Food and You 2: Wave 8 Key Findings

Area of research interest: Behaviour and perception
Project status: Completed
Project code: FS430662
Authors: Dr Beth Armstrong, Helen Heard, Lucy Murray, Robin Clifford, Dr Daniel Mensah, Matt Jenkins
Conducted by: Ipsos
Date published: 26 September 2024
DOI: https://doi.org/10.46756/sci.fsa.hox161

F&Y2 Wave 8: Executive summary

Results available: Results available
Area of research interest: Behaviour and perception
Research topics: Social science
Project code: FS430662
Authors: Dr Beth Armstrong, Helen Heard, Lucy Murray, Robin Clifford, Dr Daniel Mensah, Matt Jenkins
Conducted by: Ipsos
DOI: https://doi.org/10.46756/sci.fsa.hox161
Project status: Completed
Date published: 26 September 2024
PDF
View Food and You 2: Wave 8 Key Findings as PDF(Open in a new window) (641.71 KB)

Food and You 2 is a biannual 'Official Statistic' survey commissioned by the Food Standards Agency (FSA). The survey measures consumers' self-reported knowledge, attitudes and behaviours related to food safety and other food issues amongst adults in England, Wales, and Northern Ireland.

Fieldwork for Food and You 2: Wave 8 was conducted between 12th October 2023 and 8th January 2024. A total of 5,808 adults (aged 16 years or over) from 4,006 households across England, Wales, and Northern Ireland completed the 'push-to-web' survey (see Annex A for more information about the methodology).

The modules presented in this report include 'Food you can trust', 'Concerns about food', 'Food security', 'Eating at home', 'Food hypersensitivities', 'Eating out and takeaways' and 'Emerging issues'.

Food you can trust

Confidence in food safety and authenticity

- 90% of respondents reported that they were confident that the food they buy is safe to eat
- 82% of respondents were confident that the information on food labels is accurate

Confidence in the food supply chain

- 72% of respondents reported that they had confidence in the food supply chain

Awareness, trust and confidence in the FSA

- 90% of respondents had heard of the FSA
- 72% of respondents who had at least some knowledge of the FSA reported that they trusted the FSA to do its job (that is, to make sure 'food is safe and what it says it is')
- 79% of respondents reported that they were confident that the FSA (or the government agency responsible for food safety) can be relied upon to protect the public from food-related risks (such as food poisoning or allergic reactions from food), 78% were confident that the FSA takes appropriate action if a food-related risk is identified and 72% were confident that the FSA is committed to communicating openly with the public about food-related risks

Concerns about food

- 79% of respondents had no concerns about the food they eat, and 21% of respondents reported that they had a concern
- Respondents with a concern were asked to briefly explain what their concerns were about the food they eat. The most common concerns related to food safety and hygiene (33%), food production methods (30%) and food quality (29%)
- Respondents were asked to indicate if they had concerns about several food-related issues, from a list of options. The most common concern was food prices (69%). Other common concerns were the quality of food (65%), food waste (63%) and the amount of sugar in food (58%)

Food security

- Across England, Wales, and Northern Ireland, 76% of respondents were classified as food secure (60% high, 16% marginal) and 24% of respondents were classified as food insecure (11% low, 13% very low)
- Most respondents (94%) reported that they had not used a food bank or other emergency food provider in the last 12 months, with 4% of respondents reporting that they had

Eating out and takeaways

- 42% of respondents reported checking the food hygiene rating of a business in the previous 12 months
- 86% of respondents reported that they had heard of the Food Hygiene Rating Scheme (FHRS). Around 6 in 10 (57%) respondents reported that they had heard of the FHRS and had at least a bit of knowledge about it

Food allergies, intolerances and other hypersensitivities

- 12% of respondents reported that they have a food intolerance, 4% reported having a food allergy, and 1% reported having coeliac disease. Most respondents (77%) reported that

they did not have a food hypersensitivity
- 24% of respondents who have a food hypersensitivity had been diagnosed by an NHS or private medical practitioner and 5% had been diagnosed by an alternative or complementary therapist. However, most respondents (76%) had not received any diagnosis
- 58% of respondents who have a food hypersensitivity reported that they had experienced a reaction in the previous 12 months and 37% reported that they had not experienced a reaction

Eating at home

Cleaning

- 70% of respondents reported that they always wash their hands before preparing or cooking food
- 92% of respondents reported that they always wash their hands immediately after handling raw meat, poultry, or fish

Chilling

- 60% of respondents reported that their fridge temperature should be between 0-5 degrees Celsius
- 58% of respondents who have a fridge reported that they monitored the temperature; either manually (46%) or via an internal temperature alarm (12%)

Cooking

- 77% of respondents reported that they always cook food until it is steaming hot and cooked all the way through, and 23% reported that they do not always do this
- 90% of respondents reported that they never eat chicken or turkey when it is pink or has pink juices. 7% of respondents reported eating chicken or turkey at least occasionally when it is pink or has pink juices
- 79% of respondents reported that they would only reheat food once, 11% would reheat food twice, and 3% would reheat food more than twice

Avoiding cross-contamination

- 56% of respondents reported that they never wash raw chicken, however, 40% of respondents reported that they do this at least occasionally
- 63% of respondents reported storing raw meat and poultry at the bottom of the fridge

Use-by dates

- 65% of respondents identified the use-by date as the information which shows that food is no longer safe to eat
- 66% of respondents reported that they always check use-by dates before they cook or prepare food

Changes to eating habits, meat alternatives and genetic technologies

- The most common changes reported by respondents were that they had eaten less processed food (43%) and started minimising food waste (38%)
- 27% of respondents reported that they currently eat meat alternatives, 22% of respondents reported that they used to eat meat alternatives but no longer do, and 44% of respondents

reported that they had never eaten meat alternatives
- Respondents reported greater awareness and knowledge of genetically modified (GM) food than gene-edited or genome-edited food (GE) and least knowledge of precision bred food

F&Y2 Wave 8: Acknowledgements

First and foremost, our thanks go to all the respondents who gave up their time to take part in the survey.

We would like to thank the team at Ipsos who made a significant contribution to the project, particularly Kavita Deepchand, Kathryn Gallop, Stephen Finlay, Hannah Harding, Dr Patten Smith, Kelly Ward, Dr Ammeline Wang and Teodros Gebrekal.

We would like to thank the FSA working group, Welsh Language Unit, and our FSA colleagues – Joanna Disson and Clifton Gay.

Finally, thank you to our external reviewer Professor George Gaskell for his valuable direction and guidance.

Authors: Dr Beth Armstrong, Helen Heard, Lucy Murray, Robin Clifford, Matt Jenkins, Dr Daniel Mensah.

F&Y2 Wave 8: Introduction

The Food Standards Agency: role, remit, and responsibilities

The Food Standards Agency (FSA) is a non-ministerial government department working to protect public health and consumers' wider interests in relation to food in England, Wales, and Northern Ireland (footnote 1). The FSA's overarching mission is 'food you can trust'. The FSA's vision as set out in the 2022-2027 strategy is a food system in which:

- Food is safe
- Food is what it says it is
- Food is healthier and more sustainable

Food and You 2 is designed to monitor the FSA's progress against this mission and to inform policy decisions by measuring on a regular basis consumers' self-reported knowledge, attitudes and behaviours related to food safety and other food issues in England, Wales, and Northern Ireland.

Food and You 2: Wave 8

Food and You 2: Wave 8 data were collected between 12th October 2023 and 8th January 2024. A total of 5,808 adults (aged 16 years and over) from 4,006 households across England, Wales, and Northern Ireland completed the survey (an overall response rate of 26.7%).

Food and You 2: Wave 8 data were collected during a period of political and economic change and uncertainty; including a cost-of-living crisis where food price inflation and energy bills were high. This context is likely to have had an impact on the level of food security, concerns and food-related behaviours reported in Food and You 2.

Food and You 2: Wave 8 data were collected during a period of political and economic change and uncertainty; including a cost-of-living crisis where food price inflation and energy bills were high. This context is likely to have had an impact on the level of food security, concerns and food-related behaviours reported in Food and You 2.

Food and You 2 is a modular survey, with ‘core’ modules included in every wave, ‘rotated’ modules repeated annually or biennially, and one-off modules addressing current issues of interest. The modules presented in this report include: ‘Food you can trust’ (core); ‘Concerns about food’ (core); ’Food security’ (core); ‘Eating at home’ (core); ‘Food hypersensitivities (rotated)’ and ‘Eating out and takeaways’ (rotated).

This report presents key findings from the Food and You 2: Wave 8 survey. Not all questions asked in the Wave 8 survey are included in the report. The full results are available in the accompanying data set and tables.

Interpreting the findings

To highlight the key differences between socio-demographic and other sub-groups, variations in responses are typically reported only where the absolute difference is 10 percentage points or larger and is statistically significant at the 5% level ($p<0.05$). However, some differences between socio-demographic and other sub-groups are included where the difference is less than 10 percentage points, when the finding is notable or judged to be of interest. These differences are indicated with a double asterisk (**). A single asterisk indicates that the value is not reported as the base size is below 100 and therefore may not be representative (*).

In some cases, it was not possible to include the data of all sub-groups, however such analyses are available in the full data set and tables. Key information is provided for each reported question in the footnotes, including:

- Question wording (question) and response options (response).
- Number of respondents presented with each question and description of the respondents who answered the question (Base= N).
- ‘Please note:’ indicates important points to consider when interpreting the results.

1. In Scotland, the non-ministerial office Food Standards Scotland, is responsible for ensuring food is safe to eat, consumers know what they are eating and improving nutrition.

F&Y2 Wave 8: Chapter 1 Food you can trust

Introduction

The FSA's overarching mission is 'food you can trust'. The FSA's vision is a food system in which:

- Food is safe
- Food is what it says it is
- Food is healthier and more sustainable

This chapter provides an overview of respondents' awareness of and trust in the FSA, as well as their confidence in food safety and the accuracy of information provided on food labels.

Confidence in food safety and authenticity

Most respondents reported confidence (i.e., were very confident or fairly confident) in food safety and authenticity; 90% of respondents reported that they were confident that the food they buy is safe to eat, and 82% of respondents were confident that the information on food labels is accurate (footnote 1).

Confidence in food safety varied between different categories of people in the following ways:

- Food security: respondents who were more food secure were more likely to be confident that the food they buy is safe to eat compared to those who were less food secure (for example, 94% of those with high food security compared to 82% of those with very low food security).
- Regions (England): respondents in North-West England (95%) were more likely to be confident that the food they buy is safe to eat compared to those in the East Midlands (85%) and North-East England (85%).

Confidence in the accuracy of information on food labels varied between different categories of people in the following ways:

- Annual household income: respondents with a higher income were more likely to be confident in the accuracy of food labels than those with respondents with a lower income, (for example, 90% of those with an income of £96,000 compared to 78% of those with an income of less than £19,000).
- Food security: respondents who were more food secure were more likely to report confidence in the accuracy of food labels than those who were less food secure, (for example, 87% of those with high food security compared to 71% of those with very low food security).
- Ethnic group: white respondents (84%) were more likely to be confident in the accuracy of food labels than Asian or Asian British respondents (72%) (footnote 2).

Confidence in the food supply chain

Almost three quarters of respondents (72%) reported that they had confidence (i.e., very confident or fairly confident) in the food supply chain (footnote 3).

Confidence in the food supply chain varied between different categories of people in the following ways:

- Gender: men (76%) were more were more confident in the food supply chain compared to women (68%)**.
- NS-SEC: respondents in most occupational groups (for example 76% of those in lower supervisory and technical occupations and 81% who were long term unemployed and/or had never worked) were more likely to report confidence in the food supply chain than full-time students (57%).
- Food security: respondents who were more food secure were more likely to report confidence in the food supply chain than respondents who were less food secure (for example, 76% of those with a high level of food security compared to 66% of those with very low food security).
- Ethnic group: white respondents (75%) were more likely to report confidence in the food supply chain than Asian or Asian British respondents (60%) (footnote 4).

Awareness, trust and confidence in the FSA

Awareness of the FSA

Most respondents (90%) had heard of the FSA (footnote 5).

Awareness of the FSA varied between different categories of people in the following ways:

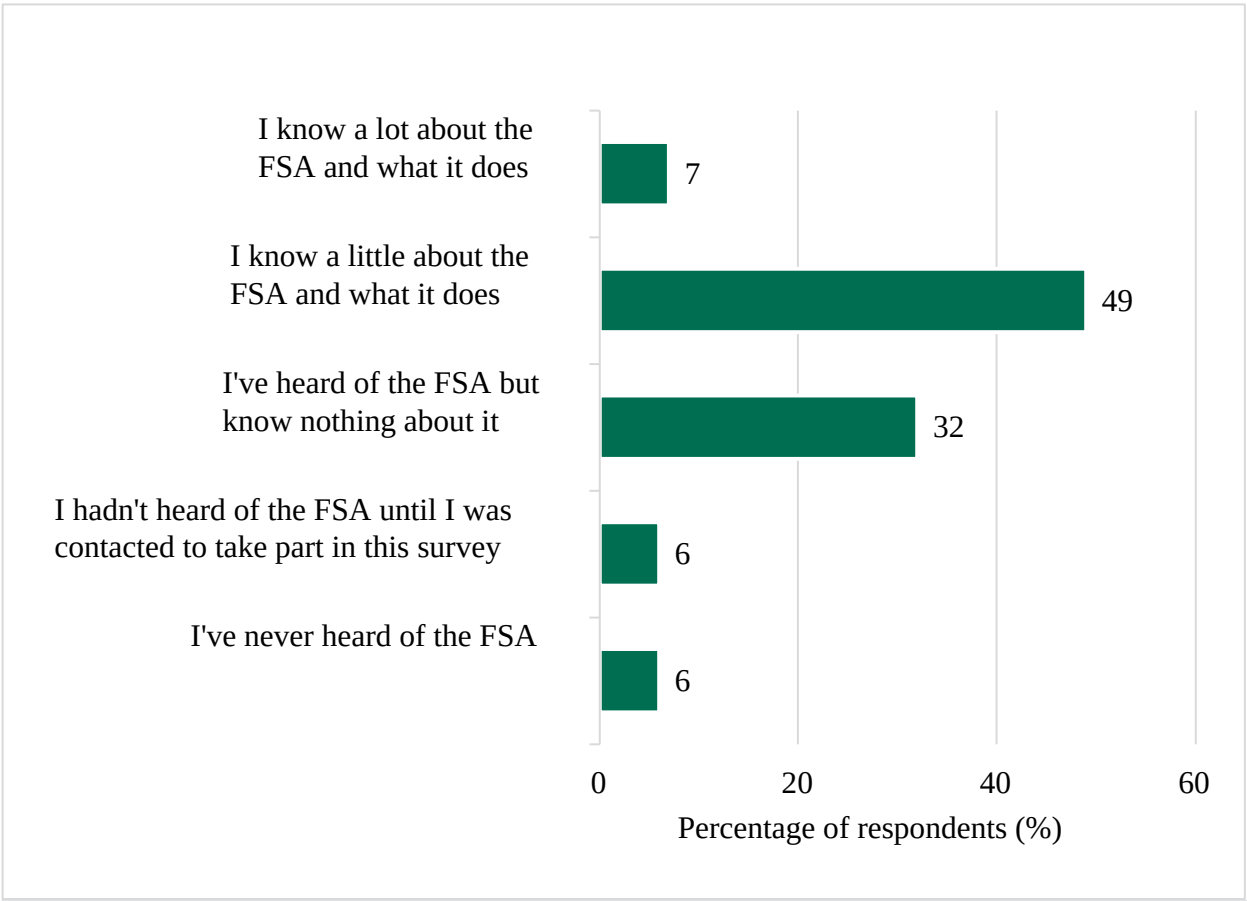
- Age group: older respondents were more likely to have heard of the FSA than younger respondents (for example, 97% of those aged 65-74 years had heard of the FSA, compared to 78% of those aged 16-24 years).
- Household size: respondents in households of between 1 and 4 occupants (for example, 92% with a household size of 1), were more likely to have heard of the FSA than households with 5 or more occupants (79%).
- Annual household income: respondents with an income of between £64,000 and £95,999 (96%) were more likely to have heard of the FSA than those with an income of less than £19,000 (84%).
- NS-SEC: respondents in most occupational groups (for example, 93% of those in intermediate occupations) were more likely to have heard of the FSA than full-time students (69%).
- Food security: respondents who were more food secure were more likely to have heard of the FSA than respondents who were less food secure (for example, 95% of those with a high level of food security compared to 84% of those with very low food security).
- Ethnic group: white respondents (93%) were more likely to have heard of the FSA compared to Asian or Asian British respondents (77%) (footnote 6).
- Responsibility for cooking: respondents who are responsible for cooking (91%) were more likely to have heard of the FSA than those who do not cook (72%).
- Responsibility for food shopping: respondents who are responsible for food shopping (91%) were more likely to have heard of the FSA than those who never shop for food (80%).

Figure 1. Knowledge about the Food Standards Agency (FSA).

Bar chart showing reported knowledge of the FSA

Change to table and accessible view

Change to chart view



Description	Percentage of respondents (%)
I've never heard of the FSA	6
I hadn't heard of the FSA until I was contacted to take part in this survey	6
I've heard of the FSA but know nothing about it	32
I know a little about the FSA and what it does	49
I know a lot about the FSA and what it does	7

Download this chart

Image .csv

Source: Food and You 2: Wave 8

Most respondents reported at least some knowledge of the FSA; 7% reported that they knew a lot about the FSA and what it does, and 49% reported that they knew a little about the FSA and what it does. Almost a third (32%) of respondents reported that they had heard of the FSA but knew nothing about it, 6% had not heard of the FSA until being contacted to take part in Food and You 2, and 6% had never heard of the FSA (Figure 1) (footnote 7).

Trust and confidence in the FSA

Respondents who had at least some knowledge of the FSA were asked how much they trusted the FSA to do its job, that is to make sure food is safe and what it says it is. Most (72%) respondents reported that they trusted the FSA to do its job, 23% of respondents neither trust or distrust the FSA to do this, and 2% of respondents reported that they distrust the FSA to do this (footnote 8).

Most respondents (79%) reported that they were confident that the FSA (or the government agency responsible for food safety) can be relied upon to protect the public from food-related

risks (such as food poisoning or allergic reactions from food). Over three quarters (78%) of respondents were confident that the FSA takes appropriate action if a food-related risk is identified and 72% were confident that the FSA is committed to communicating openly with the public about food-related risks (footnote 9).

1. Question: How confident are you that… a) the food you buy is safe to eat. b) the information on food labels is accurate (for example, ingredients, nutritional information, country of origin). Responses: very confident, fairly confident, not very confident, not at all confident, it varies, don't know. Base= 5808, all respondents.

2. Please note: the figures of other ethnic groups are not reported due to low base / sample size.

3. Question: How confident are you in the food supply chain? That is all the processes involved in bringing food to your table. Responses: very confident, fairly confident, not very confident, not at all confident, it varies, don't know. Base= 5808, all respondents.

4. Please note: the figures of other ethnic groups are not reported due to low base / sample size.

5. Question: Which of the following, if any, have you heard of? Please select all that apply. Response: Food Standards Agency (FSA), (England) Department for Environment, Food and Rural Affairs (DEFRA), (England) The Office for Health Improvement and Disparities, (England) Environment Agency, (England) UK Health Security Agency (UKHSA), (England and Wales) Health and Safety Executive (HSE), (Wales) Public Health Wales (PHW), (Wales) Natural Resources Wales, (NI) Public Health Agency (PHA), (NI) Department of Agriculture, Environment and Rural Affairs (DAERA), (NI) Health and Safety Executive Northern Ireland (HSENI), (NI) Safefood, None of these. Base= 3915, all online respondents. Please note: All consumers taking part in the survey had received an invitation to take part in the survey which mentioned the FSA. An absence of response indicates the organisation had not been heard of by the respondent or a non-response.

6. Please note: the figures of other ethnic groups are not reported due to low base / sample size.

7. Question: How much, if anything, do you know about the Food Standards Agency, also known as the FSA? Response: I know a lot about the FSA and what it does, I know a little about the FSA and what it does, I've heard of the FSA but know nothing about it, I hadn't heard of the FSA until I was contacted to take part in this survey, I've never heard of the FSA. Base= 5808, all respondents. Please note: All consumers taking part in the survey had received an invitation to take part in the survey which mentioned the FSA.

8. Question: How much do you trust or distrust the Food Standards Agency to do its job? That is to make sure that food is safe and what it says it is. Responses: I trust it a lot, I trust it, I neither trust nor distrust it, I distrust it, I distrust it a lot, don't know. Base= 3506, all respondents who know a lot or a little about the FSA and what it does. Please note: 'I trust it a lot' and 'I trust it' referred to as trust.

9. Question: How confident are you that the Food Standards Agency / the government agency responsible for food safety in England, Wales and Northern Ireland...a) Can be relied upon to protect the public from food-related risks (such as food poisoning or allergic reactions from food). b) Is committed to communicating openly with the public about food-related risks. c) Takes appropriate action if a food related risk is identified? Responses: very confident, fairly confident, not very confident, not at all confident, don't know. Base= 5808, all respondents. Please note: 'very confident' and 'fairly confident' referred to as confident. Respondents with little or no knowledge of the FSA were asked about 'the government agency responsible for food safety', those with at least some knowledge of the FSA were asked about the FSA.

Food Standards Agency
food.gov.uk

F&Y2 Wave 8: Chapter 2 Concerns about food

Introduction

The FSA's role, set out in law, is to safeguard public health and protect the interests of consumers in relation to food. The FSA uses the Food and You 2 survey to monitor consumers' concerns about food issues, such as food safety, nutrition, and environmental issues. This chapter provides an overview of respondents' concerns about food.

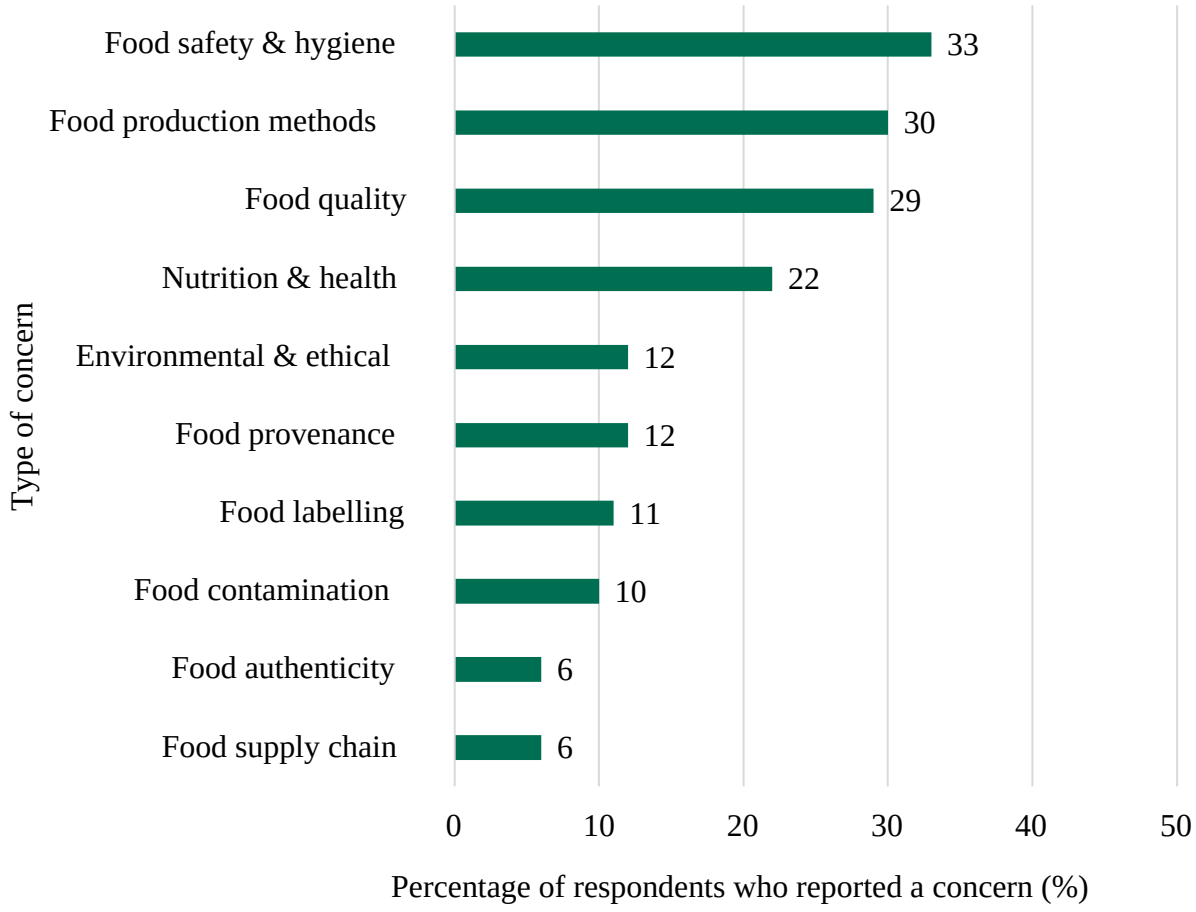
Common concerns

Respondents were asked to report whether they had any concerns about the food they eat. Most respondents (79%) had no concerns about the food they eat, and 21% of respondents reported that they had a concern (footnote 1).

