Food and You 2: Wave 5 Key Findings

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Authors: Dr Beth Armstrong, Lucy King, Robin Clifford, Mark Jitlal, Ayla Ibrahimi Jarchlo, Katie Mears, Charlotte Parnell, Dr Daniel Mensah

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Executive Summary

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 5 was conducted between 26th April and 24th July 2022. A total of 6,770 adults from 4,727 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', and 'Food shopping'.

Food you can trust

Confidence in food safety, authenticity and the food supply chain

- 91% of respondents reported that they were confident that the food they buy is safe to eat.
- 86% of respondents were confident that the information on food labels is accurate.
- 74% of respondents reported that they had confidence in the food supply chain.

Awareness, trust and confidence in the FSA

- 91% of respondents had heard of the FSA.
- 75% of respondents who had at least some knowledge of the FSA reported that they trusted the FSA to make sure 'food is safe and what it says it is'.
- 80% 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), 76% were confident that the FSA is committed to communicating openly with the public about food-related risks, and 80% were confident that the FSA takes appropriate action if a food-related risk is identified.

Concerns about food

- 80% of respondents had no concerns about the food they eat, and 20% 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 production methods (25%) and to food safety and hygiene (24%).
- Respondents were asked to indicate if they had concerns about a number of food-related issues, from a list of options. The most common concerns related to food prices (66%), food waste (60%), and the amount of sugar in food (59%).

Food security

- Across England, Wales, and Northern Ireland, 80% of respondents were classified as food secure (67% high, 13% marginal) and 20% of respondents were classified as food insecure (10% low, 10% very low).
- 80% of respondents in England reported high or marginal food security, with 78% in Northern Ireland, and 74% in Wales. Low or very low food security was reported by 20% of respondents in England, 22% in Northern Ireland, and 26% in Wales.

Food shopping and labelling

Where do respondents buy food from?

- 83% of respondents reported that they bought food from a supermarket or mini supermarket about once a week or more often.

- 51% of respondents reported that they bought food from independent shops (greengrocers, butchers, bakers, fishmongers) and 44% bought food from a local / corner shop or newsagents 2-3 times a month or less often.

Confidence in allergen labelling

- 83% of respondents who go food shopping and take into consideration a person who has a food allergy or intolerance were confident that the information provided on food labelling allows them to identify foods that will cause a bad or unpleasant physical reaction.
- Respondents who bought food loose were more confident in identifying these foods from supermarkets in-store (67%), from an online supermarket (67%) and when shopping at independent food shops (63%) compared to buying food from food markets or stalls (52%).

Online platforms

- 60% of respondents reported that they had ordered food or drink from the websites of a restaurant, takeaway or café, while 55% of respondents had ordered from an online ordering and delivery company (for example, Just Eat, Deliveroo, Uber Eats). 27% of respondents had ordered via an online marketplace (for example Amazon, Gumtree, Etsy), 10% had ordered food or drink through a food sharing app (for example Olio, Too Good To Go), and 8% had ordered via social media platforms (for example, Facebook, Instagram, Nextdoor).

Eating at home

Cleaning

- 49% of respondents reported that they always wash their hands before eating.
- 74% of respondents reported that they always wash their hands before preparing or cooking food.

Avoiding cross-contamination

- Respondents were more likely to report that they (at least occasionally) washed fish or seafood (43%) and raw chicken (39%) compared to lamb, beef or pork (29%) and raw duck, goose or turkey (27%).

Use-by dates

- 66% of respondents identified the use-by date as the information which shows that food is no longer safe to eat.
- 65% of respondents reported that they always check use-by dates before they cook or prepare food.
- Most respondents reported that they would not eat shellfish (72%), or other fish (64%) past the use-by date. Around half of respondents would not eat raw meat (52%) or smoked fish (50%) past the use-by date.

