **H2\_16**; 'Small dietary changes, such as eating less fat or cutting down on sugar, can lead to benefits for my future health'. Furthermore, the following statements were added; 'Good health is just a matter of good luck', 'the experts contradict each other over what foods are good or bad for you', 'What you eat makes a big difference to how healthy you are'.
- Questions Info, **H2\_17\_2** and **H2\_17a - H2\_17f** were updated to reflect the new guidance from Public Health England in respect of the new 'Eatwell guide'<sup>11</sup>
- The following response option was added to question **H2\_19**: 'Eating less food high in sugar'.
- Question **H2\_31** was converted to teaspoon measurements only, rather than teaspoons and tablespoons.

## Health

- Additional questions on mobility (**Mobil**), dexterity (**Dex**) and eyesight (**Eye**) were added.

## Demographics

- Questions Q7\_27, Q7\_28, Q8\_27b, Q8\_27c and Q8\_27d were removed.
- Question routing for Q8\_27 was amended to be asked of all participants. Two additional response options were added: 'Both' and 'Neither'.

<sup>11</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/528201/Eatwell\\_guide\\_what\\_changed\\_and\\_why.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/528201/Eatwell_guide_what_changed_and_why.pdf) (accessed 12/09/16).