Figure 2. Most common spontaneously expressed food-related concerns.

Change to table and accessible view

Change to chart view



Type of concern	Percentage (%)
Food supply chain	6
Food authenticity	6
Food contamination	10
Food labelling	11
Food provenance	12
Environmental & ethical	12
Nutrition & health	22
Food quality	29
Food production methods	30
Food safety & hygiene	33

Download this chart

Image .csv

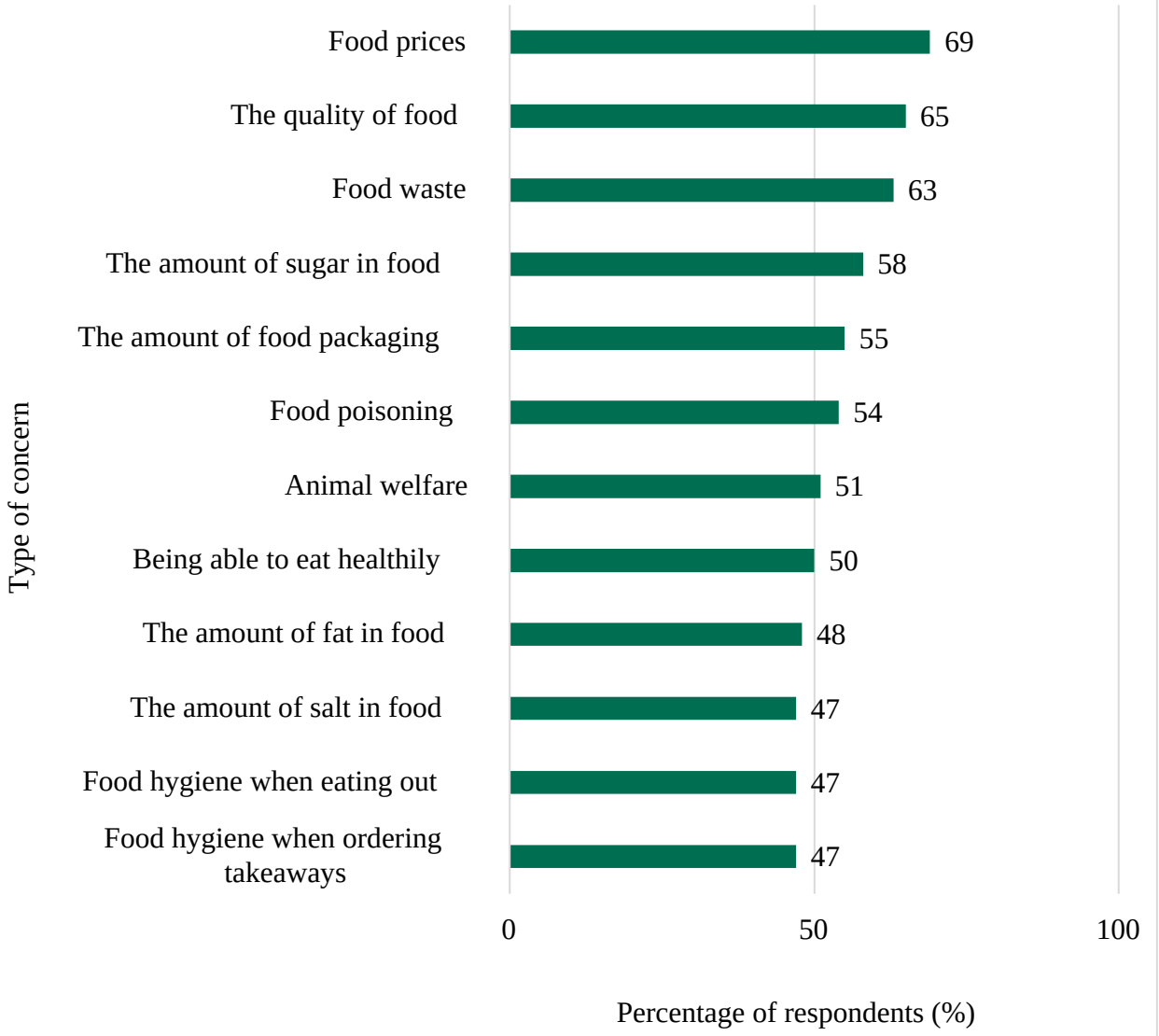
Source: Food and You 2: Wave 8

Respondents who reported having a concern were asked to briefly explain what their concerns were about the food they eat. The most common concerns related to food safety and hygiene (33%), food production methods (30%), the quality of food (29%), and nutrition and health (22%) (Figure 2) (footnote 2).

Figure 3. Most common prompted food-related concerns.

Change to table and accessible view

Change to chart view



Type of concern	Percentage (%)
Food hygiene when ordering takeaways	47
Food hygiene when eating out	47
The amount of salt in food	47
The amount of fat in food	48
Being able to eat healthily	50
Animal welfare	51
Food poisoning	54
The amount of food packaging	55
The amount of sugar in food	58
Food waste	63

Type of concern	Percentage (%)
The quality of food	65
Food prices	69

Download this chart

Image .csv

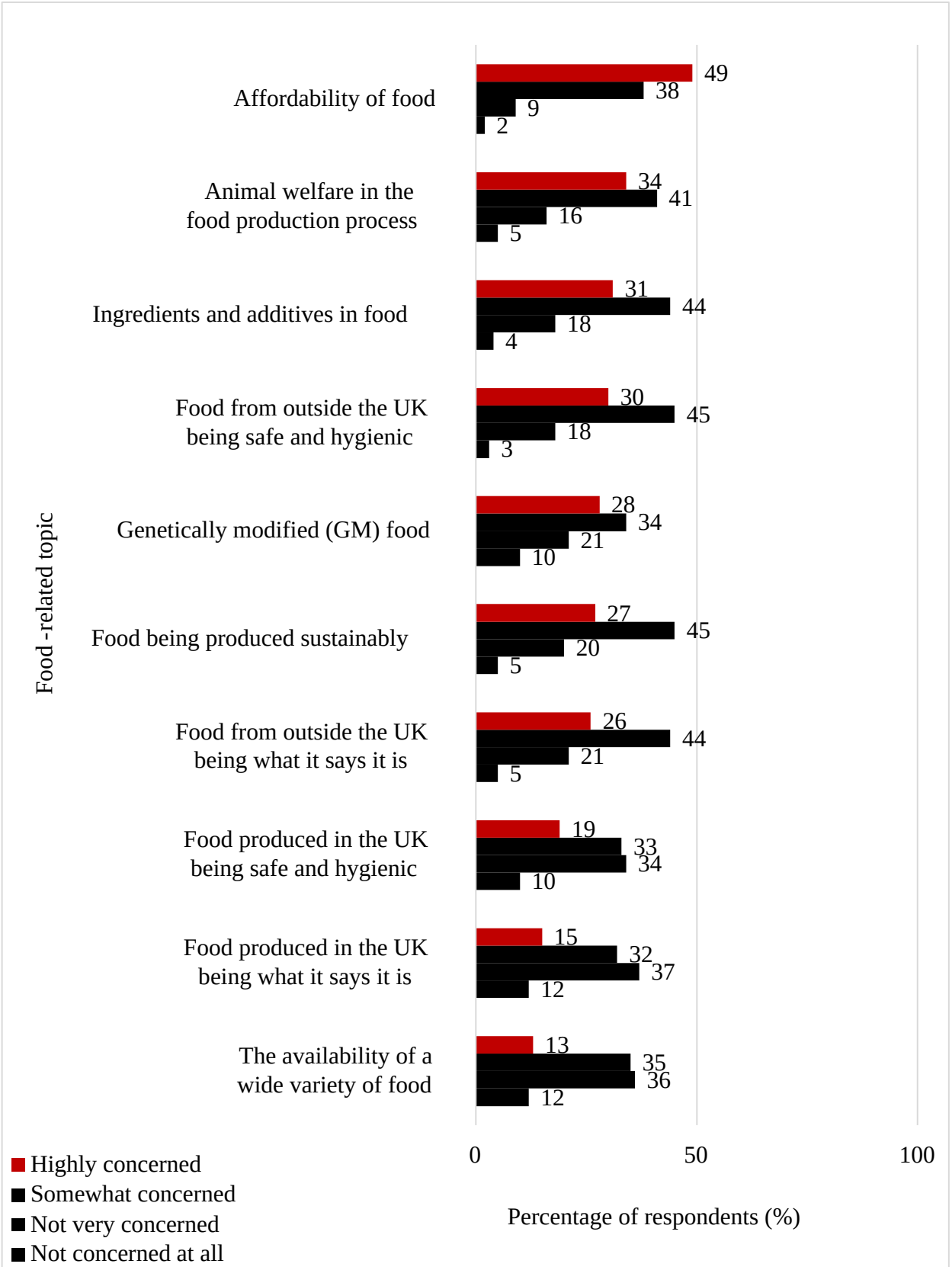
Source: Food and You 2: Wave 8

Respondents were asked to indicate if they had concerns about several food-related issues, from a list of options. The most common concern was food prices (69%). Other common concerns were the quality of food (65%), food waste (63%), and the amount of sugar in food (58%) (Figure 3) (footnote 3).

Figure 4. Level of concern about food-related topics.

Change to table and accessible view

Change to chart view



Food-related topic	Not concerned at all	Not very concerned	Somewhat concerned	Highly concerned
The availability of a wide variety of food	12	36	35	13
Food produced in the UK being what it says it is	12	37	32	15
Food produced in the UK being safe and hygienic	10	34	33	19

Food-related topic	Not concerned at all	Not very concerned	Somewhat concerned	Highly concerned
Food from outside the UK being what it says it is	5	21	44	26
Food being produced sustainably	5	20	45	27
Genetically modified (GM) food	10	21	34	28
Food from outside the UK being safe and hygienic	3	18	45	30
Ingredients and additives in food	4	18	44	31
Animal welfare in the food production process	5	16	41	34
Affordability of food	2	9	38	49

Download this chart

Image .csv

Source: Food and You 2: Wave 8

Respondents were asked to indicate the extent to which they were concerned about a number of specific food-related issues. Respondents were most likely to report a high level of concern about the affordability of food (49%). Other issues respondents were highly concerned about included animal welfare in the food production process (34%) and ingredients and additives in food (31%) (Figure 4) (footnote 4).

The reported level of concern about the affordability of food varied between different categories of people in the following ways:

- Age group: respondents aged between 16 and 54 years were more likely to report that they were highly concerned about the affordability of food compared to those aged 55 years or over (for example, 55% of those aged 25-34 years compared to 34% of those aged 75 years or over).
- Annual household income: respondents with a lower income were more likely to report that they were highly concerned about the affordability of food compared to households with a higher income (for example, 56% of those with an income below £19,000 compared to 36% of those with an income over £96,000).
- Region (England) (footnote 5): levels of concern about the affordability of food varied by region in England. For example, respondents who live in the North-East of England (64%) were more likely to report that they were highly concerned about the affordability of food compared to those who live in most other regions in England, including the East Midlands (45%), London (47%), South-West (42%) and the South-East (46%).
- Food security: respondents with very low food security (74%) were more likely to report that they were highly concerned about the affordability of food than those with low (61%) or marginal (58%) food security. Those with high food security were least likely to report that they were highly concerned about the affordability of food (40%).
- Ethnic group: Asian or Asian British respondents (59%) were more likely to report that they were highly concerned about the affordability of food compared to white respondents (48%) (footnote 6).

1. Question: Do you have any concerns about the food you eat? Responses: Yes, No. Base= 5808, all respondents.

2. Question: What are your concerns about the food you eat? Responses: [Open text]. Base= 1126, all respondents with concerns about the food they eat. Please note: additional

responses are available in the full data set and tables, responses were coded by Ipsos, see Technical Report for further details.

3. Question: Do you have concerns about any of the following? Responses: the amount of sugar in food, food waste, animal welfare, hormones, steroids or antibiotics in food, the amount of salt in food, the amount of fat in food, food poisoning, food hygiene when eating out, food hygiene when ordering takeaways, the use of pesticides, food fraud or crime, the use of additives (for example, preservatives and colouring), food prices, genetically modified (GM) foods, chemical contamination from the environment, food miles, the number of calories in food, food allergen information, cooking safely at home, the quality of food, the amount of food packaging, being able to eat healthily, none of these, don't know. Base= 3915, all online respondents.

4. Question: Thinking about food in the UK [question wording variation in Northern Ireland: the UK and Ireland] today, how concerned, if at all, do you feel about each of the following topics? a) affordability of food b) food produced in [in England and Wales: the UK; [in Northern Ireland: the UK and Ireland] being safe and hygienic c) food from outside [in England and Wales: the UK; in Northern Ireland: the UK and Ireland] being safe and hygienic d) food produced in [in England and Wales: the UK; in Northern Ireland: the UK and Ireland] being what it says it is e) food from outside [in England and Wales: the UK; in Northern Ireland: the UK and Ireland] being what it says it is f) food being produced sustainably g) the availability of a wide variety of food h) animal welfare in the food production process i) ingredients and additives in food j) genetically modified (GM) food. Base = 5808, all respondents. Please note: some question wording was modified for respondents in England, Wales and Northern Ireland.

5. Regional differences were only considered in England due to the low sample / base size in Wales and Northern Ireland.

6. Please note: the figures of other ethnic groups are not reported due to low base / sample size.

Food Standards Agency
food.gov.uk

F&Y2 Wave 8: Chapter 3 Food security

Introduction

This chapter reports the level of food security in England, Wales, and Northern Ireland, and how food security varied between different categories of people.

"Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life." World Food Summit, 1996.

Food and You 2 uses the 10-item U.S. Adult Food Security Survey Module developed by the United States Department of Agriculture (USDA) to measure consumers' food security status.

Respondents are assigned to one of the following food security status categories:

- High: no reported indications of food-access problems or limitations.
- Marginal food security: one or two reported indications—typically of anxiety over food sufficiency or shortage of food in the house. Little or no indication of changes in diets or food intake.
- Low: reports of reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake.
- Very low: reports of multiple indications of disrupted eating patterns and reduced food intake.

Those with high or marginal food security are referred to as food secure. Those with low or very low food security are referred to as food insecure.

More information on how food security is measured and how classifications are assigned and defined can be found in Annex A and on the USDA Food Security website.

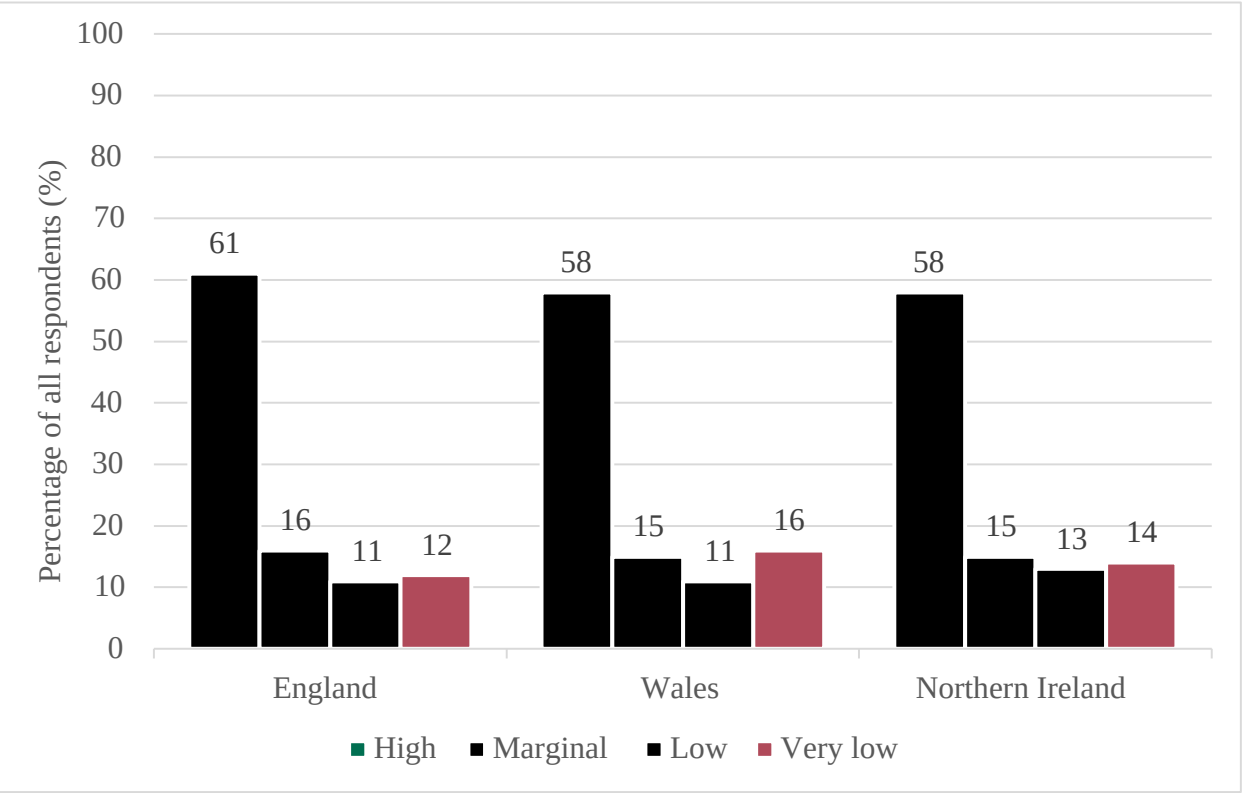
Food security

Across England, Wales, and Northern Ireland, 76% of respondents were classified as food secure (60% high, 16% marginal) and 24% of respondents were classified as food insecure (11% low, 13% very low) (footnote 1).

Figure 5. Food security in England, Wales, and Northern Ireland.

Change to table and accessible view

Change to chart view



Country	High	Marginal	Low	Very low
England	61	16	11	12
Wales	58	15	11	16
Northern Ireland	58	15	13	14

Download this chart

Image .csv

Source: Food and You 2: Wave 8

Around three-quarters of respondents were food secure (i.e. had high or marginal food security) in England (77%), Wales (73%) and Northern Ireland (73%). Approximately a quarter of respondents were food insecure (i.e. had low or very low food security) in England (23%), Wales (27%) and Northern Ireland (27%) (Figure 5).

Experiences of food insecurity

Respondents were asked up to ten questions from the US Adult Food Security Survey Module , to determine their food security classification (footnote 2).

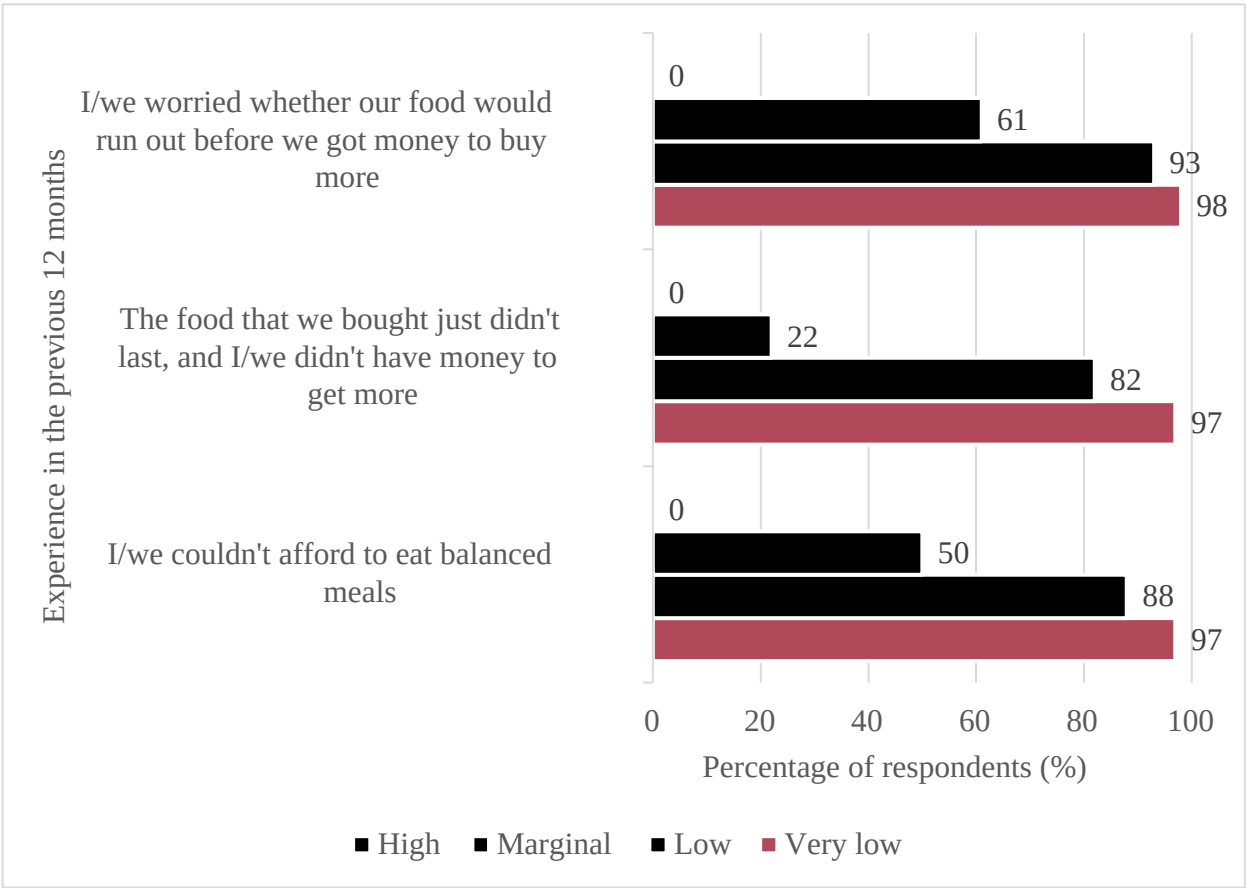
All respondents were asked the first three questions from the food security survey module. Respondents were asked how often, if ever, they had experienced any of the following in the previous 12 months:

- I/we worried whether our food would run out before we got money to buy more
- The food that we bought just didn't last, and I/we didn't have money to get more
- I/we couldn't afford to eat balanced meals

Figure 6. Experiences of food security by food security classification.

Change to table and accessible view

Change to chart view



Experience in the previous 12 months	High	Marginal	Low	Very low
I/we couldn't afford to eat balanced meals	0	50	88	97
The food that we bought just didn't last, and I/we didn't have money to get more	0	22	82	97
I/we worried whether our food would run out before we got money to buy more	0	61	93	98

Download this chart

Image .csv

Source: Food and You 2: Wave 8

Based on the previous 12 months:

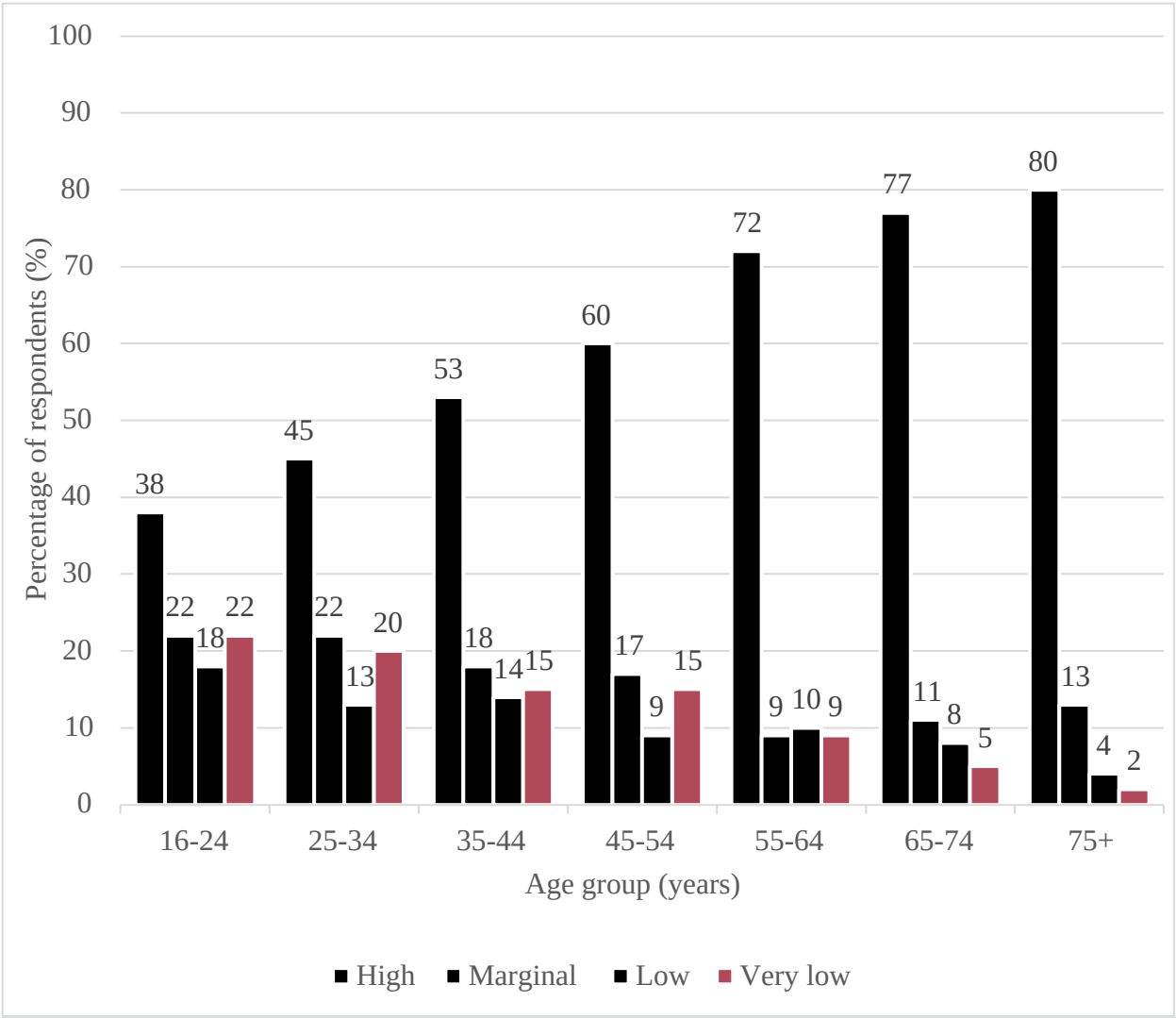
- 98% of those with very low food security, and 93% of those with low food security reported feeling worried whether food would run out before they got money to buy more, whilst 61% of those with marginal food security reported feeling worried about this.
- 97% of those with very low food security, and 82% of those with low food security worried that the food they bought didn't last, and they didn't have money to get more. Less than a quarter (22%) of those with marginal food security worried about this.
- 97% of those with very low food security, and 88% of those with low food security reported that they couldn't afford to eat balanced meals. Half (50%) of those with marginal food security reported this.
- Respondents with high food security reported that they had not had any of these experiences in the last 12 months (Figure 6).