Food-related behaviours and eating habits

- Most respondents had made changes to their eating habits in the last 12 months. The most common changes related to what and where respondents ate, reducing food costs and increased food management behaviours.
- The main causes of reported changes in eating habits were financial reasons (69%), health reasons (47%), and because of COVID-19 and lockdown (41%).

Acknowledgements

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

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Authors: Dr Beth Armstrong, Lucy King, Robin Clifford, Mark Jitlal, Ayla Ibrahimi Jarchlo, Katie Mears, Charlotte Parnell, Dr Daniel Mensah.

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[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 inform policy decisions by measuring consumers' self-reported knowledge, attitudes and behaviours related to food safety and other food issues in England, Wales, and Northern Ireland on a regular basis.

Food and You 2: Wave 5

Food and You 2: Wave 5 data were collected between 26th April and 24th July 2022. A total of 6,770 adults from 4,727 households across England, Wales, and Northern Ireland completed the survey (an overall response rate of 29.3%).

[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.

Food and You 2: Wave 5 data were collected during a period of political and economic change and uncertainty following the UK's exit from the EU in 2020 and the COVID-19 pandemic. 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[2].

Food and You 2 is a modular survey, with 'core' modules included every wave, 'rotated' modules repeated annually or biennially, and 'exclusive' modules asked on a one-off basis. The modules presented in this report include: 'Food you can trust' (core); 'Concerns about food' (core); 'Food security' (core); 'Eating at home' (rotated); 'Food shopping' (rotated).

This report presents key findings from the Food and You 2: Wave 5 survey. Not all questions asked in the Wave 5 survey are included in the report. The full results are available in the accompanying full 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 (**).

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:

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[2] For example, Consumer insights tracker report: key findings from December 2021 to March 2022 (2022), FSA. The UK Public's Interests, Needs and Concerns Around Food (2022), Bright Harbour. Food in a pandemic (2021). FSA. Family Resources Survey (FRS): financial year 2020 to 2021 (2021). DWP. The FRS asks respondents to report experiences of food insecurity in the last 30 days so responses cannot be compared with Food and You 2.

- 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.

Future publication plans

Modules expected to be reported in the Food and You 2: Wave 6 Key Findings report include, ‘Food you can trust’ (core), ‘Concerns about food’ (core), ‘Food security’ (core), ‘Food hypersensitivities, (rotated) and ‘Eating at home’ (core).

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 (for example, were very confident or fairly confident) in food safety and authenticity; 91% of respondents reported that they were confident that the food they buy is safe to eat, and 86% of respondents were confident that the information on food labels is accurate[3].

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

[3] 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= 6770, all respondents.

- NS-SEC[4]: respondents in some occupational groups (for example, 95% of small employers and account workers) were more likely to be confident that the food they buy is safe to eat than respondents who were long term unemployed and/or had never worked (77%).

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

- Annual household income: respondents with an income over £96,000 (93%) were more likely to report confidence in the accuracy of food labels than those with an income of less than £19,000 (83%).

- Food security: respondents with high food security (90%) were more likely to report confidence in the accuracy of food labels than those with low (80%) or very low (77%) food security. Most respondents with marginal food security (86%) were confident in the accuracy of food labels.

- Ethnic group: white respondents (89%) were more likely to report confidence in the accuracy of food labels than Asian or Asian British (78%) respondents.

Confidence in the food supply chain

Around three quarters of respondents (74%) reported that they had confidence (i.e., very confident or fairly confident) in the food supply chain[5].

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

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

[5] 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= 6770, all respondents.

- Age group: respondents aged between 55 and 79 years (for example, 80% of those aged 55-64 years) were more likely to report confidence in the food supply chain than younger adults (for example, 69% of those aged 16-24 years).

- NS-SEC: respondents in lower supervisory and technical occupations (82%) were more likely to report confidence in the food supply chain than those in managerial, administrative, and professional occupations (72%), full-time students (72%) and those who were long term unemployed and/or had never worked (68%).

- Food security: respondents with a high level of food security (77%) were more likely to report confidence in the food supply chain than respondents with very low food security (67%).