How food security differs between socio-economic and demographic groups

Figure 7. Food security by age group.

Change to table and accessible view

Change to chart view



Age group (years)	High	Marginal	Low	Very low
16-24	38	22	18	22
25-34	45	22	13	20
35-44	53	18	14	15
45-54	60	17	9	15
55-64	72	9	10	9
65-74	77	11	8	5
75+	80	13	4	2

Download this chart

Image .csv

Source: Food and You 2: Wave 8

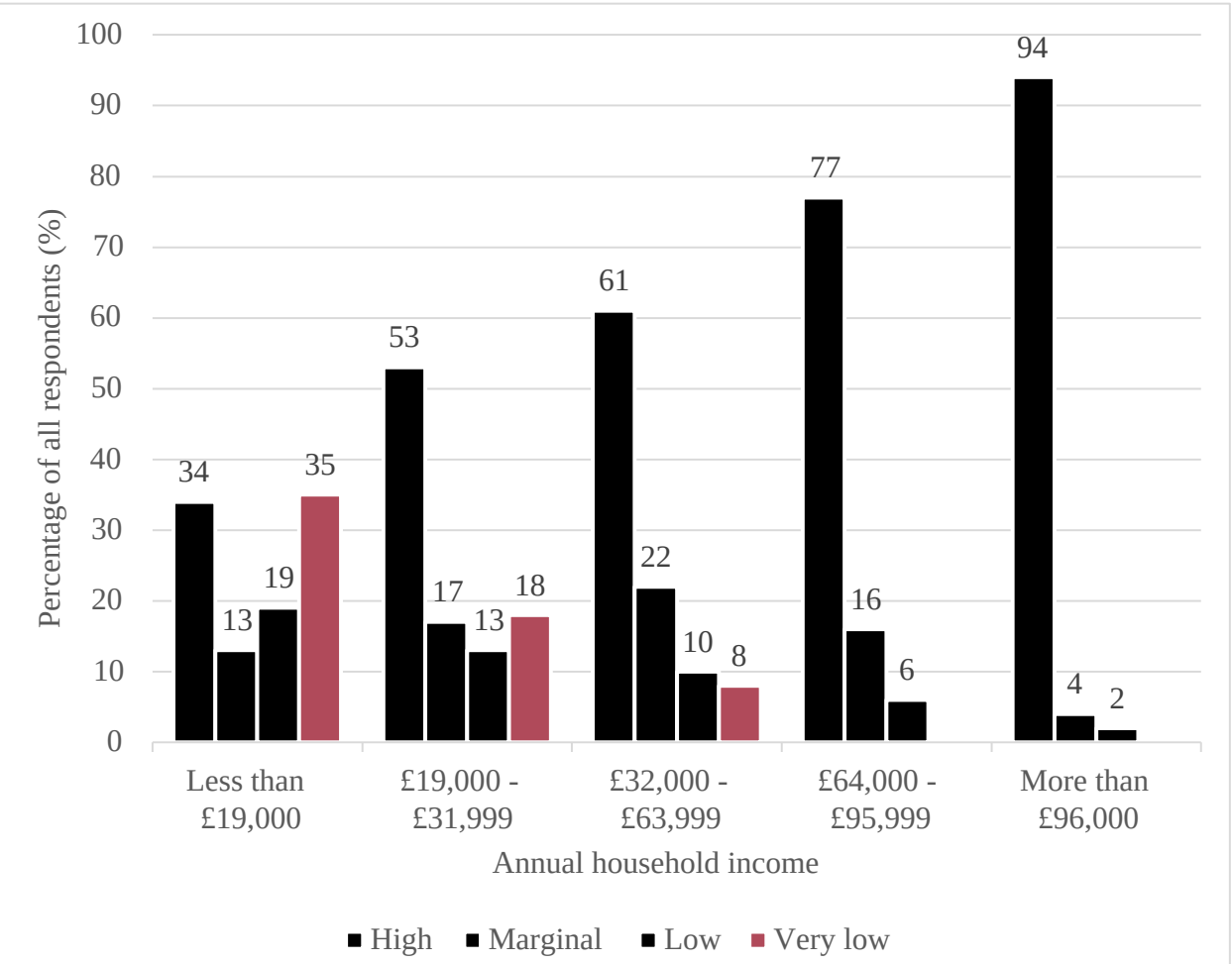
Food security varied by age group with older adults being more likely to report that they were food secure and less likely to report that they were food insecure than younger adults. For example,

40% of respondents aged 16-24 years were food insecure (18% low, 22% very low security) compared to 6% of those aged 75 years and over (4% low, 2% very low security) (Figure 7).

Figure 8. Food security by annual household income.

Change to table and accessible view

Change to chart view



Annual household income	High	Marginal	Low	Very low
Less than ?19,000	34	13	19	35
?19,000 - ?31,999	53	17	13	18
?32,000 - ?63,999	61	22	10	8
?64,000 - ?95,999	77	16	6	0
More than ?96,000	94	4	2	0

Download this chart

Image .csv

Source: Food and You 2: Wave 8

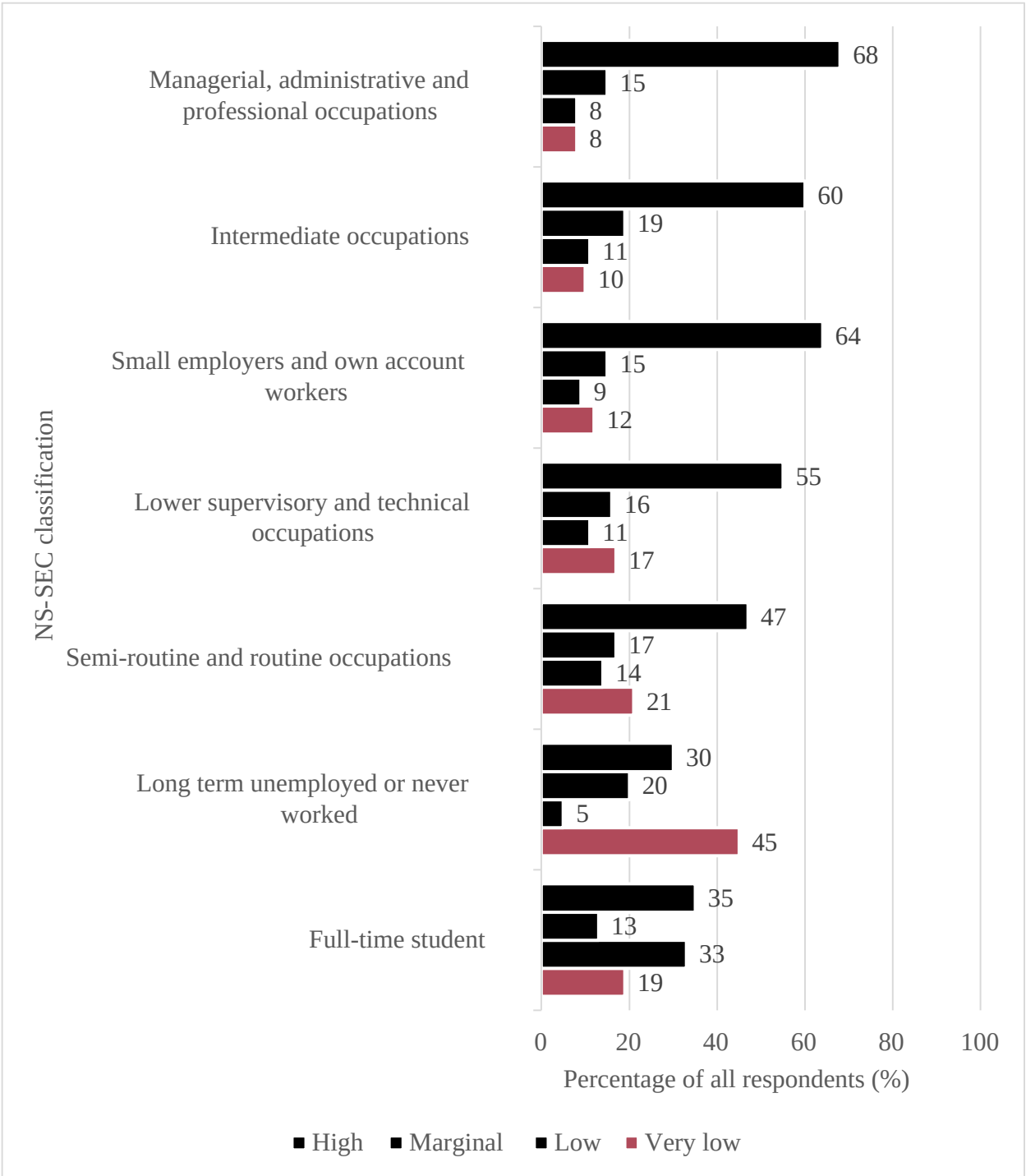
Food security was associated with household income. Respondents with a lower income were more likely to report being food insecure than those with a higher income. For example, 54% of those with an annual household income of less than £19,000 reported food insecurity (low 19%, very low 35%) compared to 7% of those with an income between £64,000 and £95,999 (low 6%,

very low; less than 0.5%) (Figure 8).

Figure 9. Food security by socio-economic classification (NS-SEC).

Change to table and accessible view

Change to chart view



NS-SEC Classification	High	Marginal	Low	Very low
Full-time student	35	13	33	19

NS-SEC Classification	High	Marginal	Low	Very low
Long term unemployed or never worked	30	20	5	45
Semi-routine and routine occupations	47	17	14	21
Lower supervisory and technical occupations	55	16	11	17
Small employers and own account workers	64	15	9	12
Intermediate occupations	60	19	11	10
Managerial, administrative and professional occupations	68	15	8	8

Download this chart

Image .csv

Source: Food and You 2: Wave 8

Respondents who were long term unemployed and/or had never worked (50%), full-time students (52%), and those in semi-routine and routine occupations (36%) were more likely to report that they were food insecure compared to most other occupational groups (for example, 17% of those in managerial, administrative, and professional occupations) (Figure 9) (footnote 3).

The reported level of food insecurity also varied between different categories of people in the following ways:

- Household size: households with 5 people or more (34%) were more likely to report that they were food insecure compared to those in households with 2-people or fewer (19% in 2-person households, 23% in households with 1 person).
- Children under 16 in household: 31% of households with children under 16 years reported that they were food insecure compared to 21% of households without children under 16 years.
- Children under 6 in household: 37% of households with children under 6 years reported that they were food insecure compared to 22% of households without children under 6 years.
- Ethnic group: 33% of Asian or Asian British respondents reported that they were food insecure compared to 21% of respondents white respondents. (footnote 4)
- Long term health condition: respondents with a long-term health condition (33%) were more likely to report being food insecure compared to those without a long-term health condition (19%).
- Region (England) (footnote 5): respondents living in the West Midlands (31%), Yorkshire and the Humber (27%) and North-East England (33%) were more likely to report being food insecure than those in London (17%) and the South-East (18%).

Food bank use

Respondents were asked if they or anyone else in their household had received a free parcel of food from a food bank or other emergency food provider in the last 12 months. Most respondents (94%) reported that they had not used a food bank or other emergency food provider in the last 12 months, with 4% of respondents reporting that they had (footnote 6).

1. Question/Responses: Derived variable, see USDA Food Security guidance and Technical Report. Base= 5808, all respondents. Please note: See Annex A for information about the

classifications and definitions of food security levels.

2. See the USDA Food Security guidance for further information about the survey and classifications.

3. NS-SEC (The National Statistics Socio-economic classification) is a classification system which provides an indication of socio-economic position based on occupation and employment status.

4. Please note: the figures of other ethnic groups are not reported due to low base / sample size.

5. Regional differences were only considered in England due to the low sample / base size in Wales and Northern Ireland.

6. Question: In the last 12 months, have you, or anyone else in your household, received a free parcel of food from a food bank or other emergency food provider? Responses: Yes, No, Prefer not to say. Base= 5808, all respondents.

Food Standards Agency
food.gov.uk

F&Y2 Wave 8: Chapter 4 Eating out and takeaways

Introduction

The Food Hygiene Rating Scheme (FHRS) helps people make informed choices about where to eat out or shop for food by giving clear information about the businesses' hygiene standards. Ratings are typically given to places where food is supplied, sold or consumed, including restaurants, pubs, cafés, takeaways, food vans and stalls.

The FSA runs the scheme in partnership with local authorities in England, Wales and Northern Ireland. A food safety officer from the local authority inspects a business to check that it follows food hygiene law so that the food is safe to eat. Businesses are given a rating from 0 to 5. A rating of 5 indicates that hygiene standards are very good and a rating of 0 indicates that urgent improvement is required.

Food businesses are provided with a sticker which shows their FHRS rating. In England businesses are encouraged to display their FHRS rating, however in Wales and Northern Ireland food businesses are legally required to display their FHRS rating (footnote 1). FHRS ratings are also available on the FSA website.

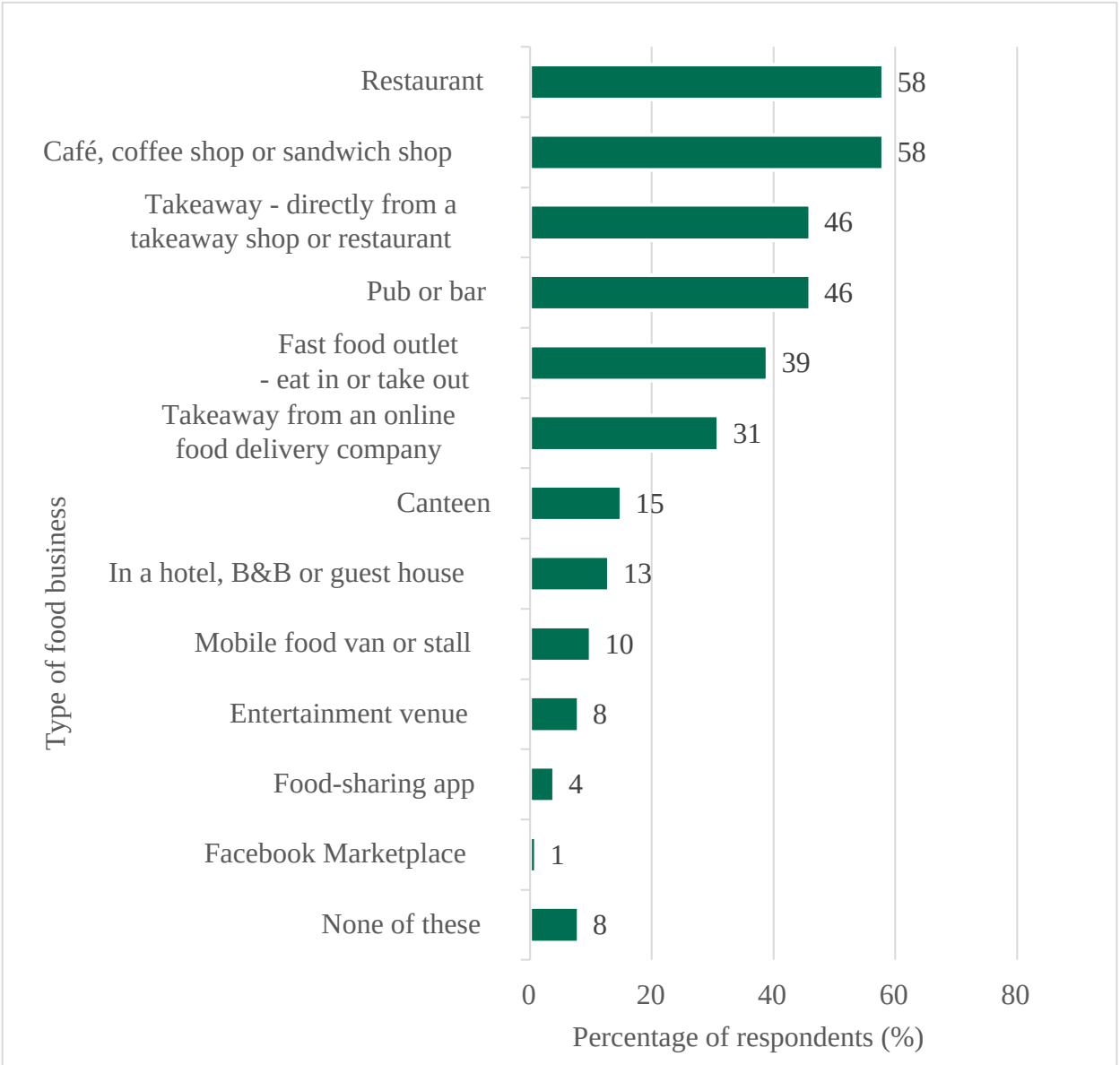
This chapter provides an overview of respondents' eating out and takeaway ordering habits, the factors that are considered when deciding where to eat out or order a takeaway from, and recognition and use of the FHRS.

Prevalence of eating out and ordering takeaways

Figure 10. Type of food business respondents had eaten at or ordered food from in the previous 4 weeks.

Change to table and accessible view

Change to chart view



Type of food business	Percentage of respondents (%)
None of these	8
Facebook Marketplace	1
Food-sharing app	4
Entertainment venue	8
Mobile food van or stall	10
In a hotel, B&B or guest house	13
Canteen	15

Type of food business	Percentage of respondents (%)
Takeaway from an online food delivery company	31
Fast food outlet - eat in or take out	39
Pub or bar	46
Takeaway - directly from a takeaway shop or restaurant	46
Cafe, coffee shop or sandwich shop	58
Restaurant	58

Download this chart

Image .csv

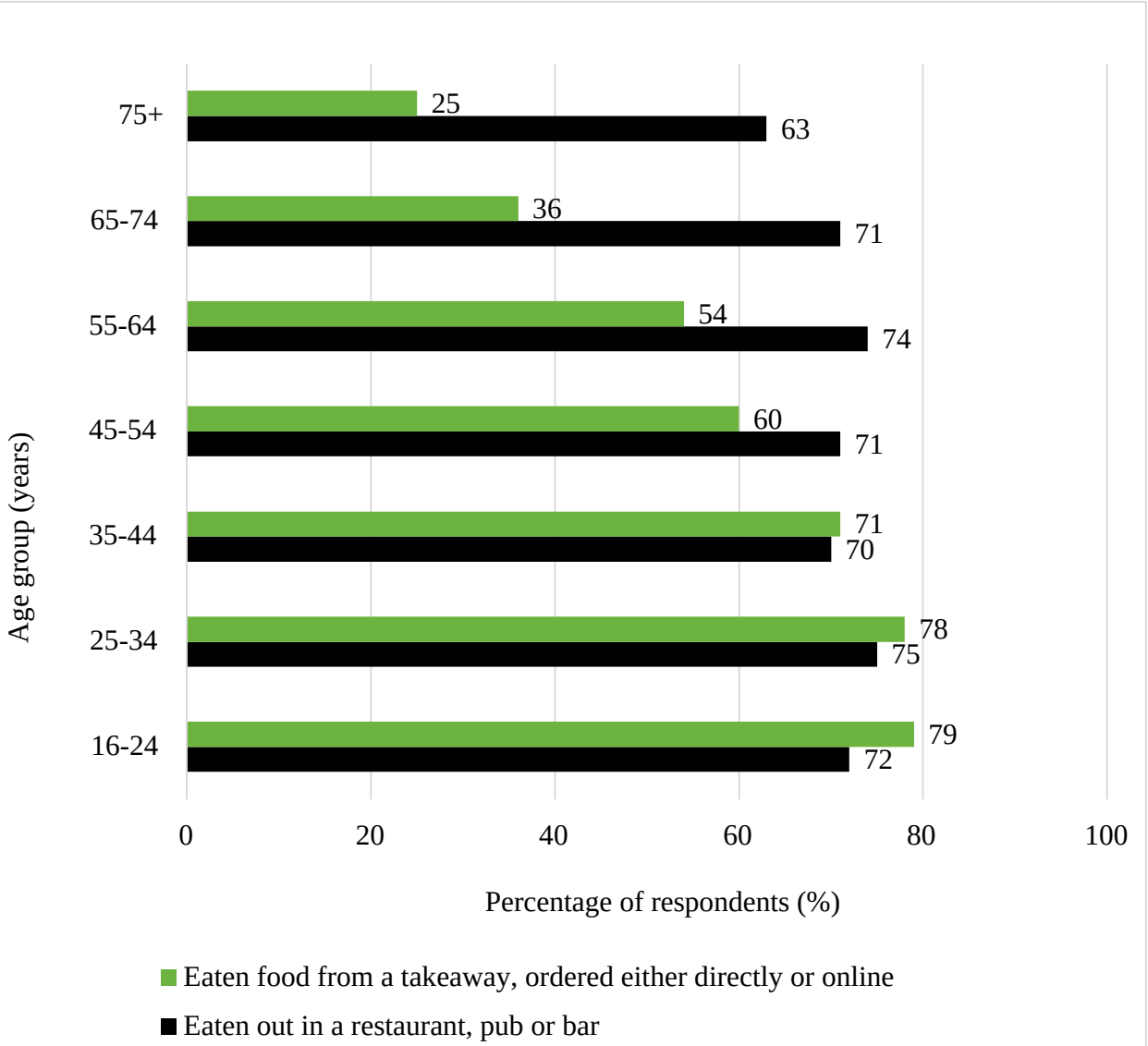
Source: Food & You 2: Wave 8

Respondents were asked where they had eaten food from in the previous four weeks. Around 6 in 10 respondents had eaten food in a restaurant (58%), or a café, coffee shop or sandwich shop (either to eat in or take out) (58%). Over 4 in 10 had eaten food from a takeaway ordered directly from a takeaway shop or restaurant (46%), or in a pub or bar (46%), and 39% had eaten food at a fast-food outlet (either to eat in or take out). Around 3 in 10 (31%) had eaten food from a takeaway ordered from an online food delivery company (for example, Just Eat, Deliveroo, Uber Eats). Around 1 in 10 (8%) respondents had not eaten food from any of the listed food businesses in the previous 4 weeks (Figure 10) (footnote 2).

Figure 11. Prevalence of eating out in a restaurant, pub or bar, or from a takeaway by age group in the previous 4 weeks.

Change to table and accessible view

Change to chart view



Age group (years)	Eaten out in a restaurant, pub or bar	Eaten food from a takeaway, ordered either directly or online
16-24	72	79
25-34	75	78
35-44	70	71
45-54	71	60
55-64	74	54
65-74	71	36
75+	63	25

Download this chart

Image .csv

Source: Food and You 2: Wave 8

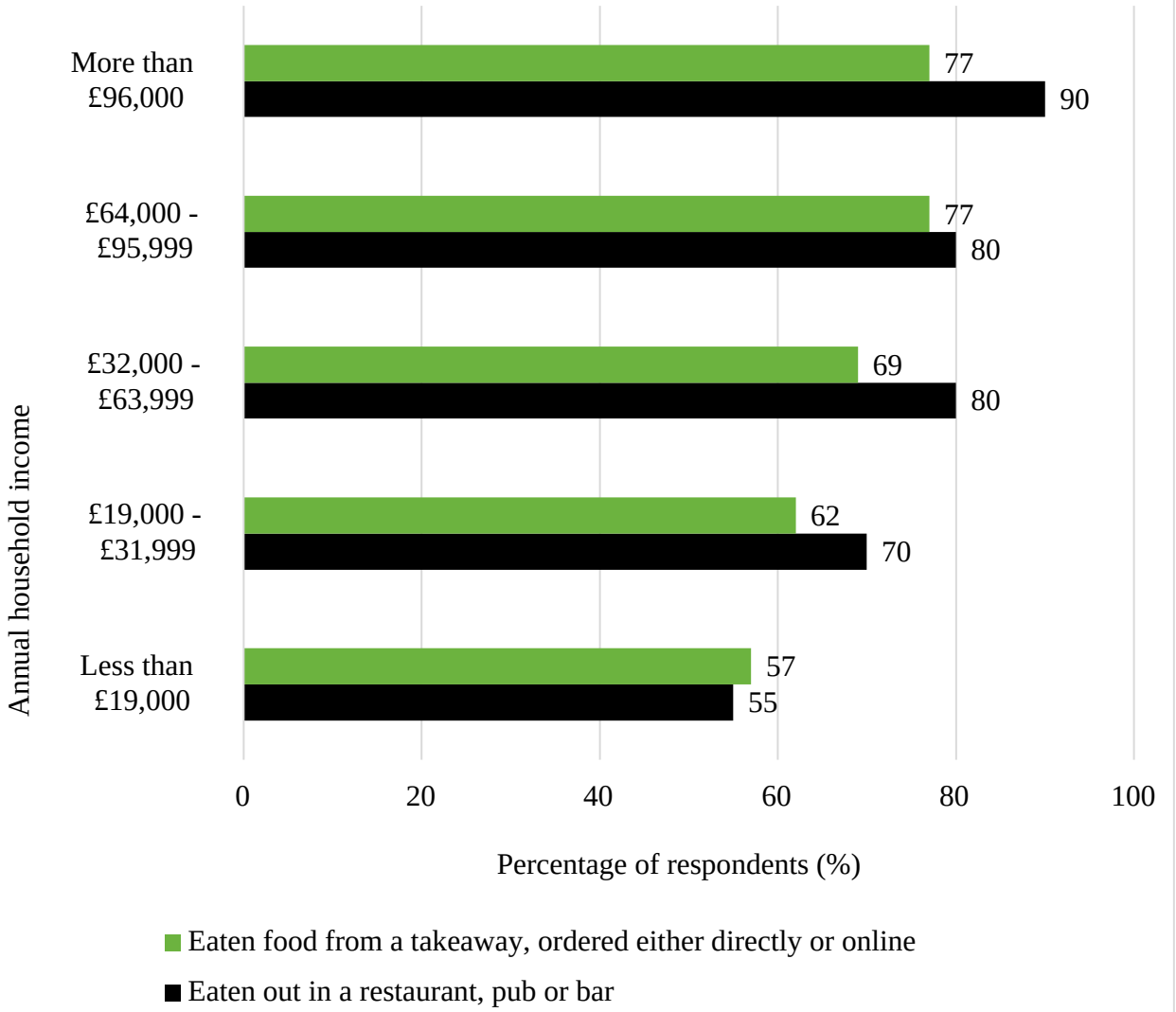
Younger respondents were more likely to have eaten food from a takeaway (ordered directly or from an online food delivery company) in the previous four weeks compared to older respondents. However, the likelihood that respondents had eaten in a restaurant, pub or bar did not differ greatly between most age groups. For example, 79% of those aged between 16 and 24 years had eaten food from a takeaway compared to 25% of those aged 75 years or over. In comparison, 72% of those aged between 16 and 24 years had eaten in a restaurant, pub or bar compared to

71% of those aged 65-74 years (Figure 11).

Figure 12. Prevalence of eating out in a restaurant, pub or bar, or from a takeaway by annual household income in the previous 4 weeks.

Change to table and accessible view

Change to chart view



Annual household income	Eaten out in a restaurant, pub or bar	Eaten food from a takeaway, ordered either directly or online
Less than ?19,000	55	57
?19,000 - ?31,999	70	62
?32,000 - ?63,999	80	69
?64,000 - ?95,999	80	77
More than ?96,000	90	77

Download this chart

Image .csv

Source: Food and You 2: Wave 8

Respondents with a higher household income were more likely to have eaten out in a restaurant, pub or bar, or have eaten food from a takeaway (ordered directly or from an online food delivery company) in the previous 4 weeks compared to respondents with a lower income. For example, 80% of respondents with an income between £64,000 and £95,999 had eaten out in a restaurant, pub or bar compared to 55% of those with an income of £19,000 or below. Similarly, 69% of respondents with an income between £64,000 and £95,999 had eaten food from a takeaway (ordered directly or from an online food delivery company) compared to 53% of those with an income of less than £19,000 (Figure 12).

The prevalence of eating out in a restaurant, pub or bar or eating food from a takeaway (ordered directly or from an online food delivery company) in the previous 4 weeks also varied between different types of people in the following ways:

- Household size: respondents who lived in larger households were more likely to have eaten food from a takeaway than those who lived in smaller households. For example, 78% of respondents living in a household of 5-persons or more had eaten food from a takeaway compared to 40% of respondents living alone.
- Children under 16 years in household: respondents who had children in the household (70%) were more likely to have eaten food from a takeaway than those who did not have children aged 16 years or under in the household (55%). Conversely, those who did not have children aged 16 years or under in the household (73%) were more likely to have eaten out in a restaurant, pub or bar compared to those with children aged 16 years or under in the household (65%)**.
- NS-SEC (footnote 3): respondents in some occupational groups (for example, 78% of those in managerial, administrative and professional occupations) were more likely to have eaten out in a restaurant, pub or bar compared to those who were long-term unemployed and/or had never worked (61%) and those in lower supervisory and technical occupations (66%), or semi-routine and routine occupations (48%). However, full-time students (82%) were more likely to have eaten food from a takeaway than those in occupational groups (for example, 56% in intermediate occupations) and those who were long term unemployed and/or had never worked (66%).
- Regions (England): respondents in London (79%), and South-West England (77%) were more likely to have eaten out in a restaurant, pub or bar than those in North-East England (61%). Conversely, respondents in North-East England (72%) were more likely to have eaten food from a takeaway than those in Yorkshire and the Humber (59%), South-East England (56%), London (55%), East Midlands (55%), and South-West England (55%).
- Urban/rural: respondents living in an urban area (61%) were more likely to have eaten food from a takeaway than those living in a rural area (50%). However, the prevalence of eating out in a restaurant, pub or bar did not differ between those who lived in urban (71%) or rural (71%) areas**.
- Food security: respondents with high (77%) food security were more likely to have eaten out in a restaurant, pub or bar than those with marginal (72%)**, low (67%) or very low (54%) food security. However, respondents with high (54%) food security were less likely to have eaten food from a takeaway than those with marginal (65%), low (66%) or very low (69%) food security.
- Ethnic group: white respondents (73%) were more likely to have eaten out in a restaurant, pub or bar compared to Asian or Asian British respondents (64%)**, however Asian or Asian British respondents (70%) were more likely to have eaten food from a takeaway compared to white respondents (58%) (footnote 4).
- Long term health condition: respondents with no long-term health condition (75%) were more likely to have eaten out in a restaurant, pub or bar compared to respondents who had a long-term health condition (64%), however the prevalence of eating food from a takeaway

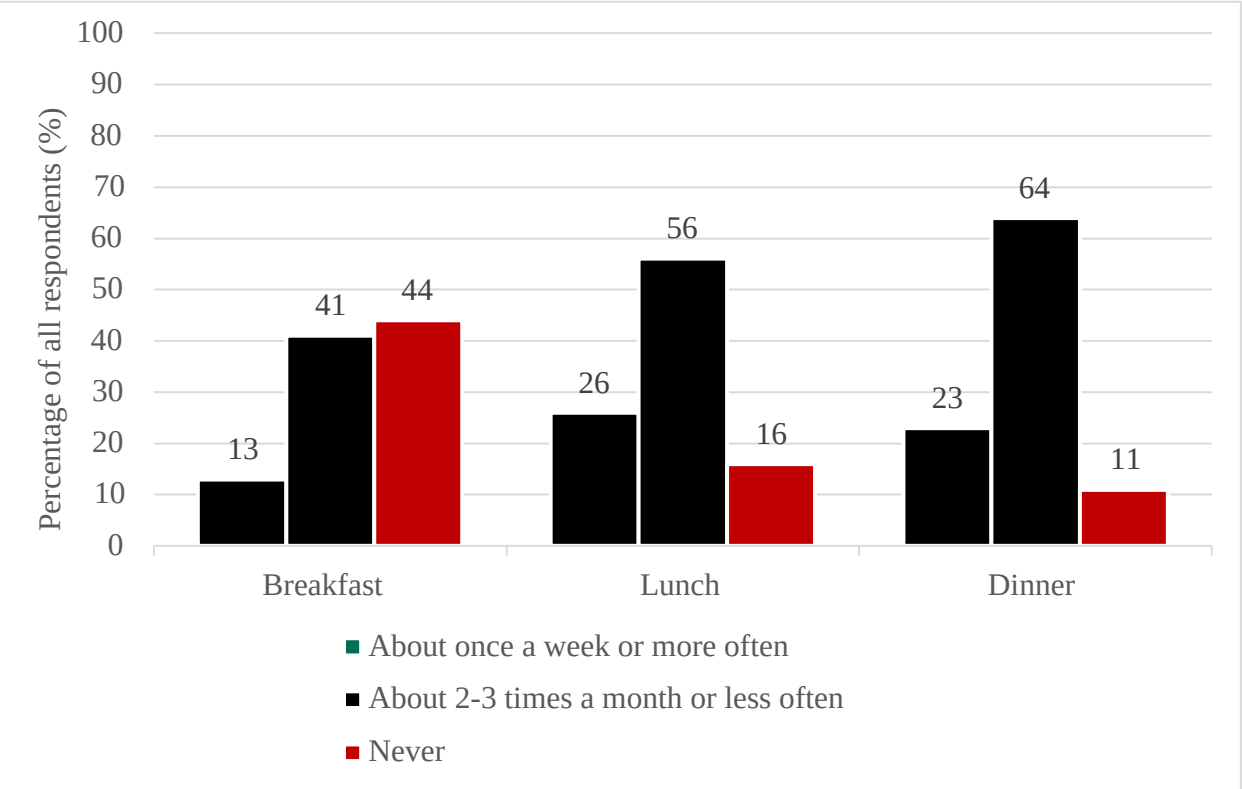
did not differ greatly between those with (56%) or without (61%) a long-term health condition**.

Eating out and takeaways by mealtime

Figure 13. Frequency of eating out or buying food to takeout by mealtime.

Change to table and accessible view

Change to chart view



Mealtime	About once a week or more often	About 2-3 times a month or less often	Never
Breakfast	13	41	44
Lunch	26	56	16
Dinner	23	64	11

Download this chart

Image .csv

Source: Food and You 2: Wave 8

Respondents were asked how often they ate out or bought food to take out for breakfast, lunch, and dinner. Respondents were least likely to eat out or buy food to take out for breakfast, with 44% of respondents never doing this. Over half of respondents (56%) reported that they ate out or bought takeout food for lunch 2-3 times a month or less often. Respondents were most likely to eat out or buy food to take out for dinner, with 64% doing this 2-3 times a month or less often and 23% doing this about once a week or more often (Figure 13) (footnote 5).

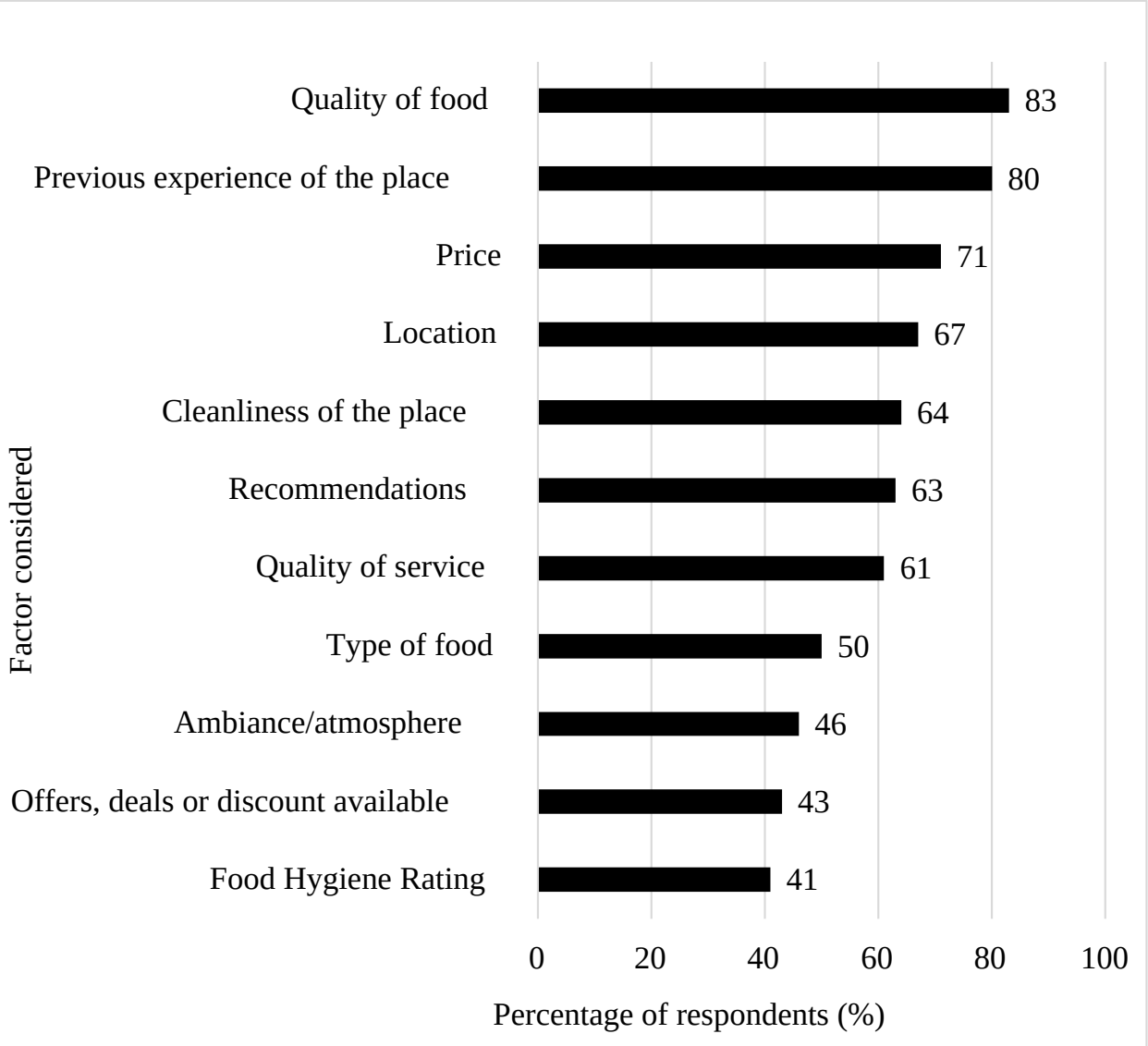
Factors considered when eating out

Respondents were asked which factors, from a given list, they generally considered when deciding where to eat out in restaurants, pubs, bars, cafés, coffee shops or sandwich shops.

Figure 14. Factors considered when deciding where to eat out.

Change to table and accessible view

Change to chart view



Factors considered	Percentage of respondents (%)
Food Hygiene Rating	41
Offers, deals or discount available	43
Ambiance/atmosphere	46
Type of food	50
Quality of service	61
Recommendations	63

Factors considered	Percentage of respondents (%)
Cleanliness of the place	64
Location	67
Price	71
Previous experience of the place	80
Quality of food	83

Download this chart

Image .csv

Source: Food and You 2: Wave 8

Those who eat out were most likely to consider the quality of food (83%) and their previous experience of the place (80%) when deciding where to eat. Around 4 in 10 (41%) respondents considered the food hygiene rating when deciding where to eat out (Figure 14). (footnote 6) (footnote 7)

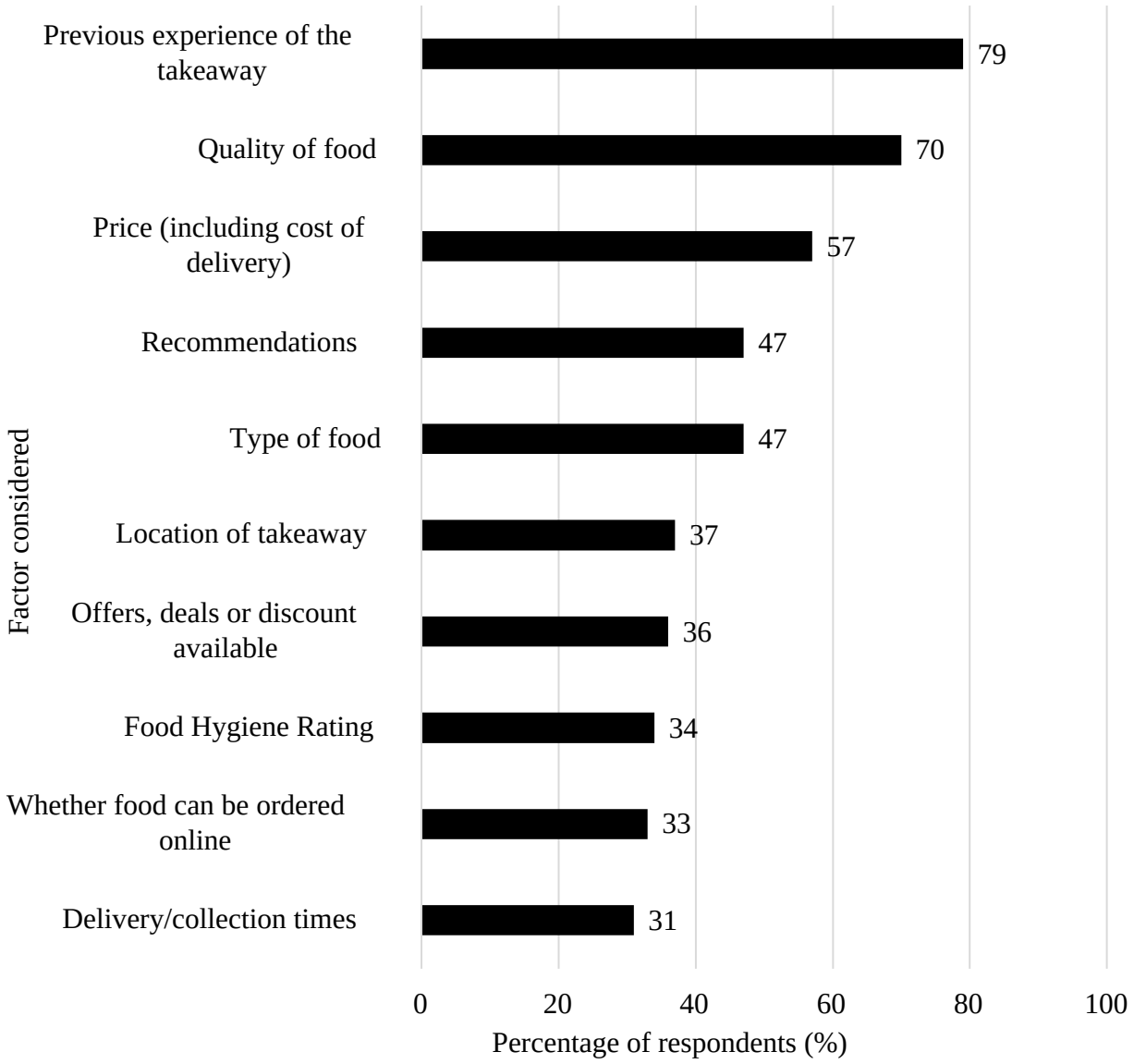
Factors considered when ordering takeaways

Respondents were asked which factors, from a given list, they generally considered when deciding where to order a takeaway from (footnote 8).

Figure 15. Factors considered when ordering a takeaway.

Change to table and accessible view

Change to chart view



Factors considered	Percentage of respondents (%)
Delivery/collection times	31
Whether food can be ordered online	33
Food Hygiene Rating	34
Offers, deals or discount available	36
Location of takeaway	37
Type of food	47
Recommendations	47
Price (including cost of delivery)	57
Quality of food	70
Previous experience of the takeaway	79

Download this chart

Image .csv

Source: Food and You 2: Wave 8

Those who order takeaways were most likely to consider their previous experience of the takeaway (79%) and the quality of food (70%) when deciding where to order a takeaway from. Around a third (34%) of respondents considered the food hygiene rating when deciding where to order a takeaway from (Figure 15) (footnote 9).

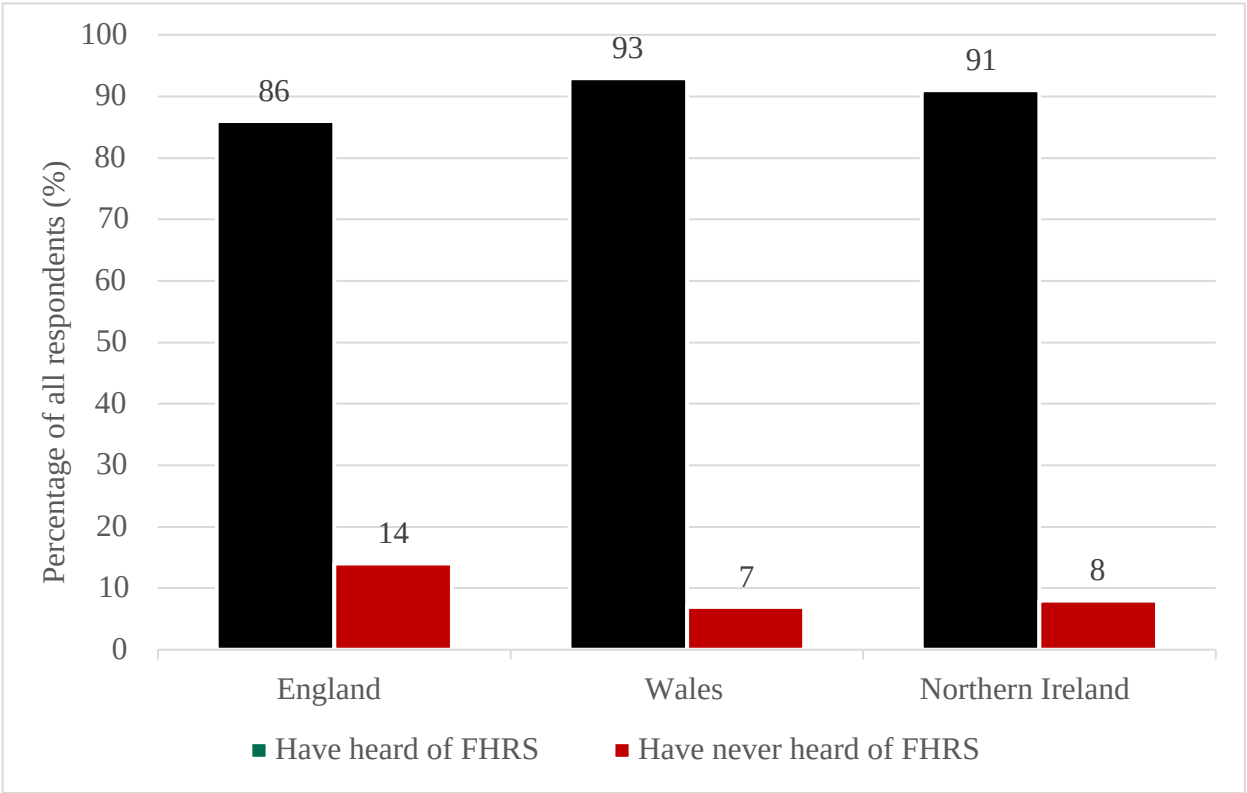
Awareness and recognition of the FHRS

Most respondents (86%) reported that they had heard of the FHRS. Around 6 in 10 (57%) respondents reported that they had heard of the FHRS and had at least a bit of knowledge about it (footnote 10), (footnote 11).

Figure 16. Percentage of respondents who had heard of the FHRS by country.

Change to table and accessible view

Change to chart view



Country	Have heard of FHRS	Have never heard of FHRS
England	86	14
Wales	93	7
Northern Ireland	91	8

Download this chart

Image .csv

Source: Food and You 2: Wave 8

Most respondents living in England (86%), Wales (93%), and Northern Ireland (91%) had heard of the FHRS (Figure 16)**.

Respondents in Wales (74%) and Northern Ireland (66%) were more likely to report that they had heard of the FHRS and had at least a bit of knowledge of the FHRS compared to those in England (56%).

When shown an image of the food hygiene rating sticker, 89% of respondents reported that they had seen the food hygiene rating sticker before. Recognition of the food hygiene rating sticker was slightly higher in Wales (95%) and Northern Ireland (94%) than in England (89%) (footnote 12) (footnote 13)**.