- Ethnic group: white respondents (77%) were more likely to report confidence in the food supply chain than Asian or Asian British respondents (67%).

Awareness, trust and confidence in the FSA

Most respondents (91%) had heard of the FSA[6].

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

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[6] Question: Which of the following, if any, have you heard of? Please select all that apply. Response: Food Standards Agency (FSA), (England) Public Health England (PHE), (England) Department for Environment, Food and Rural Affairs (DEFRA), (England) The Office for Health Improvement and Disparities, (England) Environment Agency, (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= 4041, all online respondents. Please note: All consumers taking part in the survey had received an invitation to take part in the survey from Ipsos which mentioned the FSA. An absence of response indicates the organisation had not been heard of by the respondent or a non-response.

- Age group: older respondents were more likely to have heard of the FSA than younger respondents. For example, 97% of those aged 55-64 years had heard of the FSA, compared to 77% of those aged 16-24 years.

- Annual household income: respondents with an income of more than £32,000 (for example, 97% of those with an income of £32,000-£63,999) were more likely to have heard of the FSA than those with an income of less than £19,000 (82%).

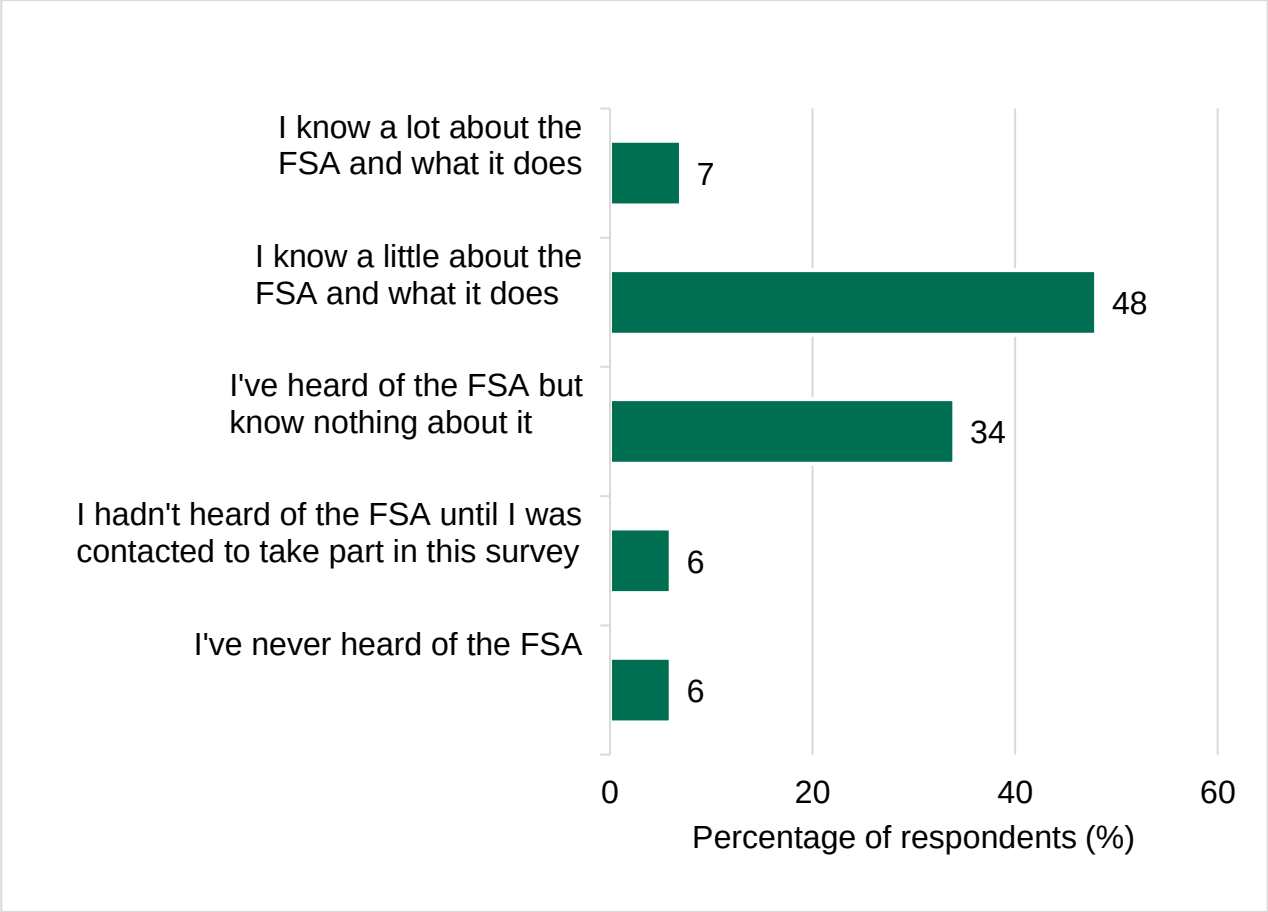
- NS-SEC: respondents in most occupational groups (for example, 96% of small employers and account workers) were more likely to have heard of the FSA compared to full-time students (73%).