FHRS usage

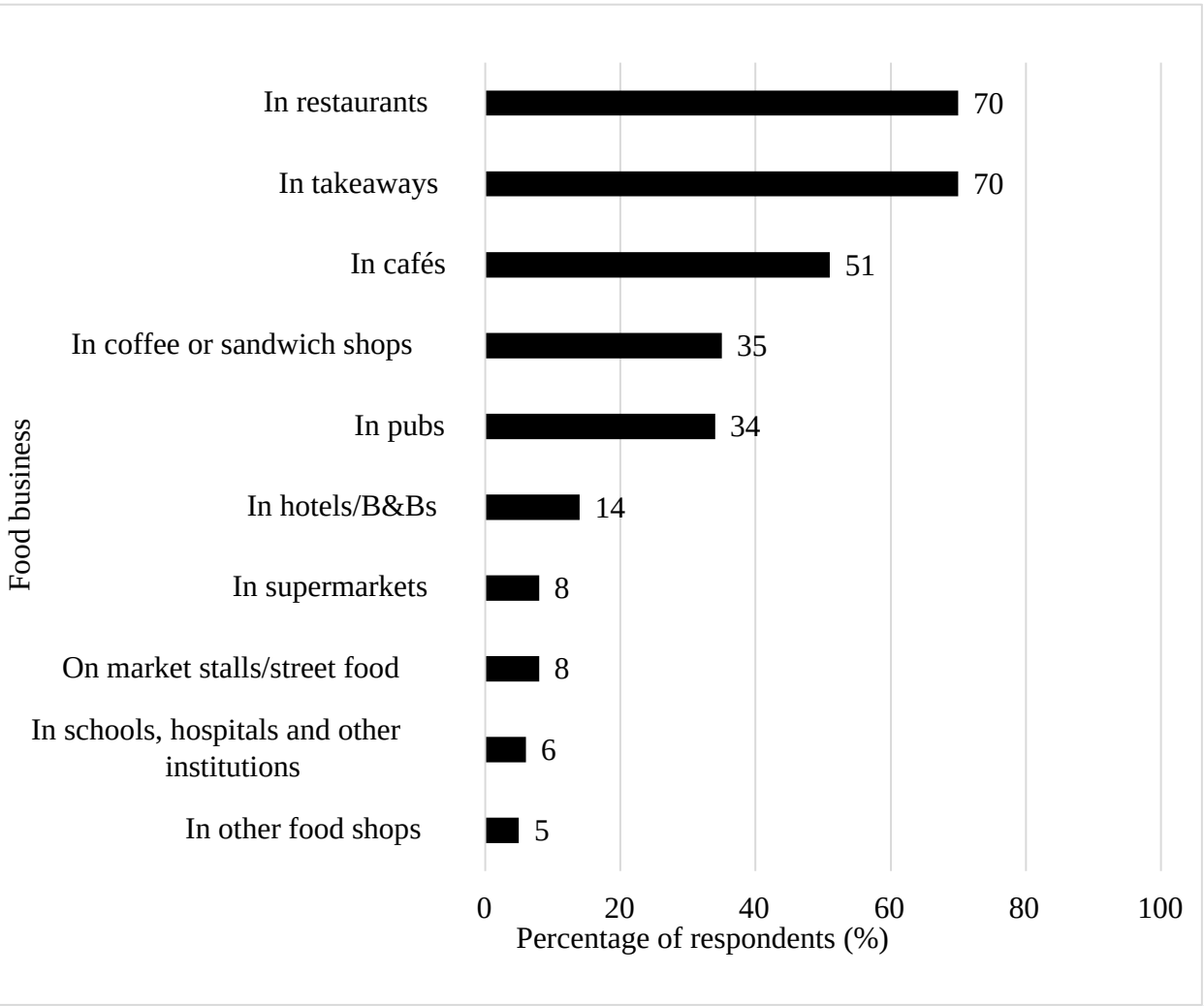
Respondents were asked if they had checked the hygiene rating of a food business in the last 12 months. Around 4 in 10 (42%) respondents reported checking the food hygiene rating of a business in the previous 12 months (footnote 14).

Respondents living in Wales (58%) were more likely to have checked the hygiene rating of a food business in the last 12 months compared to respondents in England (41%) and Northern Ireland (49%)**.

Figure 17. Food businesses where respondents had checked the food hygiene rating in last 12 months.

Change to table and accessible view

Change to chart view



Food business	Percentage of respondents (%)
In other food shops	5
In schools, hospitals and other institutions	6
On market stalls/street food	8
In supermarkets	8
In hotels/B&Bs	14
In pubs	34
In coffee or sandwich shops	35
In cafes	51
In takeaways	70
In restaurants	70

Download this chart

Image .csv

Source: Food and You 2: Wave 8

Respondents who said they had checked the hygiene rating of a food business in the last 12 months were asked what types of food businesses they had checked. The most common types of food business respondents had checked the food rating of were restaurants (70%) and takeaways (70%). Respondents were less likely to report checking the food hygiene rating of cafés (51%), coffee or sandwich shops (35%), or pubs (34%) (Figure 17) (footnote 15).

1. Legislation for the mandatory display of FHRS ratings was introduced in November 2013 in Wales and October 2016 in Northern Ireland.

2. Question: In the last 4 weeks, have you eaten food... ? (Select all the apply) Responses: Ordered a takeaway directly from a takeaway shop or restaurant, From a café, coffee shop or sandwich shop (either to eat in or take out), Ordered a takeaway from an online food delivery company (for example Just Eat, Deliveroo, Uber Eats), From a fast food outlet (either to eat in or take out), In a restaurant, In a pub/ bar, From a canteen (for example at work, school, university, or hospital), From a mobile food van or stall, In a hotel, B&B or guesthouse, From an entertainment venue (for example cinema, bowling alley, sports club), From a food-sharing app (for example Olio or Too Good To Go), From Facebook Marketplace (for example pre-prepared food or meals), None of these. Base= 4966, all online respondents and those answering the 'Eating Out' postal questionnaire (see Annex A). Please note, percentages shown do not add up to 100% as multiple responses could be selected.

3. NS-SEC (The National Statistics Socio-economic classification) is a classification system which provides an indication of socio-economic position based on occupation and employment status.

4. Please note: the figures of other ethnic groups are not reported due to low base / sample size.

5. Question: At the moment, how often, if at all, do you eat out or buy food to take out for…? A) Breakfast, B) Lunch, C) Dinner. Responses: Several times a week, About once a week, About 2-3 times a month, About once a month, Less than once a month, Never, Can't remember. Base= 3915, all online respondents and those answering the 'Eating Out' postal questionnaire.

6. Please note: Figure 14 was amended in November 2024 to include a missing variable "Offers, deals or discount available (43%)" which was previous omitted from the figure.

7. Question: Generally, when you eat out, what do you consider when deciding where to go? Please think about eating out in restaurants, pubs/bars, and cafés/coffee shops/sandwich shops? Responses: Quality of food, My previous experience of the place, Price, Location, Recommendations from family or friends, Cleanliness of the place, Quality of service, Type of food (e. g. cuisine or vegetarian/vegan options), Ambiance/atmosphere, Food Hygiene Rating, Offers, deals or discount available, Reviews, e. g. on TripAdvisor, Google or social media, or in newspapers and magazines, Whether it is an independent business or part of a chain, Whether healthier options are available, Whether the place is child-friendly, Whether allergen information is provided, Whether information about calories is provided, None of these, Don't know. Base= 3819, all online respondents who eat out.

8. Including takeaway ordered directly from a takeaway shop or restaurant or via an online food delivery company.

9. Question: Generally, when ordering food from takeaways (either directly from a takeaway shop or restaurant or from an online food delivery company like Just Eat, Uber Eats or

Deliveroo) what do you consider when deciding where to order from? Responses: My previous experience of the takeaway, Quality of food, Price (including cost of delivery), Type of food (for example cuisine or vegetarian/vegan options), Recommendations from family or friends, Food Hygiene Rating, Location of takeaway, Whether there is a delivery or collection option, Offers, deals or discount available, Delivery/ collection times, Whether food can be ordered online for example through a website or app, Reviews for example on TripAdvisor, Google, social media, or in newspapers and magazines, Whether it is an independent business or part of a chain, Whether healthier options are provided, Whether allergen information is provided, Whether information about calories is provided, None of these, Don't know. Base= 3307, all online respondents who order takeaways.

10. Question: Have you heard of the Food Hygiene Rating Scheme? Responses: Yes, I've heard of it and know quite a lot about it, Yes, I've heard of it and know a bit about it, Yes, I've heard of it but don't know much about it, Yes, I've heard of it but don't know anything about it, No, I've never heard of it. Base = 4966, all online respondents and those answering the 'Eating Out' postal questionnaire.

11. Responses to other FHRS questions not included in this report are available in the full dataset and tables. A more detailed FHRS report will be published separately.

12. Please note: This sentence was amended in November 2024 to clarify the differences between England, Wales and Northern Ireland. The sentence previously stated, "Recognition of the FHRS sticker was comparable across England (89%), Wales (95%) and Northern Ireland (94%)".

13. Question: Have you ever seen this sticker before? Responses: Yes, No, Don't know/ Not sure. Base = 4966, all online respondents and those answering the 'Eating Out' postal questionnaire.

14. Question: In the last 12 months, have you checked the hygiene rating of a food business? You may have checked a rating at the business premises, online, in leaflets or menus whether or not you decided to purchase food from there. Responses: Yes, I have checked the Food Hygiene Rating of a food business, No, I have not checked the Food Hygiene Rating of a food business, Don't know. Base = 4966, all online respondents and those answering the 'Eating Out' postal questionnaire.

15. Question: In which of the following kinds of food businesses have you checked the hygiene ratings in the last 12 months? Responses: In takeaways, In restaurants, In cafés, In coffee or sandwich shops, In pubs, In hotels & B&Bs, In supermarkets, In other food shops, In schools, hospitals and other institutions, On market stalls/street food, Manufacturers (Business-to-Business traders), Somewhere else, Don't know. Base = 2378, all online respondents and all those who completed the 'Eating Out' postal questionnaire who have checked the Food Hygiene Rating of a food business in the last 12 months.

F&Y2 Wave 8: Chapter 5 Food allergies, intolerances and other hypersensitivities

Introduction

'Food hypersensitivity' is a term that refers to a bad or unpleasant physical reaction which occurs as a result of consuming a particular food. There are different types of food hypersensitivity including a food allergy, food intolerance and coeliac disease.

A **food allergy** occurs when the immune system (the body's defence) mistakes the proteins in food as a threat. Symptoms of a food allergy can vary from mild symptoms to very serious symptoms, and can include itching, hives, vomiting, swollen eyes and airways, or anaphylaxis which can be life threatening.

Food intolerance is difficulty in digesting specific foods which causes unpleasant reactions such as stomach pain, bloating, diarrhoea, skin rashes or itching. Food intolerance is not an immune condition and is not life threatening.

Coeliac disease is an autoimmune condition caused by gluten, a protein found in wheat, barley and rye, including products using these as ingredients. The immune system attacks the small intestine which damages the gut and reduces the ability to absorb nutrients. Symptoms of coeliac disease can include diarrhoea, abdominal pain and bloating, as well as longer term health consequences if the disease is not managed.

The FSA is responsible for allergen labelling and providing guidance to people with food hypersensitivities. By law, food businesses in the UK must inform customers if they use any of the 14 most potent and prevalent allergens (footnote 1) in the food and drink they provide.

This chapter provides an overview of the self-reported prevalence and diagnosis of food hypersensitivities (footnote 2), and experiences of eating out or ordering a takeaway among those with a hypersensitivity.

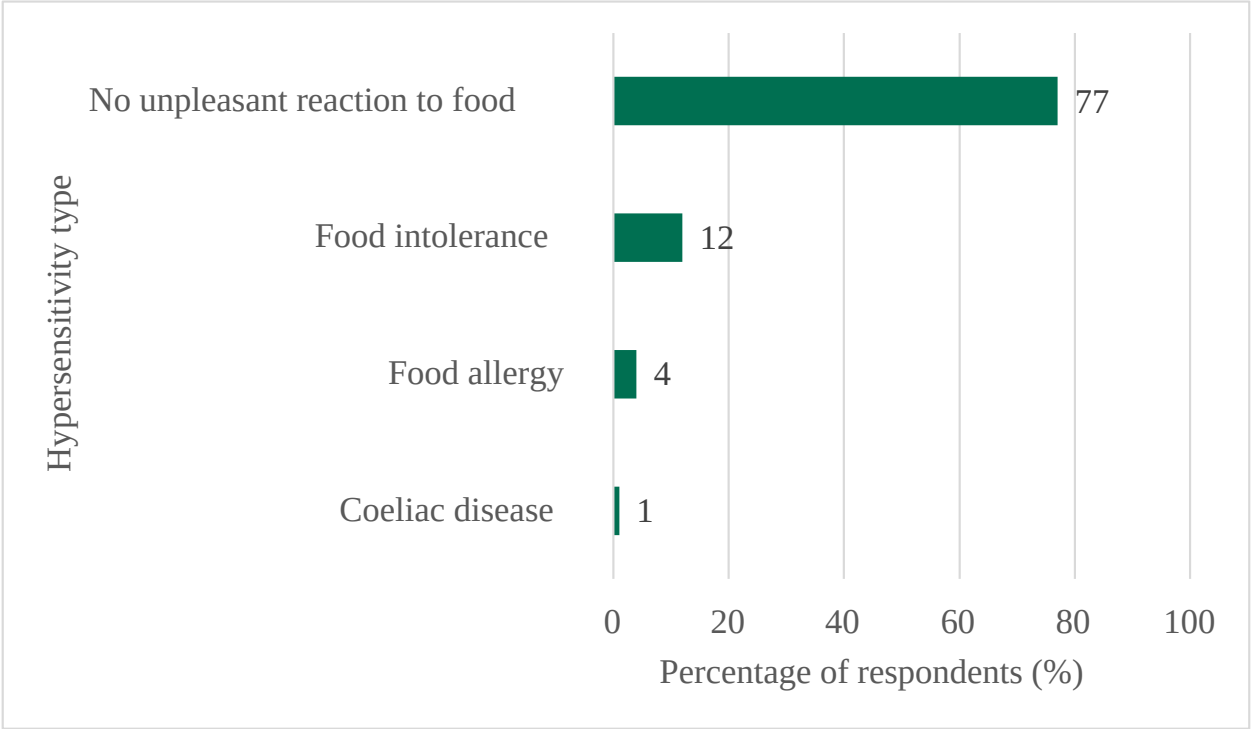
Prevalence, diagnosis and severity of food hypersensitivities

Around a quarter (23%) of respondents reported that they suffer from a bad or unpleasant physical reaction after consuming certain foods or avoid certain foods because of the bad or unpleasant physical reaction they might cause (footnote 3).

Figure 18. Prevalence of different types of food hypersensitivity.

Change to table and accessible view

Change to chart view



Hypersensitivity type	Percentage of respondents (%)
Coeliac disease	1
Food allergy	4
Food intolerance	12
No unpleasant reaction to food	77

Download this chart

Image .csv

Source: Food and You 2 Wave 8

Most respondents (77%) reported that they did not have a food hypersensitivity. Around 1 in 10 (12%) respondents reported that they had a food intolerance, 4% reported having a food allergy, and 1% reported having coeliac disease (Figure 18) (footnote 4).

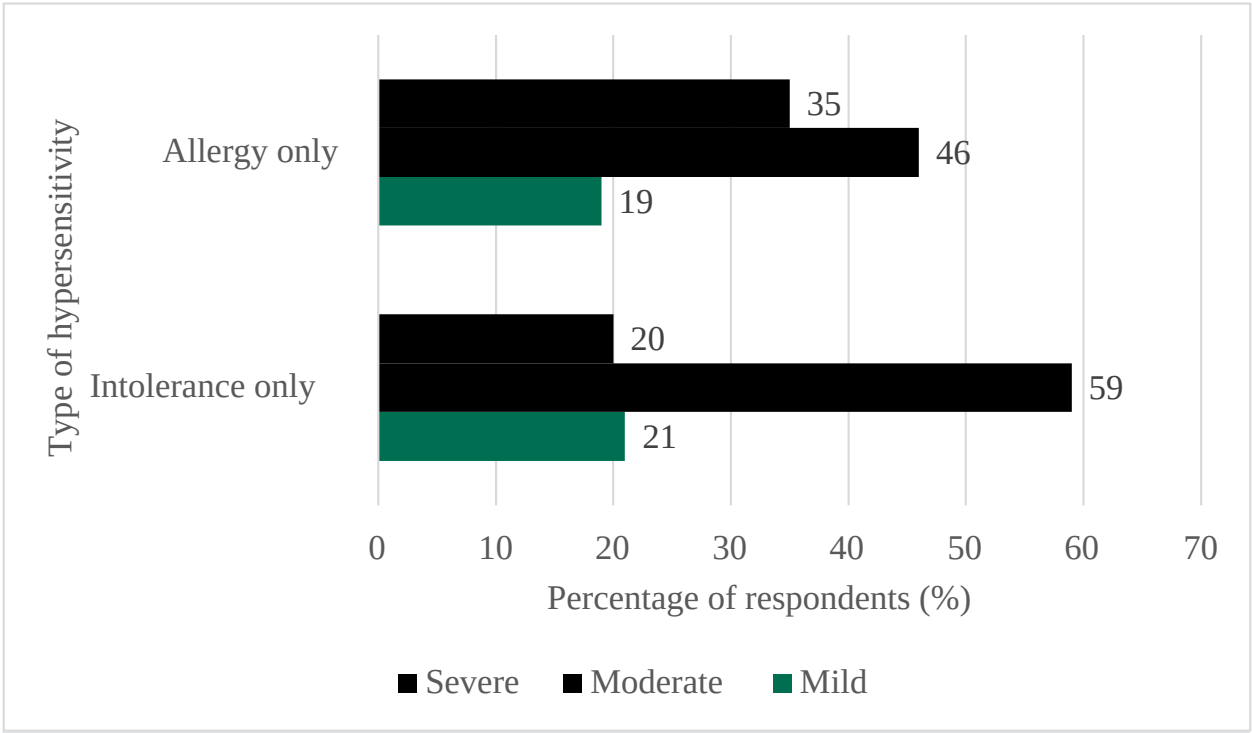
Severity of food hypersensitivities

Respondents who reported that they suffer from a bad or unpleasant physical reaction after consuming certain foods or avoid certain foods because of the bad or unpleasant physical reaction they might cause were asked how they would describe their reaction. Around a quarter (26%) of respondents reported that they had a mild reaction, 53% of respondents reported that they had a moderate reaction, and 20% of respondents reported that they had a severe reaction (footnote 5).

Figure 19. Reaction severity of respondents with an intolerance or allergy.

Change to table and accessible view

Change to chart view



Type of hypersensitivity	Mild	Moderate	Severe
Intolerance only	21	59	20
Allergy only	19	46	35

Download this chart

Image .csv

Source: Food and You 2: Wave 8

Respondents who suffer from an allergy only (35%) were more likely to report that they had a severe reaction than those with only an intolerance (20%). Conversely, respondents who suffer from an intolerance only (59%) were more likely to report that they had a moderate reaction than those with only an allergy (46%) (Figure 19).

Prevalence, frequency and causes of food reactions

Respondents who reported that they suffer from a bad or unpleasant physical reaction after consuming certain foods or avoid certain foods because of the bad or unpleasant physical reaction they might cause, were asked if they had experienced a reaction in the previous 12 months. Of these respondents, 58% reported that they had experienced a reaction and 37% reported that they had not experienced a reaction (footnote 6).

Respondents who had experienced a bad or unpleasant physical reaction in the previous 12 months were asked how many times they had experienced a reaction. A fifth (20%) of respondents had experienced reactions once or twice, 46% of respondents had experienced between 3 and 10 reactions and 31% had experienced more than 10 reactions (footnote 7).

Respondents who had experienced a bad or unpleasant physical reaction in the previous 12 months were asked what they thought caused their last reaction. The most reported causes were food made to order from a restaurant or café (19%), food ordered directly from a takeaway shop or restaurant (19%), food prepared/cooked by the respondent at home (17%) and pre-packaged food bought in a shop or café (15%) (footnote 8).

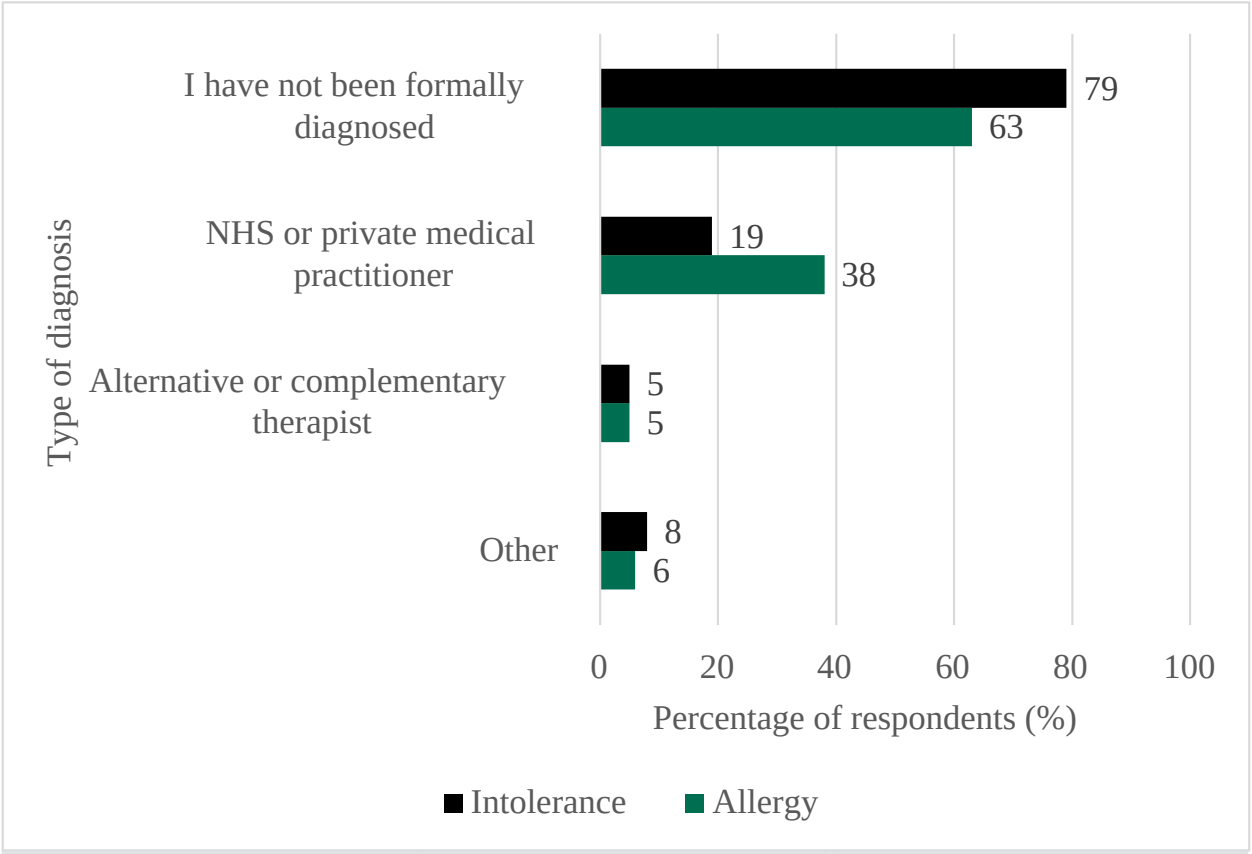
Diagnosis of food hypersensitivities

Respondents who reported having a bad or unpleasant reaction were asked how they had found out about their condition. Around a quarter (24%) of respondents who had a food hypersensitivity had been diagnosed by an NHS or private medical practitioner and 5% had been diagnosed by an alternative or complementary therapist. However, most respondents (76%) had not received any diagnosis (footnote 9).

Figure 20. Prevalence and type of food reaction and intolerance diagnosis.

Change to table and accessible view

Change to chart view



Type of diagnosis	Allergy	Intolerance
Other	6	8
Alternative or complementary therapist	5	5
NHS or private medical practitioner	38	19
I have not been formally diagnosed	63	79

Download this chart

Image .csv

Source: Food and You 2 Wave 8

Most respondents who reported having a food intolerance (79%) have noticed that a particular food causes them problems but have not been formally diagnosed with a specific condition.

However, 19% of respondents reporting a food intolerance had been diagnosed by an NHS or private medical practitioner (for example GP, dietician, allergy specialist in a hospital or clinic) and 5% had been diagnosed by an alternative or complementary therapist (e. g. homeopath, reflexologist, online or walk-in allergy testing service).

Around 6 in 10 (63%) respondents who reported having a food allergy had noticed that a particular food causes them problems but have not been formally diagnosed with a specific condition. However, 38% of respondents reporting a food allergy had been diagnosed by an NHS or private medical practitioner (for example GP, dietician, allergy specialist in a hospital or clinic) and 5% had been diagnosed by an alternative or complementary therapist (e. g. homeopath, reflexologist, online or walk-in allergy testing service).

Respondents reporting that they had a food allergy (38%) were more likely to have been diagnosed by an NHS or private medical practitioner (for example GP, dietician, allergy specialist in a hospital or clinic) than those with a food intolerance (19%) (Figure 20).

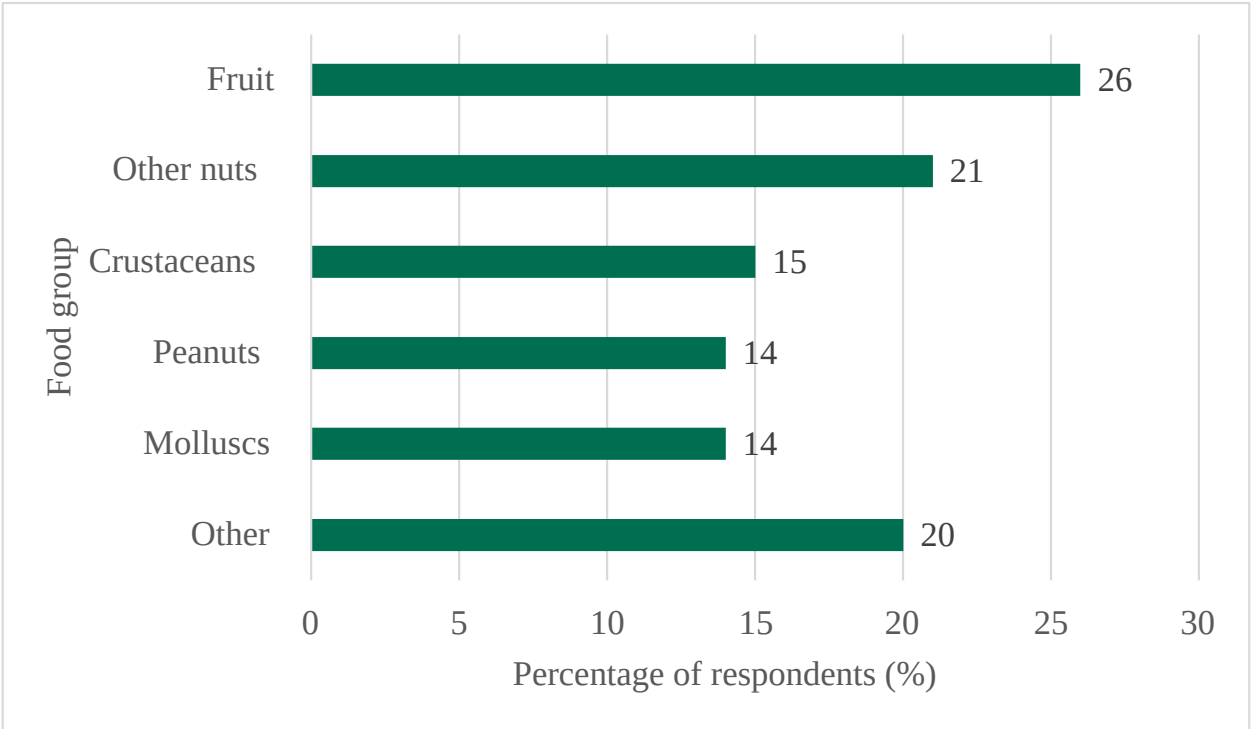
Foods most likely to cause unpleasant reactions

Respondents who reported that they suffered from a bad or unpleasant physical reaction after consuming certain foods or avoided certain foods because of the bad or unpleasant physical reaction it might cause, were asked which foods they experience reactions to.

Figure 21. The food groups most likely to cause allergic reactions.

Change to table and accessible view

Change to chart view



Food group	Percentage of respondents (%)
Other	20

Food group	Percentage of respondents (%)
Molluscs	14
Peanuts	14
Crustaceans	15
Other nuts	21
Fruit	26

Download this chart

Image .csv

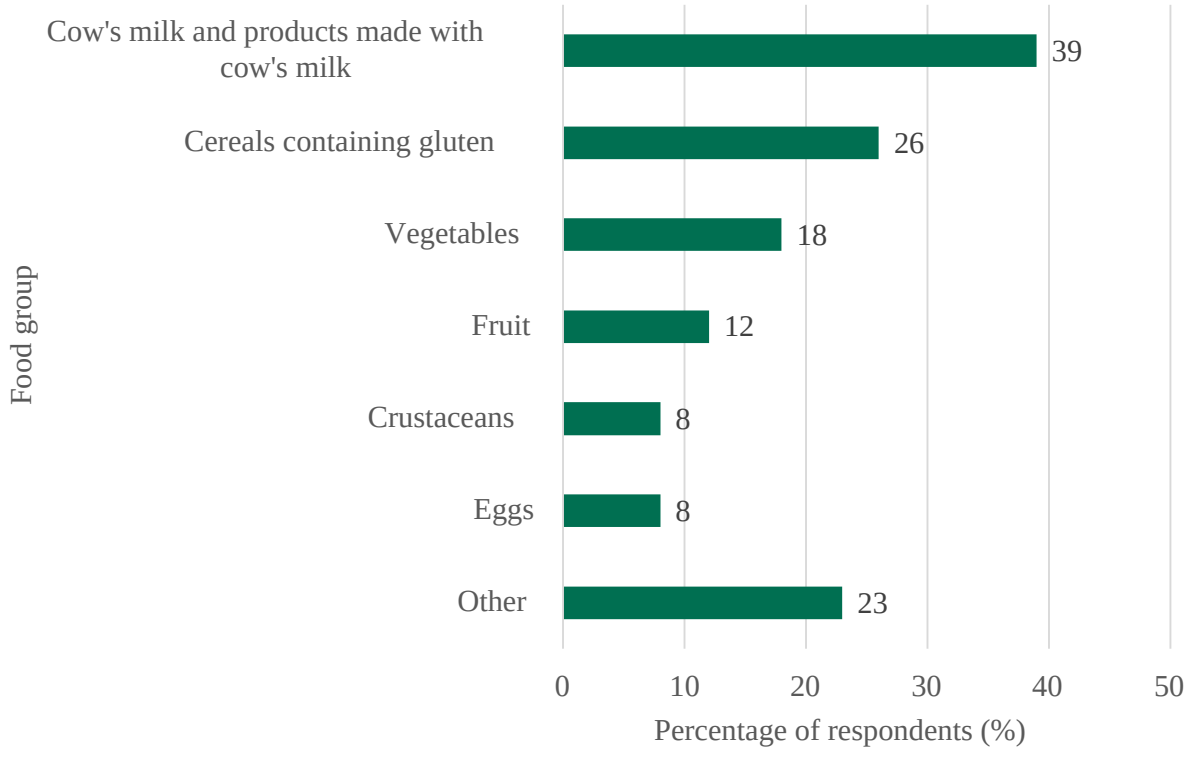
Source: Food and You 2 Wave 8

Amongst the respondents who reported having a food allergy, the most common food reported as causing a reaction was fruit (26%). Other common allergens were other nuts (for example almonds, hazelnuts, walnuts, cashew nuts, pecans) (21%), crustaceans (for example, crabs, lobster, prawns, scampi) (15%), peanuts (14%) and molluscs (for example, mussels, snails, squid, whelks, clams, oysters) (14%). However, 20% of respondents reported an allergy to other foods which were not listed in the questionnaire (Figure 21) (footnote 10).

Figure 22. The food groups most likely to cause a food intolerance

Change to table and accessible view

Change to chart view



Food group	Percentage of respondents (%)
Other	23

Food group	Percentage of respondents (%)
Eggs	8
Crustaceans	8
Fruit	12
Vegetables	18
Cereals containing gluten	26
Cow's milk and products made with cow's milk	39

Download this chart

Image .csv

Source: Food and You 2 Wave 8

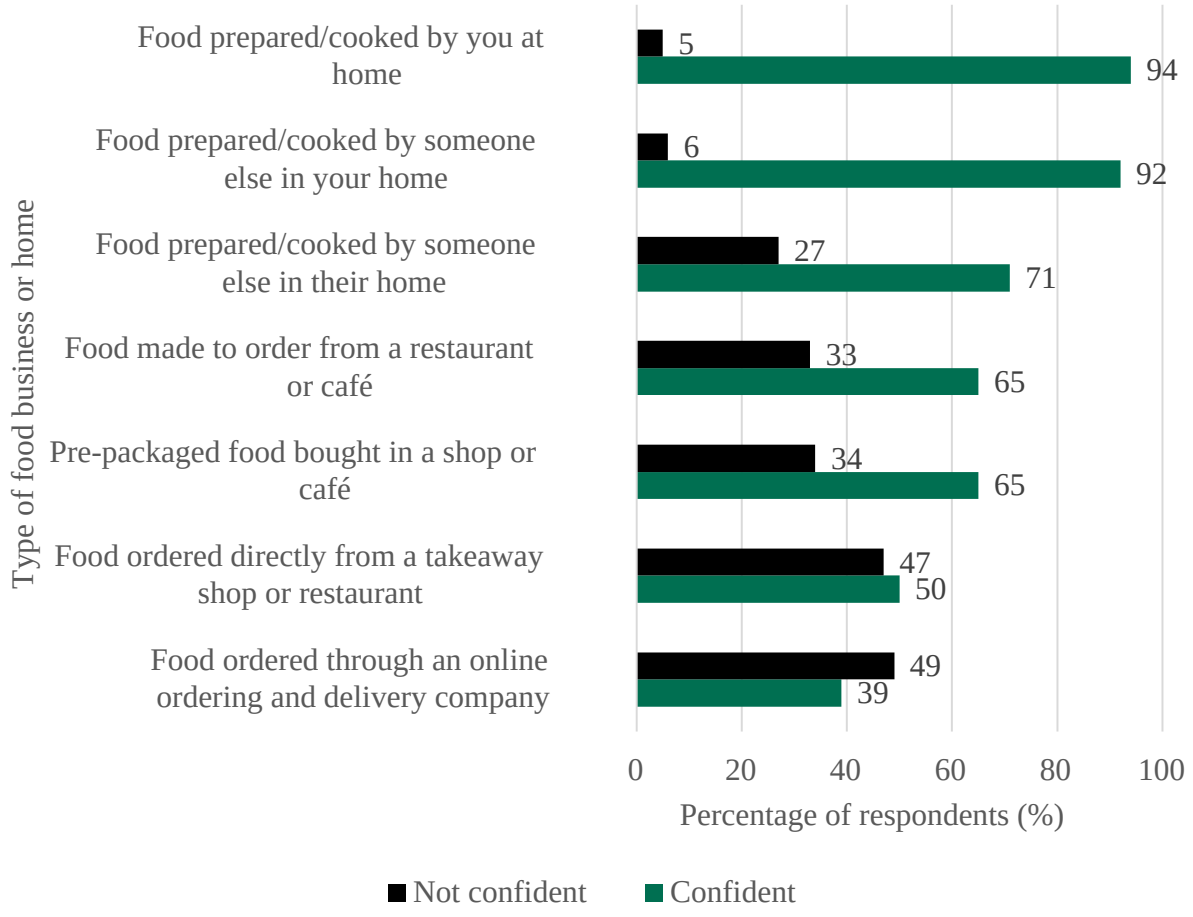
Amongst the respondents who reported having a food intolerance, the most common food group reported as causing a reaction was cow's milk and products made with cow's milk (for example, butter, cheese, cream, yoghurt) (39%). Other common allergens were cereals containing gluten (for example, wheat, rye, barley, oats) (26%). Around a quarter (23%) of respondents reported an intolerance to other foods which were not listed in the questionnaire (Figure 22) (footnote 11).

Confidence in avoiding unpleasant reactions when eating food in a home setting or from a food business

Figure 23. Confidence of respondents with a food hypersensitivity in avoiding a bad or unpleasant reaction when eating food in a home setting or from different types of food business.

Change to table and accessible view

Change to chart view



Type of food business or home	Confident	Not confident
Food ordered through an online ordering and delivery company	39	49
Food ordered directly from a takeaway shop or restaurant	50	47
Pre-packaged food bought in a shop or caf?	65	34
Food made to order from a restaurant or caf?	65	33
Food prepared/cooked by someone else in their home	71	27
Food prepared/cooked by someone else in your home	92	6
Food prepared/cooked by you at home	94	5

Download this chart

Image .csv

Source Food and You 2 Wave 8

Respondents who had a food hypersensitivity were asked how confident they were in their ability to avoid food that might cause a bad or unpleasant physical reaction when eating food from different food businesses and food that had been prepared or cooked in a home environment.

Almost all respondents were confident (i.e., very or fairly confident) in their ability to avoid unpleasant reactions when eating food they had prepared or cooked at home (94%) or food prepared or cooked by someone else in the respondents' home (92%). Around 1 in 10 (71%) were confident in their ability to avoid unpleasant reactions when food was prepared or cooked by someone else in their home.

Around two-thirds of respondents reported they were confident avoiding unpleasant reactions when eating food made to order from a restaurant or café (65%) and pre-packaged food bought in a shop or café (65%). Respondents were less likely to report confidence when eating food ordered directly from a takeaway shop or restaurant (50%) and food ordered through an online ordering and delivery company (for example, Just Eat, Deliveroo, Uber Eats) (39%) (Figure 23) (footnote 12). In addition, respondents were more likely to report that they don't know how confident they feel in their ability to avoid unpleasant reactions when eating food ordered through an online ordering and delivery company (for example, Just Eat, Deliveroo, Uber Eats) (12%) compared to other settings (for example, 1% of respondent don't know how confident they feel when eating food made to order from a restaurant or café).

Eating out with a food hypersensitivity

The FSA provides guidance for food businesses on providing allergen information. Food businesses in the retail and catering sector are required by law to provide allergen information and to follow labelling rules. The type of allergen information which must be provided depends on the type of food business. However, all food business operators must provide allergen information for pre-packed and non-pre-packed food and drink. Foods which are pre-packed or pre-packed for direct sale (PPDS) are required to have a label with a full ingredients list with allergenic ingredients emphasised.

How often people checked allergen information in advance when eating somewhere news

Respondents who suffer from a bad or unpleasant physical reaction after consuming certain foods were asked how often, if at all, they checked in advance that information was available which would allow them to identify food that might cause them a bad or unpleasant reaction when they ate out or ordered a takeaway from somewhere new.

A quarter (25%) of respondents always checked in advance that information was available which would allow them to identify food that might cause them a bad or unpleasant reaction. 43% of respondents checked this information was available less often (i.e., most of the time, about half of the time, or occasionally). However, around 3 in 10 (32%) respondents never checked in advance that information that would allow them to identify food that might cause them a bad or unpleasant reaction was available (footnote 13).

Availability and confidence in allergen information when eating out or ordering takeaways

Respondents who suffered from a bad or unpleasant physical reaction after consuming certain foods were asked how often information which allowed them to identify food that might cause them a bad or unpleasant reaction was readily available when eating out or buying food to take out.

Around 1 in 10 (11%) respondents reported that this information was always readily available and 69% of respondents reported that this information was available less often (i.e., most of the time, about half of the time, occasionally). However, 11% of respondents reported that this information was never readily available (footnote 14).

Respondents were asked how often they asked a member of staff for more information when it is not readily available. Around a quarter (24%) of respondents reported that they always asked staff for more information, whilst 46% did this less often (i.e., most of the time, about half of the time, occasionally) and 29% of respondents never asked staff for more information (footnote 15).

Respondents were asked how comfortable they felt asking a member of staff for more information about food that might cause them a bad or unpleasant physical reaction. Most respondents (70%) reported that they were comfortable (i.e., very comfortable or fairly comfortable) asking staff for more information, however 18% of respondents reported that they were not comfortable doing this (i.e., not very comfortable or not at all comfortable) (footnote 16).

Respondents were asked how confident they felt that the information provided would allow them to identify and avoid food that might cause a bad or unpleasant physical reaction. Most respondents were confident (i.e., very confident or fairly confident) that the information provided in writing (78%) or verbally by a member of staff (60%) would allow them to identify and avoid food that might cause a bad or unpleasant physical reaction (footnote 17).

1. Allergens: celery, cereals containing gluten (such as barley and oats), crustaceans (such as prawns, crabs and lobsters), eggs, fish, lupin, milk, molluscs (such as mussels and oysters), mustard, peanuts, sesame, soybeans, sulphur dioxide and sulphites and tree nuts (such as almonds, hazelnuts, walnuts, Brazil nuts, cashews, pecans, pistachios and macadamia nuts).

2. For further information about the Patterns and Prevalence of Adults Food Allergy report.

3. Question: Do you suffer from a bad or unpleasant physical reaction after consuming certain foods, or avoid certain foods because of the bad or unpleasant physical reaction they might cause? Responses: Yes, No, Don’t know, Prefer not to say. Base= 5808, all respondents.

4. Question/ Responses: This data is derived from multiple questions, see the Technical Report for further details. See data tables (REACTYPE_1 to REACTYPE_18 combined NET). Base= 5808, all respondents. Please note: the figures shown do not add up to 100% as not all responses are shown.

5. Question: How would you describe your bad or unpleasant physical reaction? Responses: Mild, Moderate, Severe, Don't know. Base = 834, all online respondents who suffer from a bad or unpleasant physical reaction after consuming certain foods or avoid certain foods because of the bad or unpleasant physical reaction they might cause.

6. Question: In the last 12 months, have you experienced any bad or unpleasant physical reactions after consuming certain foods? Responses: Yes, No, Can’t remember. Base = 1255, all online respondents who suffer from a bad or unpleasant physical reaction after consuming certain foods or avoid certain foods because of the bad or unpleasant physical reaction they might cause.

7. Question: In the last 12 months, approximately how many times have you experienced a bad or unpleasant physical reaction after consuming certain foods? Responses: Once, Twice, Between 3 and 10 times, More than 10 times, Don't know. Base = 500, all respondents who experienced a bad or unpleasant physical reaction after consuming certain foods, in the last 12 months.

8. Question: Thinking about the last time you experienced a bad or unpleasant physical reaction after consuming food, what do you think caused the reaction? Responses: Food made to order from a restaurant or café, Food ordered directly from a takeaway shop or

restaurant, Food prepared/cooked by you at home, Pre-packaged food bought in a shop or café, Other, Food ordered through an online ordering and delivery company, Don't know, Food prepared/cooked by someone else in your home, Food prepared/cooked by someone else in their home. Base = 500, all online respondents who experienced a bad or unpleasant physical reaction after consuming certain foods, in the last 12 months.

9. Question: How did you find out about your problem with these foods? Responses: I have been diagnosed by an NHS or private medical practitioner (for example GP, dietician, allergy specialist in a hospital or clinic), I have been diagnosed by an alternative or complementary therapist (for example homeopath, reflexologist, online or walk-in allergy testing service), I have noticed that this food causes me problems, but I have not been formally diagnosed with a specific condition, Other. Base= 1237, all respondents who suffer from a bad or unpleasant physical reaction after consuming certain foods, or avoid certain foods because of the bad or unpleasant physical reaction they might cause.

10. Questions/Respondents: Derived variable, see data tables (REACSOURCAL) and Technical Report. Base= 161.

11. Questions/Respondents: Derived variable, see data tables (REACSOURCIN) and Technical Report. Base= 474.

12. Question: How confident would you feel in your ability to avoid a bad or unpleasant physical reaction if you were eating...A) Food prepared/cooked by you at home. B) Food prepared/cooked by someone else in your home C) Food prepared/cooked by someone else in their home D) Pre-packaged food bought in a shop or café E) Food made to order from a restaurant or café F) Food ordered directly from a takeaway shop or restaurant G) Food ordered through an online ordering and delivery company (e. g. Just Eat, Deliveroo, Uber Eats). Responses: Very confident, Fairly confident, Not very confident, Not at all confident, Don't know. Base = 834, all online respondents who suffer from a bad or unpleasant physical reaction after consuming certain foods or avoid certain foods because of the bad or unpleasant physical reaction they might cause.

13. Question: When eating out or ordering food from somewhere new, how often, if at all, do you check in advance that information is available allowing you to identify food that might cause you a bad or unpleasant physical reaction? Responses: Always, Most of the time, About half of the time, Occasionally, Never, Don’t know. Base= 1193, all online respondents who eat out or buy food to take away and have a food reaction, and all postal respondents, who suffer from a bad or unpleasant physical reaction after consuming certain foods or avoid certain foods because of the bad or unpleasant physical reaction they might cause who eat out or order takeaways.

14. Question: When eating out or buying food to take out, how often, if at all, is the information you need to help you identify food that might cause you a bad or unpleasant physical reaction readily available? Responses: Always, Most of the time, About half of the time, Occasionally, Never, Don’t know. Base= 1186, all online respondents who eat out or buy food to take away and have a food reaction, and all postal respondents, who suffer from a bad or unpleasant physical reaction after consuming certain foods or avoid certain foods because of the bad or unpleasant physical reaction they might cause, who eat out or order takeaway.

15. Question: When information is not readily available, how often do you ask a member of staff for more information? Responses: Always, Most of the time, About half of the time, Occasionally, Never, I don't need to ask because the information is always readily available, Don't know. Base= 1124, all respondents who eat out or buy food to take away, and all respondents who suffer from a bad or unpleasant physical reaction after consuming certain foods, or avoid certain foods because of the bad or unpleasant physical reaction they might cause, excluding those who say 'I don't need to ask because the information is always readily available'.

16. Question: How comfortable do you feel asking a member of staff for more information about food that might cause you a bad or unpleasant physical reaction? Responses: Very comfortable, Fairly comfortable, Not very comfortable, Not at all comfortable, It varies from place to place, Don't know. Base = 1186, all online respondents who eat out or buy food to take away and have a food reaction, and all postal respondents, who suffer from a bad or unpleasant physical reaction after consuming certain foods or avoid certain foods because of the bad or unpleasant physical reaction they might cause.

17. Question: How confident are you that the information provided will allow you to identify and avoid food that might cause you a bad or unpleasant physical reaction? A) when the information is provided in writing (for example, on the main menu or a separate allergen menu). B) when the information is provided verbally by a member of staff. Responses: Very confident, Fairly confident, Not very confident, Not at all confident, It varies from place to place, Don't know. Base= 1186, all online respondents who eat out or buy food to take away and have a food reaction, and all postal respondents, who suffer from a bad or unpleasant physical reaction after consuming certain foods or avoid certain foods because of the bad or unpleasant physical reaction they might cause, who eat out or order takeaways.

Food Standards Agency
food.gov.uk

F&Y2 Wave 8: Chapter 6 Eating at home

Introduction

The FSA is responsible for protecting the public from foodborne diseases. This involves working with farmers, food producers and processors, and the retail and hospitality sectors to ensure that the food people buy is safe. The FSA gives practical guidance and recommendations to consumers on food safety and hygiene in the home.

The Food and You 2 survey asks respondents about their food-related behaviours in the home, including whether specific foods are eaten, and knowledge and reported behaviour in relation to five important aspects of food safety: cleaning, cooking, chilling, avoiding cross-contamination and use-by dates. Food and You 2 also asks respondents about the frequency they prepare or consume certain types of food.

Two versions of the ‘Eating at home’ module have been created; a ‘core’ module which includes a limited number of key questions which are fielded annually, and a ‘deep dive’ module which includes additional questions and is fielded every 2 years. This chapter reports on questions from

the core ‘Eating at home’ module (footnote 1).

This chapter provides an overview of respondents’ knowledge and reported behaviours relating to food safety and other food-related behaviours.

Cleaning

Handwashing in the home

The FSA recommends that everyone should wash their hands before they prepare, cook or eat food, after handling raw food and before preparing ready-to-eat food.

7 in 10 (70%) respondents reported that they always wash their hands before preparing or cooking food, 29% reported that they do this most of the time or less often, whilst 1% reported never doing this (footnote 2).

Most respondents (92%) reported that they always wash their hands immediately after handling raw meat, poultry, or fish, 7% reported that they do this most of the time or less often, and less than 0.5% reported never doing this (footnote 3).

Two-fifths (41%) of respondents reported that they always wash their hands before eating, 55% reported doing this most of the time or less often, and 3% reported never washing their hands before eating (footnote 4).

Handwashing when eating out

Respondents were asked, how often, if at all, they washed their hands or used hand sanitising gel or wipes before eating when they ate outside of their home. A third (33%) of respondents reported that they always washed their hands, used hand sanitising gel or wipes when they ate outside of their home, 59% did this most of the time or less often and 7% never did this (footnote 5).

Chilling

The FSA provides guidance on how to chill food properly to help stop harmful bacteria growing.

If and how respondents check fridge temperature

When asked what temperature the inside of a fridge should be, 60% of respondents who have a fridge, reported that it should be between 0-5 degrees Celsius, as recommended by the FSA. A fifth (20%) of respondents reported that the temperature should be above 5 degrees, 3% reported that the temperature should be below 0 degrees, and 16% of respondents did not know what temperature the inside of their fridge should be (footnote 6).

Almost three-fifths (58%) of respondents who have a fridge reported that they monitored the temperature; either manually (46%) or via an internal temperature alarm (12%) (footnote 7). Of the respondents who monitor the temperature of their fridge, 80% reported that they check the temperature of their fridge at least once a month (footnote 8).

Cooking

The FSA recommends that cooking food at the right temperature and for the correct length of time will ensure that any harmful bacteria are killed. When cooking pork, poultry, and minced meat products the FSA recommends that the meat is steaming hot and cooked all the way through, that

none of the meat is pink and that any juices run clear.

Around three quarters (77%) of respondents reported that they always cook food until it is steaming hot and cooked all the way through, however 23% reported that they do not always do this (footnote 9).