- Ethnic group: white respondents (94%) were more likely to have heard of the FSA compared to Asian or Asian British respondents (77%).

- Responsibility for cooking: respondents who were responsible for cooking (92%) were more likely to have heard of the FSA than those who do not cook (81%).

- Responsibility for food shopping: respondents who were responsible for food shopping (92%) were more likely to have heard of the FSA than those who never shop for food (77%).

Figure 1. Knowledge about the Food Standards Agency.



Source: Food and You 2: Wave 5

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 48% reported that they knew a little about the FSA and what it does. Around a third (34%) 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)[7].

[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= 6770, 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.

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

- Age group: respondents aged between 35 and 79 years (for example, 65% of those aged 45-54 years) were more likely to report knowledge of the FSA compared to younger respondents (39% of those aged 16-24 years) or the oldest respondents (44% of those aged 80 years and over).

- Annual household income: respondents with a higher income were more likely to report knowledge of the FSA compared to those with a lower income. For example, 67% of those with an income of more than £96,000 reported knowledge of the FSA compared to 50% of those with an income of less than £19,000.

- NS-SEC: respondents in managerial, administrative, and professional occupations (63%) were more likely to report knowledge of the FSA than those who were in intermediate occupations (48%), or semi-routine and routine occupations (47%). Those who were long term unemployed and/or never worked (36%) or full-time students (34%) were least likely to report knowledge of the FSA.

- Ethnic group: white respondents (57%) were more likely to report knowledge of the FSA than Asian or Asian British respondents (41%).

- Food hypersensitivity: respondents with a food intolerance (65%) or allergy (64%) were more likely to report knowledge of the FSA compared to who did not have a food hypersensitivity (54%).

- Responsibility for cooking: respondents who were responsible for cooking (57%) were more likely to report knowledge of the FSA compared to respondents who do not cook (37%).

- Responsibility for shopping: respondents who were responsible for shopping (57%) were more likely to report knowledge of the FSA compared to respondents who never shop (37%).

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; 75% of these respondents reported that they trusted the FSA to do this[8].

Most 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) (80%), were confident that the FSA is committed to communicating openly with the public about food-related risks (76%), and were confident that the FSA takes appropriate action if a food-related risk is identified (80%)[9].

[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= 3930, 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= 6770, 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.