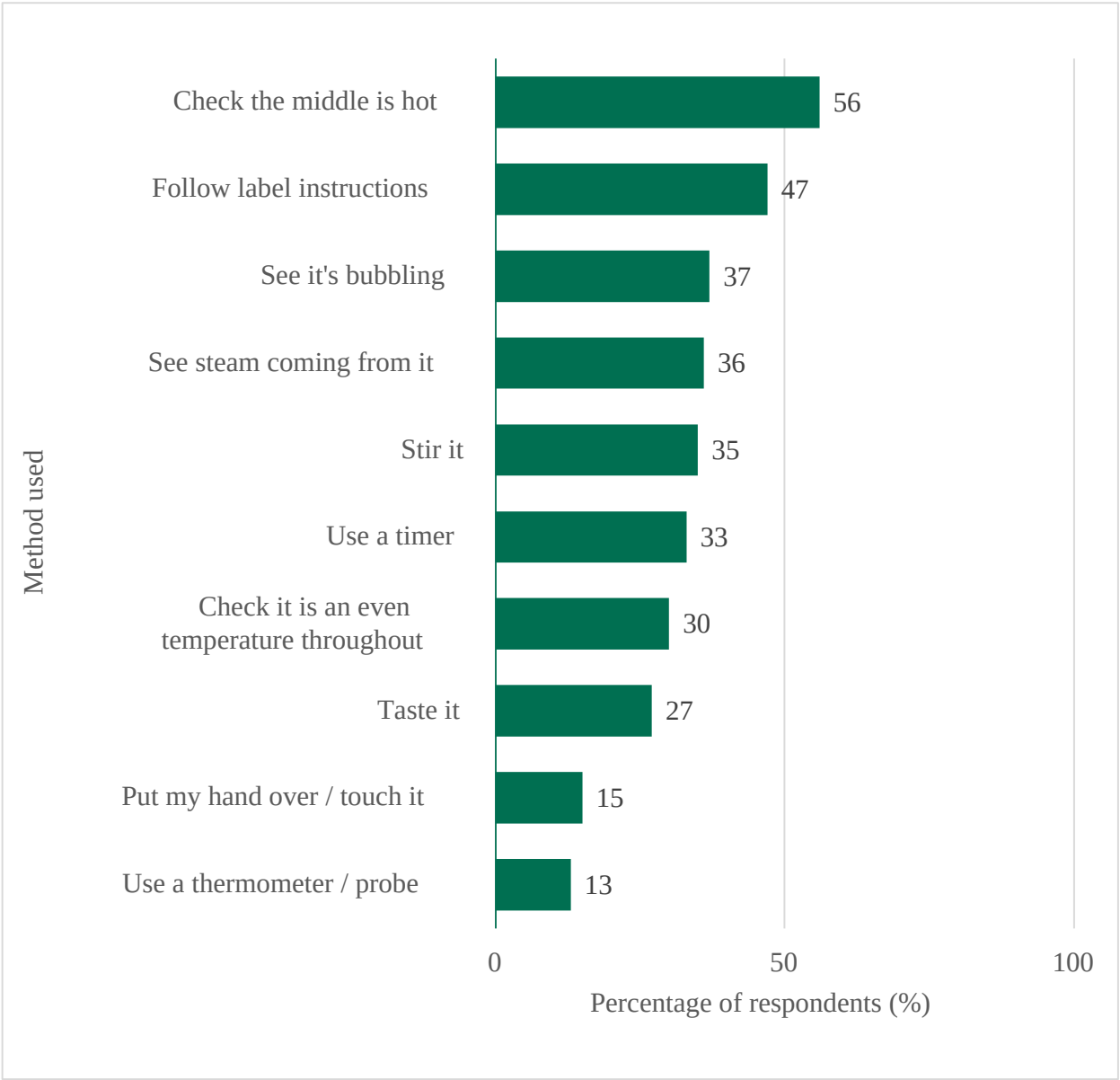
Respondents were asked to indicate how often they eat chicken or turkey when the meat is pink or has pink juices (footnote 10). 9 in 10 (90%) respondents reported that they never eat chicken or turkey when it is pink or has pink juices. However, 7% of respondents reported eating chicken or turkey at least occasionally when it is pink or has pink juices (footnote 11).

Reheating

Figure 24. How respondents check whether reheated food is ready to eat.

Change to table and accessible view

Change to chart view



Method used	Percentage of respondents (%)
Use a thermometer / probe	13
Put my hand over / touch it	15
Taste it	27
Check it is an even temperature throughout	30
Use a timer	33
Stir it	35
See steam coming from it	36
See it's bubbling	37
Follow label instructions	47
Check the middle is hot	56

Download this chart

Image .csv

Source: Food and You 2 Wave 8

Respondents were asked to indicate how they check food is ready to eat when they reheat it. The most common method was to check the middle is hot (56%), and the least common methods were to put a hand over the food or touch the food (15%) or use a thermometer or probe (13%) (Figure 24) (footnote 12).

The FSA recommends that food is only reheated once. When respondents were asked how many times they would reheat food, the majority reported that they would only reheat food once (79%), 11% would reheat food twice, and 3% would reheat food more than twice (footnote 13).

Leftovers

Respondents were asked for how long they would keep leftovers in the fridge. Around 6 in 10 (64%) respondents reported that they would eat leftovers within 2 days, 27% of respondents reported that they would eat leftovers within 3-5 days and 2% would eat leftovers more than 5 days later (footnote 14).

Avoiding cross-contamination

The FSA provides guidelines on how to avoid cross-contamination. The FSA recommends that people do not wash raw meat, fish or poultry. Washing raw meat can spread harmful bacteria onto your hands, clothes, utensils, and worktops.

Respondents were asked how often, if at all, they washed raw chicken (footnote 15). Over half (56%) of respondents reported that they never wash raw chicken, however, 40% of respondents reported that they do this at least occasionally (footnote 16).

How and where respondents store raw meat and poultry in the fridge

The FSA recommends that refrigerated raw meat and poultry are kept covered, separately from ready-to-eat foods and stored at the bottom of the fridge to avoid cross-contamination.

Respondents were asked to indicate, from a range of responses, how they store meat and poultry in the fridge. Respondents were most likely to report storing raw meat and poultry in its original packaging (71%) or away from cooked foods (51%). Around 4 in 10 respondents reported storing

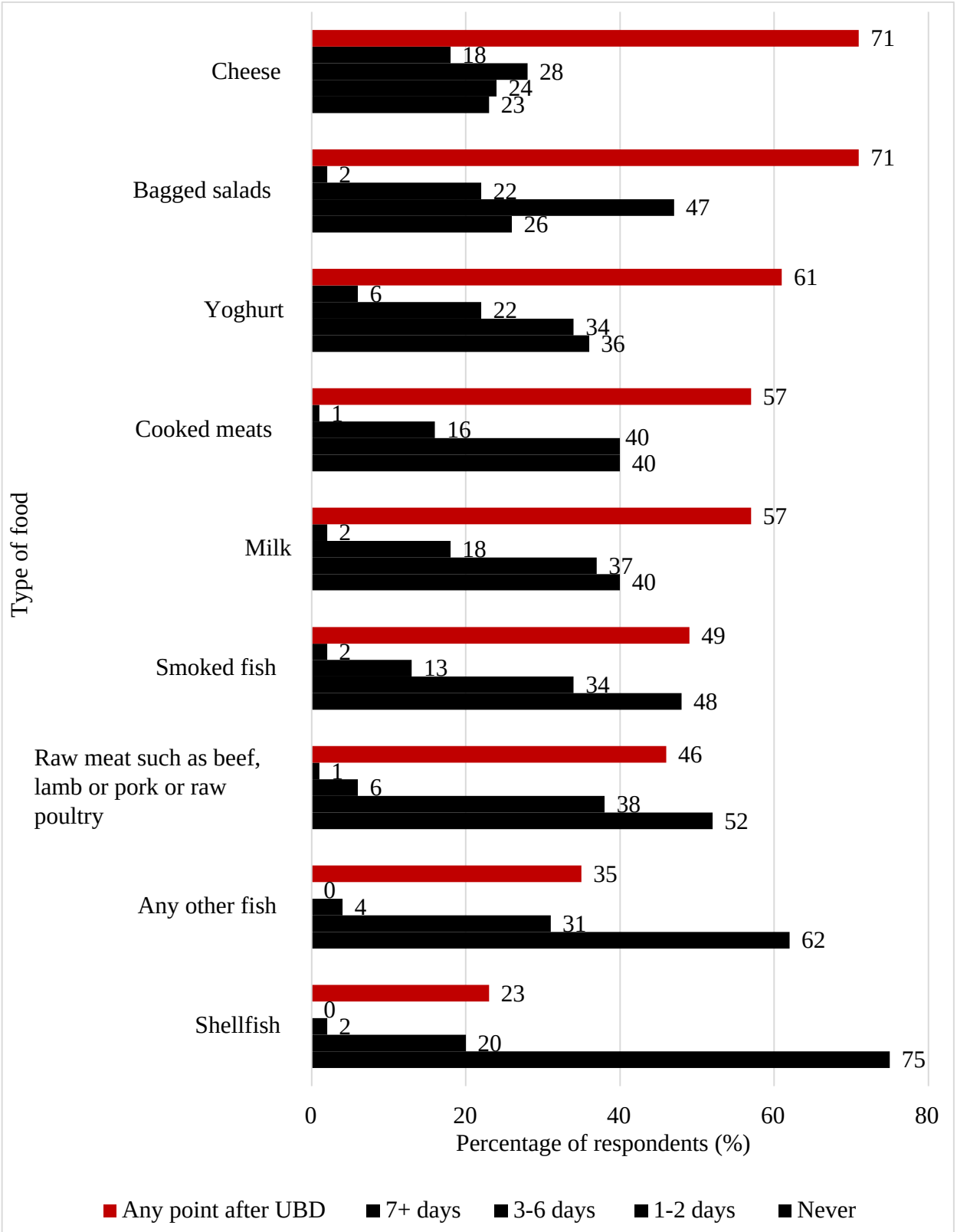
raw meat and poultry in a sealed container (40%) and covered raw meat and poultry with film/foil (35%), with 14% keeping the product on a plate (footnote 17).

Most respondents (63%) reported only storing raw meat and poultry at the bottom of the fridge, as recommended by the FSA. However, 20% of respondents reported storing raw meat and poultry wherever there is space in the fridge, 11% reported storing raw meat and poultry in the middle of the fridge, and 7% at the top of the fridge (footnote 18).

Figure 25. How long after the use-by date respondents would consume different foods.

Change to table and accessible view

Change to chart view



Type of food	Any point after UBD	7+ days	3-6 days	1-2 days	Never
Shellfish	23	0	2	20	75
Any other fish	35	0	4	31	62
Raw meat such as beef,					
lamb or pork or raw poultry"	46	1	6	38	52
Smoked fish	49	2	13	34	48

Type of food	Any point after UBD	7+ days	3-6 days	1-2 days	Never
Milk	57	2	18	37	40
Cooked meats	57	1	16	40	40
Yoghurt	61	6	22	34	36
Bagged salads	71	2	22	47	26
Cheese	71	18	28	24	23

Download this chart

Image .csv

Use-by and best before dates

Respondents were asked about their understanding of the different types of date labels and instructions on food packaging, as storing food for too long or at the wrong temperature can cause food poisoning. Use-by dates relate to food safety. Best before (BBE) dates relate to food quality.

Respondents were asked to indicate which date shows that food is no longer safe to eat. Around two-thirds (65%) of respondents correctly identified the use-by date as the information which shows that food is no longer safe to eat. However, some respondents identified the best before date (10%) as the date which shows food is no longer safe to eat (footnote 19).

Two-thirds (66%) of respondents reported that they always check use-by dates before they cook or prepare food, 31% reported checking use-by most of the time or less often, and 1% reported never checking use-by dates (footnote 20).

Source: Food & You 2: Wave 8

Respondents who eat certain foods were asked when, if at all, is the latest that they would eat the type of food after the use-by date. Most respondents reported that they would not eat shellfish (75%), or other fish (62%) past the use-by date. Around half of respondents would not eat raw meat (52%) or smoked fish (48%) past the use-by date. Bagged salad (71%) and cheese (71%) were the foods respondents were most likely to report eating at any point after the use-by date. Around 6 in 10 respondents would eat yoghurt (61%) milk (57%), or cooked meats (57%) at any point after the use-by date (Figure 25) (footnote 21).

1. The full ‘Eating at home’ module was last reported in the Food and You 2: Wave 5 Key Findings report. The brief module was last reported in the Food and You 2: Wave 6 Key Findings report.

2. Question: When you are at home, how often, if at all, do you wash your hands before starting to prepare or cook food. Responses: always, most of the time, about half the time, occasionally, never, don’t know. Base= 4431, all online respondents and all those who completed the `Eating at Home' postal questionnaire who ever do some food preparation or cooking for their household.

3. Question: When you are at home, how often, if at all, do you wash your hands immediately after handling raw meat, poultry or fish. Responses: always, most of the time, About half the time, Occasionally, Never, I don’t cook meat, poultry or fish, Don’t know. Base= 4263, all online respondents and those who completed the `Eating at Home' postal questionnaire

who ever do some food preparation or cooking for their household, excluding `I don't cook meat, poultry or fish' and 'not stated'.

4. Question: When you are at home, how often, if at all, do you wash your hands before eating. Responses: always, most of the time, about half the time, occasionally, never, don’t know. Base= 4757, all online respondents, and those answering the `Eating at Home' postal questionnaire.

5. Question: When eating outside of the home, how often, if at all, do you wash your hands, or use hand sanitising gel or wipes before eating? Responses: always, most of the time, about half the time, occasionally, never, don’t know. Base= 4966, all online respondents, and those answering the `Eating at Home' postal questionnaire.

6. Question: What do you think the temperature inside your fridge should be? Responses: less than 0 degrees C (less than 32 degrees F), between 0 and 5 degrees C (32 to 41 degrees F), more than 5 but less than 8 degrees C (42 to 46 degrees F), 8 to 10 degrees C (47 to 50 degrees F), more than 10 degrees C (over 50 degrees F), other, don’t know. Base=4746, all online respondents and all those who completed the `Eating at Home' postal questionnaire, excluding those who don't have a fridge.

7. Question: Do you, or anyone else in your household, ever check your fridge temperature? Responses: yes, no, I don't need to - it has an alarm if it is too hot or cold, don’t know. Base= 4740, all online respondents and all those who completed the `Eating at Home' postal questionnaire, excluding those who don't have a fridge.

8. Question: How often, if at all, do you or someone else in your household check the temperature of the fridge? Responses: at least daily, 2-3 times a week, once a week, less than once a week but more than once a month, once a month, four times a year, 1-2 times a year, never/less often, don’t know. Base= 2368, all online respondents and all those who completed the `Eating at Home' questionnaire where someone in household checks fridge temperature.

9. Question: How often, if at all, do you cook food until it is steaming hot and cooked all the way through? Responses: always, most of the time, about half of the time, occasionally, never, don’t know. Base= 4431, all online respondents and all those who completed the `Eating at Home' postal questionnaire who ever do some food preparation or cooking for their household.

10. Data on the consumption of red meat, duck, beefburgers, sausages and pork when the meat is pink or has pink or red juices is available from Food and You 2: Wave 5.

11. Question: How often, if at all, do you eat chicken or turkey when the meat is pink or has pink or red juices? Responses: always, most of the time, about half of the time, occasionally, never, don’t know. Base = 4399, all online respondents, and those answering the 'Eating at Home' postal questionnaire, who are not vegan, pescatarian or vegetarian, and who do eat chicken/turkey.

12. Question: When reheating food, how do you know when it is ready to eat? (Select all that apply). Responses: I check the middle is hot, I follow the instructions on the label, I can see

its bubbling, I use a timer to ensure it has been cooked for a certain amount of time, I check it's an even temperature throughout, I can see steam coming from it, I taste it, I stir it, I put my hand over it/touch it, I use a thermometer/probe, None of the above, I don't check. Base= 4220, all online respondents and all those who completed the `Eating at Home' questionnaire who ever do some food preparation or cooking for their household, excluding `I don't reheat food' and `not stated'.

13. Question: How many times would you consider reheating food after it was cooked for the first time? Responses: not at all, once, twice, more than twice, don't know. Base= 4253, all online respondents and all those who completed the `Eating at Home' questionnaire who reheat food using one of the methods in the previous question.

    [1] Question: When is the latest you would consume any leftovers stored in the fridge? Responses: the same day, within 1-2 days, within 3-5 days, more than 5 days later, it varies too much, don't know. Base= 4757, all online respondents, and those answering the `Eating at Home' postal questionnaire.

14. Question: When is the latest you would consume any leftovers stored in the fridge? Responses: the same day, within 1-2 days, within 3-5 days, more than 5 days later, it varies too much, don't know. Base= 4757, all online respondents, and those answering the `Eating at Home' postal questionnaire.

15. Data on washing other types of meat, fish and poultry is available in the full "Eating at Home" module (see latest results in Food and You 2: Wave 5)

16. Question: How often, if at all, do you wash raw chicken? Responses: always, most of the time, about half of the time, occasionally, never, don't know. Base = 4407, all online respondents and all those who completed the `Eating at Home' postal questionnaire who ever do some food preparation or cooking for their household.

17. Question: How do you store raw meat and poultry in the fridge? Please select all that apply. Responses: away from cooked foods, covered with film/foil, in a sealed container, in its original packaging, on a plate. Base= 4335, all online respondents and all those who completed the `Eating at Home' postal questionnaire, except those who don't buy/store meat/poultry, don't store raw meat/poultry in the fridge, do not have a fridge or don't know.

18. Question: Where in the fridge do you store raw meat and poultry? Responses: wherever there is space, at the top of the fridge, in the middle of the fridge, at the bottom of the fridge. Base= 4262, all online respondent and all those who completed the `Eating at Home' postal questionnaire who store raw meat/poultry in the fridge except those who don't buy/store meat/poultry, don't have a fridge, or don't know.

19. Question: Which of these shows when food is no longer safe to eat? Responses: use-by date, best before date, sell by date, display until date, all of these, it depends, none of these, don't know. Base= 4757, all online respondents, and those answering the `Eating at Home' postal questionnaire.

20. Question: How often, if at all, do you check use-by dates when you are about to cook or prepare food? Responses: always, most of the time, about half of the time, occasionally,

never, it varies too much to say, don’t know. Base= 4431, all online respondents and all those who completed the `Eating at Home' postal questionnaire who ever do some food preparation or cooking for their household.

21. Question: When, if at all, is the latest you would eat or drink the following items after their use-by date? a=cooked meats, b=smoked fish, c=bagged salads, d=cheese, e=milk, f= raw meat such as beef/pork/lamb/raw poultry, g=shellfish, h=any other fish, i=yoghurt. Responses: 1-2 days after the use-by date, 3-4 days after the use-by date, 5-6 days after the use-by date, 1-2 weeks after the use-by date, more than 2 weeks after the use-by date, I don't eat/drink this after its use-by date, don't know/I don't ever check the use-by date of this. Base A= 4337, B=3338, C=4296, D=4505, E=4459, F=4278, G=2949, H=3763, I=4297, all online respondents and those who completed the `Eating at Home' postal questionnaire, who eat A/B/C/D/F/F/G/H/I. Please note: the figures shown do not add up to 100% as not all responses are shown.

Food Standards Agency
food.gov.uk

F&Y2 Wave 8: Chapter 7 Changes to eating habits, meat alternatives and genetic technologies

Introduction

The Department for Environment, Food and Rural Affairs (Defra) has a broad remit and plays a major role in increasing the sustainability, productivity and resilience of the agriculture, fishing, food and drink sectors, enhancing biosecurity at the border and raising animal welfare standards. In addition, Defra oversees the regulation of genetic technologies such as genetically modified organisms (GMO), gene edited (GE) organisms and precision bred foods.

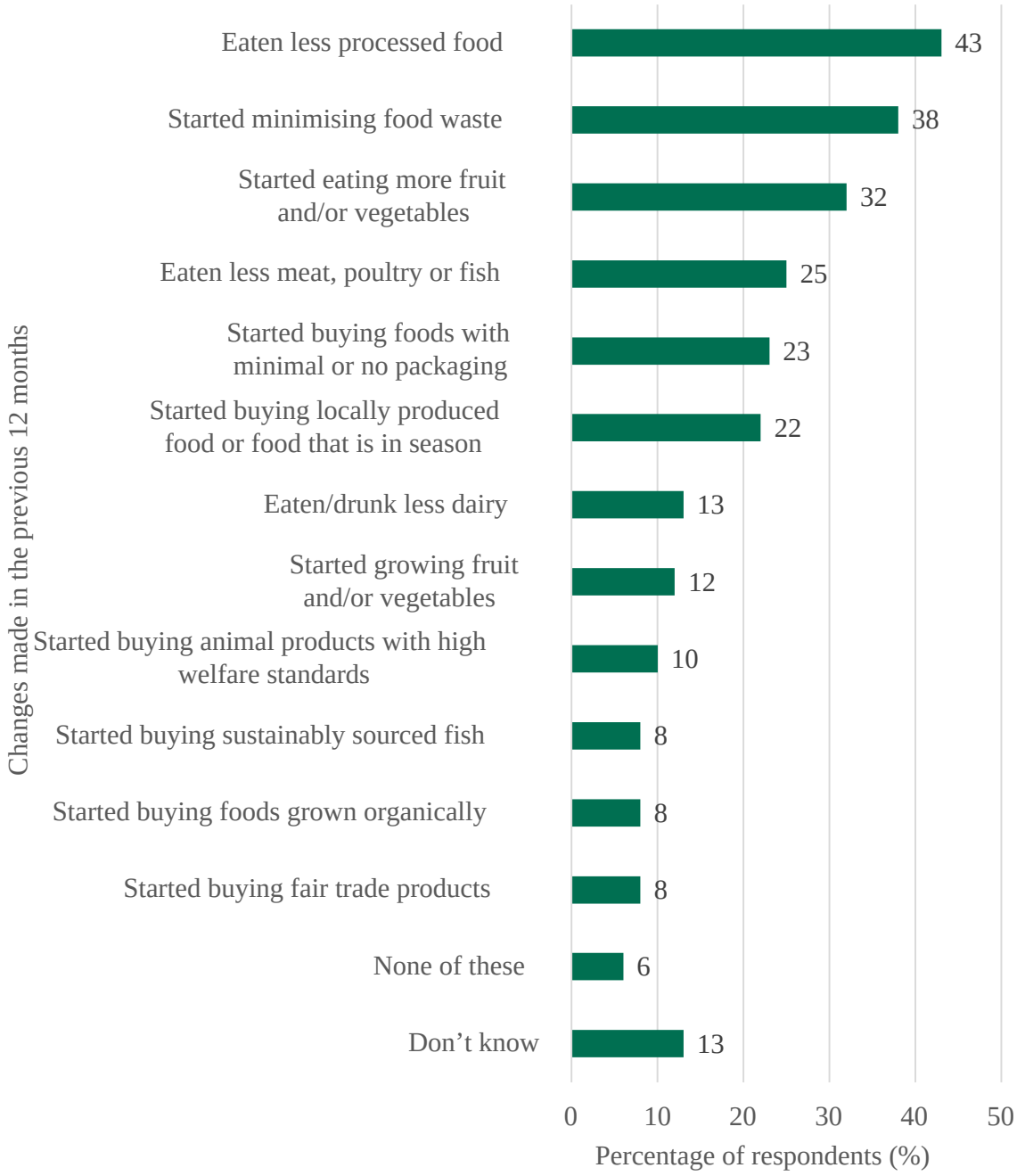
This chapter provides an overview of respondent knowledge, attitudes and behaviours related to changes in eating habits, meat alternatives and genetic technologies.

Changes to eating habits and food-related behaviours

Figure 26. Changes respondents had made in the previous 12 months.

Change to table and accessible view

Change to chart view



Changes made in the previous 12 months	Percentage of respondents (%)
Stopped eating meat or poultry or fish completely	2
Started buying foods that have been produced with minimal water usage and / or minimal deforestation	4
Started buying foods grown organically	8
Started buying animal products with high welfare standards	9
Don?t know	13
None of these	6
Started buying fair trade products	8
Started buying foods grown organically	8
Started buying sustainably sourced fish	8

Changes made in the previous 12 months	Percentage of respondents (%)
Started buying animal products with high welfare standards	10
Started growing fruit and/or vegetables	12
Eaten/drunk less dairy	13
Started buying locally produced food or food that is in season	22
Started buying foods with minimal or no packaging	23
Eaten less meat, poultry or fish	25
Started eating more fruit and/or vegetables	32
Started minimising food waste	38
Eaten less processed food	43

Download this chart

Image .csv

Source: Food and You 2: Wave 8

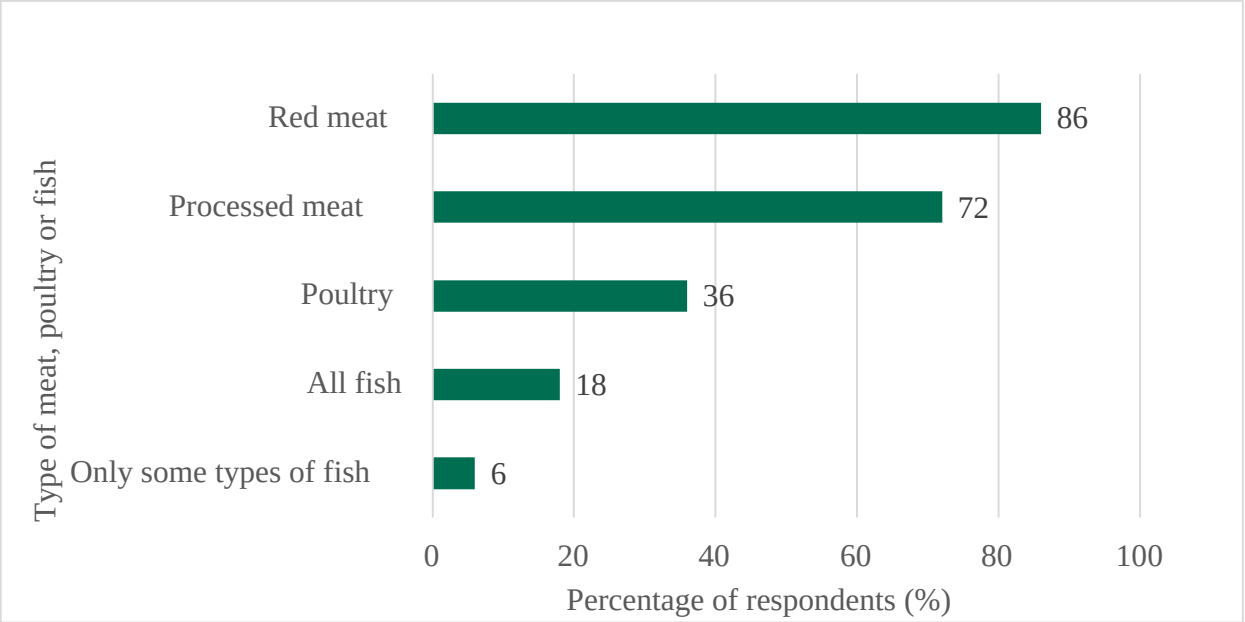
Respondents were asked, from a list of options, which, if any changes they had made in the previous 12 months. The most common changes reported by respondents were that they had eaten less processed food (43%) and started minimising food waste (38%). Almost a third of respondents reported that they had started eating more fruit and vegetables (32%). Around a quarter of respondents reported that they had eaten less meat, poultry, or fish (25%), started buying food with minimal or no packaging (23%) and/or started buying locally produced food or food that is in season (22%) in the previous 12 months. However, 6% of respondents reported that they had not made any of the listed changes and 13% of respondents reported that they did not know if they had made any of the listed changes in the previous 12 months (Figure 26) (footnote 1).

Meat, poultry, and fish: changes in consumption habits

Figure 27. Types of meat, poultry or fish respondents had eaten less of in the previous 12 months.

Change to table and accessible view

Change to chart view



Types of meat, poultry or fish	Percentge of respondents (%)
Only some types of fish	6
All fish	18
Poultry	36
Processed meat	72
Red meat	86

Download this chart

Image .csv

Source: Food and You 2: Wave 8

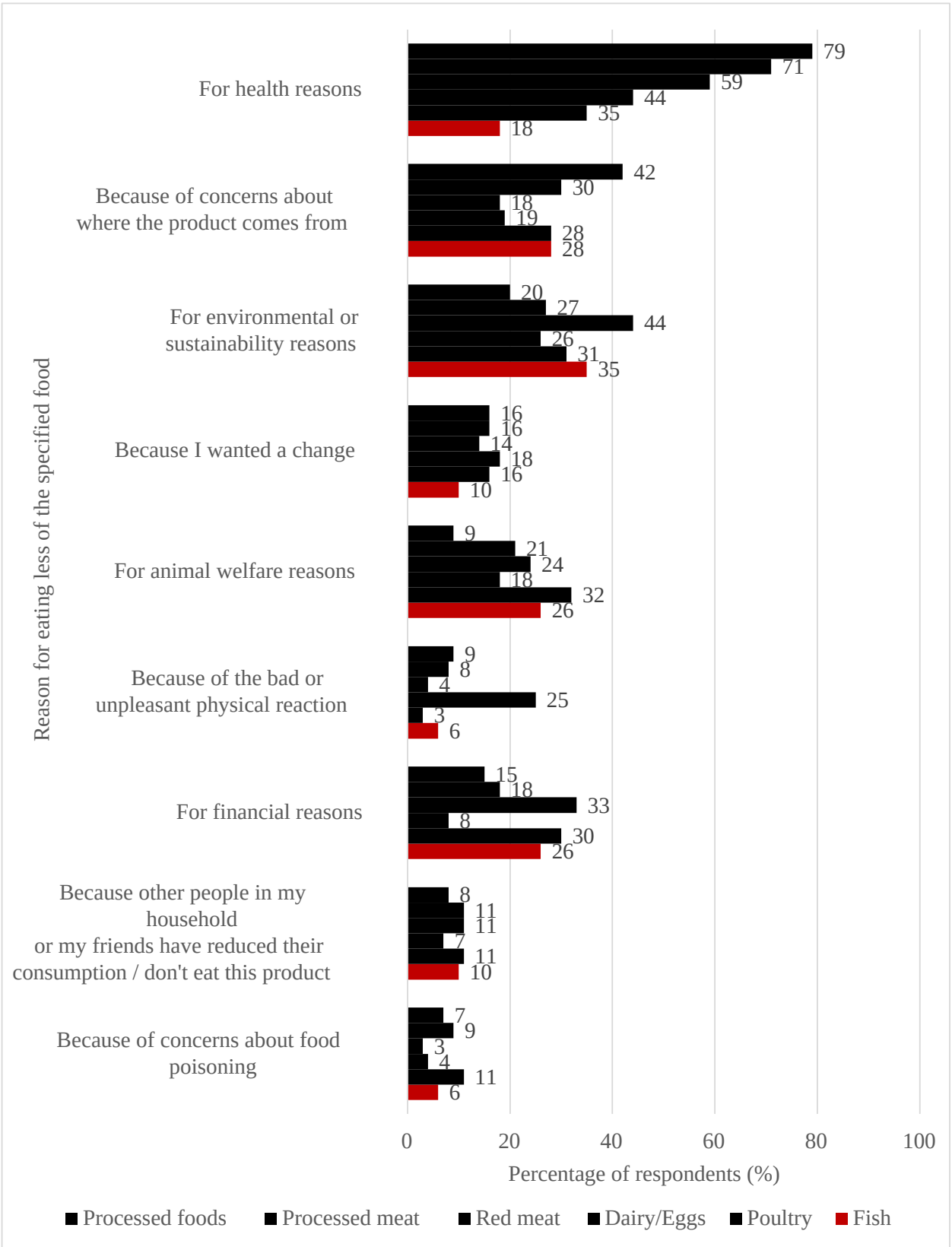
Respondents who reported that they had eaten less meat, poultry, or fish in the previous 12 months were asked which types of products the changes related to. Of these respondents, most (86%) had eaten less red meat (for example, beef, pork, or lamb) and 72% had eaten less processed meat (for example, chicken nuggets, ham, bacon) in the previous 12 months. Around a third (36%) reported that they had eaten less poultry and 18% reported that they had eaten less of all types of fish, with 6% eating less of only some types of fish in the previous 12 months (Figure 27) (footnote 2).

Reasons for changes in consumption habits

Figure 28. Common reasons respondents had eaten less of specified foods in the previous 12 months.

Change to table and accessible view

Change to chart view



Reason for eating less of the specified food	Fish	Poultry	Dairy/Eggs	Red meat	Processed meat	Processed foods
Because of concerns about food poisoning	6	11	4	3	9	7

Reason for eating less of the specified food	Fish	Poultry	Dairy/Eggs	Red meat	Processed meat	Processed foods
Because other people in my household or my friends have reduced their consumption / don't eat this product	10	11	7	11	11	8
For financial reasons	26	30	8	33	18	15
Because of the bad or unpleasant physical reaction	6	3	25	4	8	9
For animal welfare reasons	26	32	18	24	21	9
Because I wanted a change	10	16	18	14	16	16
For environmental or sustainability reasons	35	31	26	44	27	20
Because of concerns about where the product comes from	28	28	19	18	30	42
For health reasons	18	35	44	59	71	79

Download this chart

Image .csv

Source: Food and You 2: Wave 8

Respondents who reported that they had eaten less processed food, red meat, processed meat, poultry, fish or dairy and/or eggs in the previous 12 months were asked, which, if any of the given options, was the reason that they had eaten less of that product. The most common reason to have eaten less processed food (79%), processed meat (71%), red meat (59%), dairy and/or eggs (44%) and poultry (35%) was for health reasons (for example, to be more healthy or lose weight). The most common reason to have eaten less fish (35%) was for environmental or sustainability reasons (for example, impact on climate change). Around 3 in 10 respondents reported that they had eaten less red meat (33%), poultry (30%) and/or fish (26%) for financial reasons. Respondents were more likely to report that they had eaten less dairy and/or eggs (25%) because of a bad or unpleasant physical reaction compared to other foods (Figure 28) (footnote 3).

Meat alternatives

Meat alternatives are meat-free products that may be eaten instead of meat, such as seitan or vegetarian sausages and burgers (for example, Quorn, Linda McCartney, or Beyond Meat products).

Meat alternative consumption

Respondents were asked if they had ever eaten meat alternatives. Around a quarter (27%) of respondents reported that they currently eat meat alternatives, 22% of respondents reported that they used to eat meat alternatives but no longer do, and 44% of respondents reported that they had never eaten meat alternatives (footnote 4).

Of the respondents who currently eat meat alternatives, 30% reported eating meat alternatives 2-3 times a week or more often (i.e., every day, most days, 2-3 times a week), 43% reported eating meat alternatives occasionally (i.e., about once a week, 2-3 times a month) and 25% reported eating meat alternatives about once a month or less often (footnote 5).
Respondents who reported that they currently eat meat alternatives were asked why they eat

meat alternatives from a list of options. The most common reasons were for environmental or sustainability reasons (34%), for health reasons (34%), because they like the taste (33%), and for animal welfare reasons (32%) (footnote 6).

Willingness to try lab-grown meat

'Lab-grown meat' is grown in a laboratory from the cells or tissue of a live animal such as a cow, without having to kill the animal.

Respondents were asked if they would like to try including lab-grown meat in their diet if it became available in this country. Almost 3 in 10 (28%) respondents reported that they would like to try lab-grown meat and 60% would not. However, 11% of respondents reported that they didn't know whether they would like to try including lab-grown meat in their diet (footnote 7).

Awareness of gene-edited (GE) and genetically modified (GM) foods

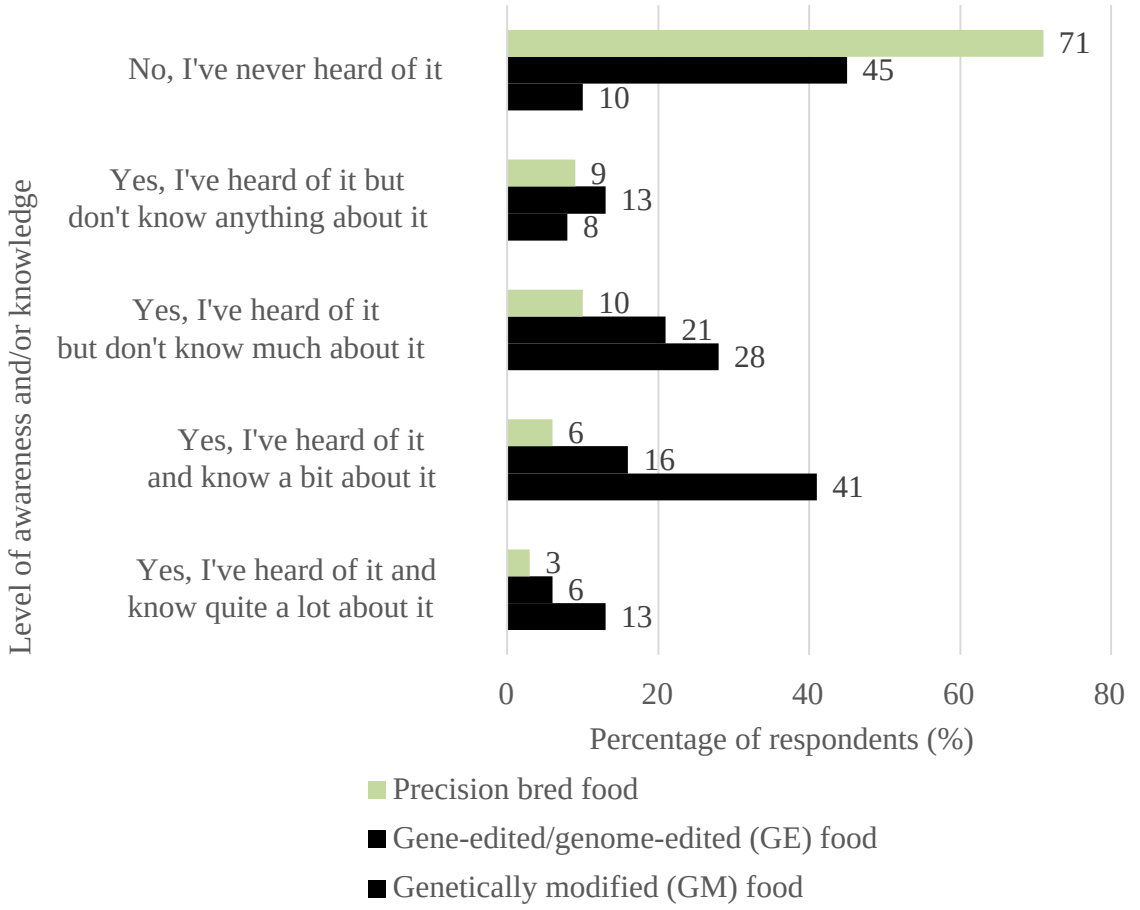
Genetically modified foods can be defined as organisms (i.e. plants or animals) in which the genetic material (DNA) has been altered in a way that does not occur naturally by mating and/or natural recombination.

Precision breeding is a way of changing the DNA of plants or animals in a precise way, using techniques including gene-editing. Gene-editing uses specialised enzymes to cut DNA at specific points. These changes must be equivalent to those that could have been made using traditional plant or animal breeding methods.

Figure 29. Awareness and knowledge of genetically modified (GM), gene-edited/genome-edited (GE), and precision bred food.

Change to table and accessible view

Change to chart view



Level of awareness and/or knowledge	Genetically modified (GM) food	Gene-edited/genome-edited (GE) food	Precision bred food
Yes, I've heard of it and know quite a lot about it	13	6	3
Yes, I've heard of it and know a bit about it	41	16	6
Yes, I've heard of it but don't know much about it	28	21	10
Yes, I've heard of it but don't know anything about it	8	13	9
No, I've never heard of it	10	45	71

Download this chart

Image .csv

Source: Food and You 2: Wave 8

Respondents were asked if they had ever heard of genetically modified (GM) food, gene-edited or genome-edited food, and precision bred food. Respondents reported greater awareness and knowledge of genetically modified (GM) food than gene-edited or genome-edited food (GE) and least knowledge of precision bred food. For example, 71% of respondents had never heard of precision bred food, 45% of respondents had never heard of GE food, 10% of respondents had never heard of GM food (Figure 29) (footnote 8).

1. Question Which, if any, of the following changes have you made in the last 12 months? Responses: Stopped eating meat or poultry or fish completely, Eaten less meat or poultry

or fish, Eaten/drunk less dairy, Eaten less processed food, Started eating more fruit and/or vegetables, Started minimising food waste, Started growing fruit and/or vegetables, Started buying animal products with high welfare standards, Started buying fair trade products, Started buying locally produced food or food that is in season, Started buying foods with minimal or no packaging, Started buying foods that have been produced with minimal water usage and / or minimal deforestation, Started buying foods grown organically, Started buying sustainably sourced fish, Started getting food from the waste area or bins of a supermarket or shop (i.e., freeganism), Other, None of these, Don't know. Base= 4757, all online respondents, and those answering the `Eating at Home' postal questionnaire.

2. Question What types of meat, poultry and/or fish have you eaten less of in the last 12 months? Responses: Red meat, e.g. beef, pork or lamb; Processed meat, e.g. chicken nuggets, ham, bacon, sausages, salami; Poultry, e.g. chicken, turkey, duck; All fish; Only some types of fish; I haven't eaten less meat, poultry and/or fish in the last 12 months. Base= 1094, all online respondents and those who completed the `Eating at Home' postal questionnaire who have eaten less meat, poultry and/or fish in the last 12 months.

3. Question: You have said that you have eaten less …A/B/C/D/E/F… in the last 12 months. Which of the following reasons, if any, explain why you chose to make this change? A) red meat B) processed meat, C) poultry, D) fish, E) dairy and/or eggs, F) processed foods. Responses: For animal welfare reasons, For environmental or sustainability reasons, e.g. impact on climate change, For financial reasons, e.g. cost of meat or reduced income, For health reasons, e.g. to be more healthy or lose weight, For religious reasons, Because of the bad or unpleasant physical reaction eating A/B/C causes me (e.g. food intolerance), Because of concerns about food poisoning, Because other people in my household or my friends have reduced their A/B/C consumption or don't eat meat, Because of advice from friends or family, Because of advice from celebrities or influencers, Because of concerns about where meat comes from, Because I wanted a change, Due to pregnancy, None of these, Other, Prefer not to say. Base A = 783, B= 724, C=344, D=231, E=478, F=1783, all online respondents who have eaten less A/B/C/D/E/F in the last 12 months.

4. Question: Have you ever eaten meat alternatives? Responses: Yes, I currently eat meat alternatives; Yes, I used to eat meat alternatives, but I don't now; No, I have never eaten meat alternatives; I have never heard of meat alternatives; Don't know. Base= 4757, all online respondents, and those answering the `Eating at Home' postal questionnaire.

5. Question: How often do you eat meat alternatives? Responses: Every day, Most days, 2-3 times a week, About once a week, 2-3 times a month, About once a month, Less than once a month, Don't know. Base= 1184, all online respondents and those who completed the `Eating at Home' postal questionnaire who currently eat meat alternatives.

6. Question: Which of the following reasons, if any, explain why you choose to eat meat alternatives? Responses: For animal welfare reasons; For environmental or sustainability reasons, e.g. impact on climate change; For financial reasons, e.g. cheaper than meat; For health reasons, e.g. to be more healthy or lose weight; For religious reasons; Because I don't eat meat; Because of concerns about food poisoning; Because another person has cooked meat alternatives for me or I've cooked them for others; Because of advice from friends or family; Because of advice from celebrities or influencers; Because I like the taste ; Because of concerns about where meat comes from; Because I wanted a change; Due to pregnancy; Other reason; None of these; Prefer not to say. Base= 1961, all online respondents who currently eat meat alternatives

7. Question: Would you like to try including lab-grown meat in your diet, if it became available in this country? Responses: I definitely would like to try this, I probably would like to try this, I probably would not like to try this, I definitely would not like to try this, Don't know. Base= 3915, all online respondents.

8. Question: Have you ever heard of...A/B/C? A) Genetically modified (GM) food? B) Gene-edited or genome-edited food? C) Precision bred food. Responses: Yes, I've heard of it and know quite a lot about it; Yes, I've heard of it and know a bit about it; Yes, I've heard of it but don't know much about it; Yes, I've heard of it but don't know anything about it; No, I've never heard of it. Base= 4757, all respondents.

Food Standards Agency
food.gov.uk

F&Y2 Wave 8: Annex A

Background

In 2018 the FSA's Advisory Committee for Social Science (ACSS) established a new Food and You Working Group to review the methodology, scope and focus of the Food and You survey. The Food and You Working Group provided a series of recommendations on the future direction of the Food and You survey to the FSA and ACSS in April 2019. Food and You 2 was developed from the recommendations.

The Food and You 2 survey replaced the biennial Food and You survey (2010-2018), biannual Public Attitudes Tracker (2010-2019) and annual Food Hygiene Rating Scheme (FHRS) Consumer Attitudes Tracker (2014-2019). The Food and You survey has been an Official Statistic since 2014. Due to the difference in methodology between the Public Attitudes Tracker, FHRS Consumer Attitudes Tracker and Food and You survey (2010-2018) it is not possible to compare the data collected in Food and You 2 (2020 onward) with these earlier data. Comparisons can be made between the different waves of Food and You 2. Since Wave 6, we have published a separate trends report on an annual basis, which comments on changes over time.

- Food and You 2: Wave 1 Key Findings (March 2021)
- Food and You 2: Wave 2 Key Findings (July 2021)
- Food and You 2: Wave 3 Key Findings (January 2022)
- Food and You 2: Wave 4 Key Findings (August 2022)
- Food and You 2: Wave 5 Key Findings (March 2023)
- Food and You 2: Wave 6 Key Findings (July 2023)
- Food and You 2: 2020-2023 trends (December 2023)
- Food and You 2: Wave 7 Key Findings (April 2024)

Methodology

The Food and You 2 survey is commissioned by the Food Standards Agency (FSA). The fieldwork is conducted by Ipsos. Food and You 2 is a biannual survey. Fieldwork for Wave 8 was conducted between 12th October 2023 to 8th January 2024.

Food and You 2 is a sequential mixed-mode 'push-to-web' survey (summary of method below). Push-to-web helps to reduce the response bias that otherwise occurs with online-only surveys. This method is accepted for government surveys and national statistics, including the 2021 Census and 2019/2020 Community Life Survey.

A random sample of addresses (selected from the Royal Mail's Postcode Address File) received a letter inviting up to two adults (aged 16 or over) in the household to complete the online survey. A first reminder letter was sent to households that had not responded to the initial invitation. A postal version of the survey accompanied the second reminder letter for those who did not have access to the internet or preferred to complete a postal version of the survey. A third and final reminder was sent to households if the survey had not been completed. Respondents were given a gift voucher for completing the survey.

The sample of main and reserve addresses (footnote 1) was stratified by region (with Wales and Northern Ireland being treated as separate regions), and within region (or country) by local authority (district in Northern Ireland) to ensure that the issued sample was spread proportionately across the local authorities. National deprivation scores were used as the final level of stratification within the local authorities - in England the Index of Multiple Deprivation (IMD), in Wales the Welsh Index of Multiple Deprivation (WIMD) and in Northern Ireland, the Northern Ireland Multiple Deprivation Measure (NIMDM).

Due to the length and complexity of the online questionnaire it was not possible to include all questions in the postal version of the questionnaire. The postal version of the questionnaire needed to be shorter and less complex to encourage a high response rate. To make the postal version of the questionnaire shorter and less complex, two versions were produced. The two versions of the postal survey are referred to as the 'Eating Out' and 'Eating at Home' postal questionnaires. See the Technical Report for further details.

All data collected by Food and You 2 are self-reported. The data are the respondents own reported attitudes, knowledge and behaviour relating to food safety and food issues. As a social research survey, Food and You 2 cannot report observed behaviours. Observed behaviour in kitchens has been reported in Kitchen Life 2, an ethnographic study which used a combination of observation, video observation and interviews to gain insight into domestic kitchen practices.

The minimum target sample size for the Food and You 2 survey is 4,000 households (2,000 in England, 1,000 in Wales, 1,000 in Northern Ireland), with up to two adults in each household invited to take part as mentioned above. For Wave 8 a total of 5,808 adults (aged 16 years or over) from 4,006 households across England (2,870 adults), Northern Ireland (1,550 adults), and Wales (1,388 adults), completed the survey. An overall response rate of 26.7% was achieved (England 27.5%, Wales 28.3%, Northern Ireland 24.0%). Sixty-seven per cent (67.4%) of respondents completed the survey online and 32.6% completed the postal version of the survey. The postal responses from 62 respondents were removed from the data set as the respondent had completed both the online and postal survey. Further details about the response rates are available in the Technical Report.

Weighting was applied to ensure the data are as close as possible to being representative of the socio-demographic and sub-groups in the population, as is usual practice in government surveys. The weighting applied to the Food and You 2 data helps to compensate for variations in within-household individual selection, for response bias, and for the fact that some questions were only asked in one of the postal surveys. Further details about weighting approach used and the weights applied to the Food and You 2: Wave 8 data are available in the Technical Report.

The data have been checked and verified by members of the Ipsos research team and members of the FSA Statistics branch. Further details about checks of the data are available in the Technical Report. Descriptive analysis and statistical tests have been performed by the FSA Statistics branch. R (statistical software) was used by the FSA Statistics branch to calculate the

descriptive analysis and statistical tests (t-tests).

The p-values that test for statistical significance are based on t-tests comparing the weighted proportions for a given response within that socio-demographic and sub-group breakdown. An adjustment has been made for the effective sample size after weighting, but no correction is made for multiple comparisons.

Reported differences between socio-demographic and sub-groups typically have a minimum difference of 10 percentage points between groups and are statistically significant at the 5% level ($p<0.05$). However, some differences between respondent groups are included where the difference is fewer than 10 percentage points when the finding is notable or of interest. Percentage calculations are based only on respondents who provided a response. Reported values and calculations are based on weighted totals.

Technical terms and definitions

Statistical significance is indicated at the 5% level ($p<0.05$). This means that where a significant difference is reported, there is reasonable confidence that the reported difference is reflective of a real difference at the population level.

Food security means that all people always have access to enough food for a healthy and active lifestyle (World Food Summit, 1996). The United States Department of Agriculture (USDA) has created a series of questions which indicate a respondent's level of food security. Food and You 2 incorporates the 10 item U.S. Adult Food Security Survey Module and uses a 12 month time reference period. Respondents are referred to as being food secure if they are classified as having high food security (no reported indications of food-access problems or limitations), or marginal food security (one or two reported indications—typically of anxiety over food sufficiency or shortage of food in the house. Little or no indication of changes in diets or food intake). Respondents are referred to as being food insecure if they are classified as having low food security (reports of reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake) or very low food security (reports of multiple indications of disrupted eating patterns and reduced food intake).

NS-SEC (The National Statistics Socio-economic classification) is a classification system which provides an indication of socio-economic position based on occupation and employment status.

Index of Multiple Deprivation (IMD) / Welsh Index of Multiple Deprivation (WIMD) / Northern Ireland Multiple Deprivation Measure (NIMDM) is the official measure of relative deprivation of a geographical area. IMD/WIMD/NIMDM classification is assigned by postcode or place name. IMD/WIMD/NIMDM is a multidimensional calculation which is intended to represent the living conditions in the area, including income, employment, health, education, access to services, housing, community safety and physical environment. Small areas are ranked by IMD/WIMD/NIMDM; this is done separately for England, Wales and Northern Ireland.

1. A reserve sample of addresses was created to use if the target number of respondents was not achieved from the main sample of addresses.