Chapter 2: Concerns about food

Introduction

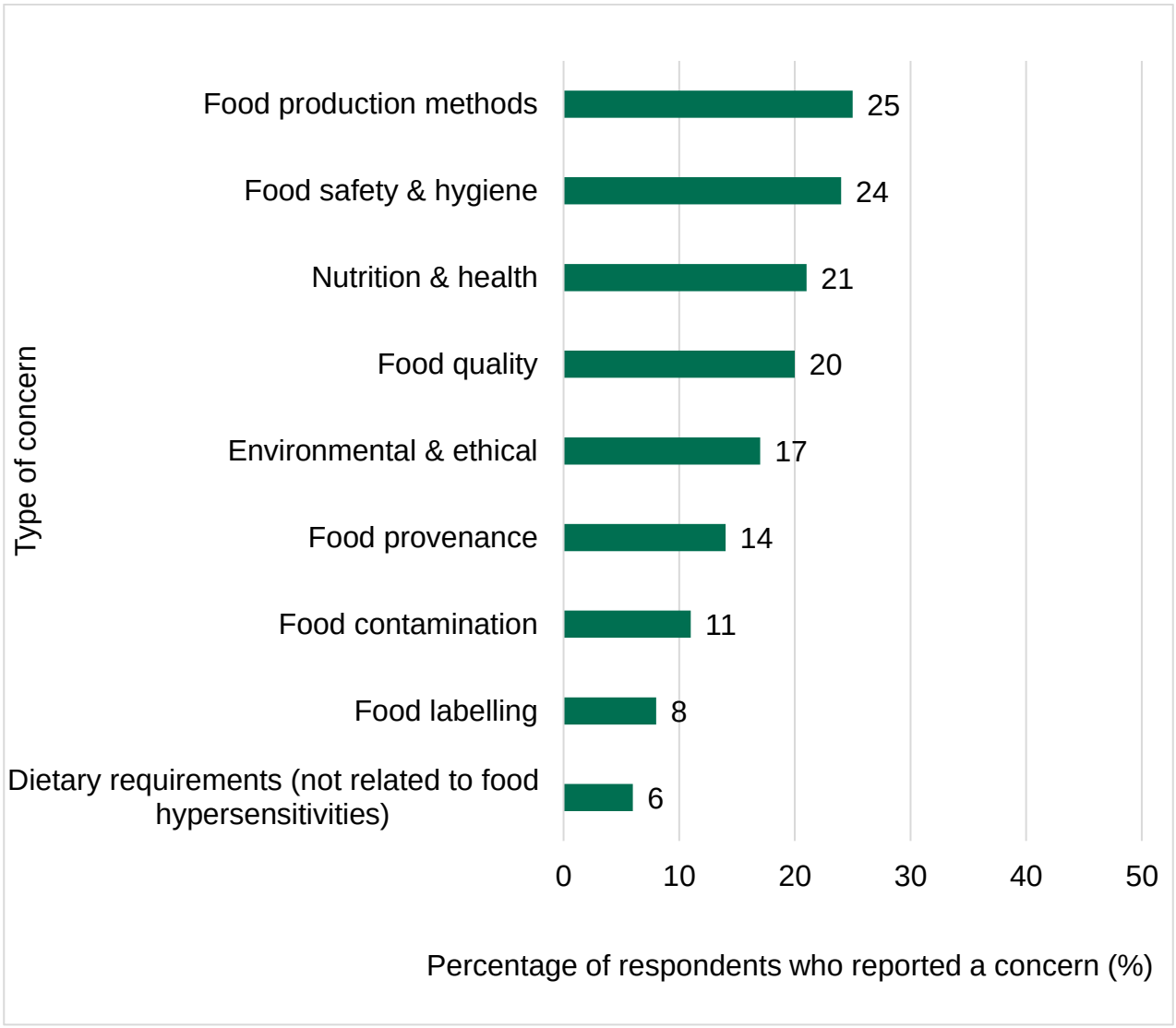
The FSA's role, set out in law, is to safeguard public health and protect the interests of consumers in relation to food. The FSA uses the Food and You 2 survey to monitor consumers' concerns about food issues, such as food safety, nutrition, and environmental issues. This chapter provides an overview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

Common concerns

Respondents were asked to report whether they had any concerns about the food they eat. Most respondents (80%) had no concerns about the food they eat, and 20% of respondents reported that they had a concern[10].

[10] Question: Do you have any concerns about the food you eat? Responses: Yes, No. Base= 6770, all respondents.

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

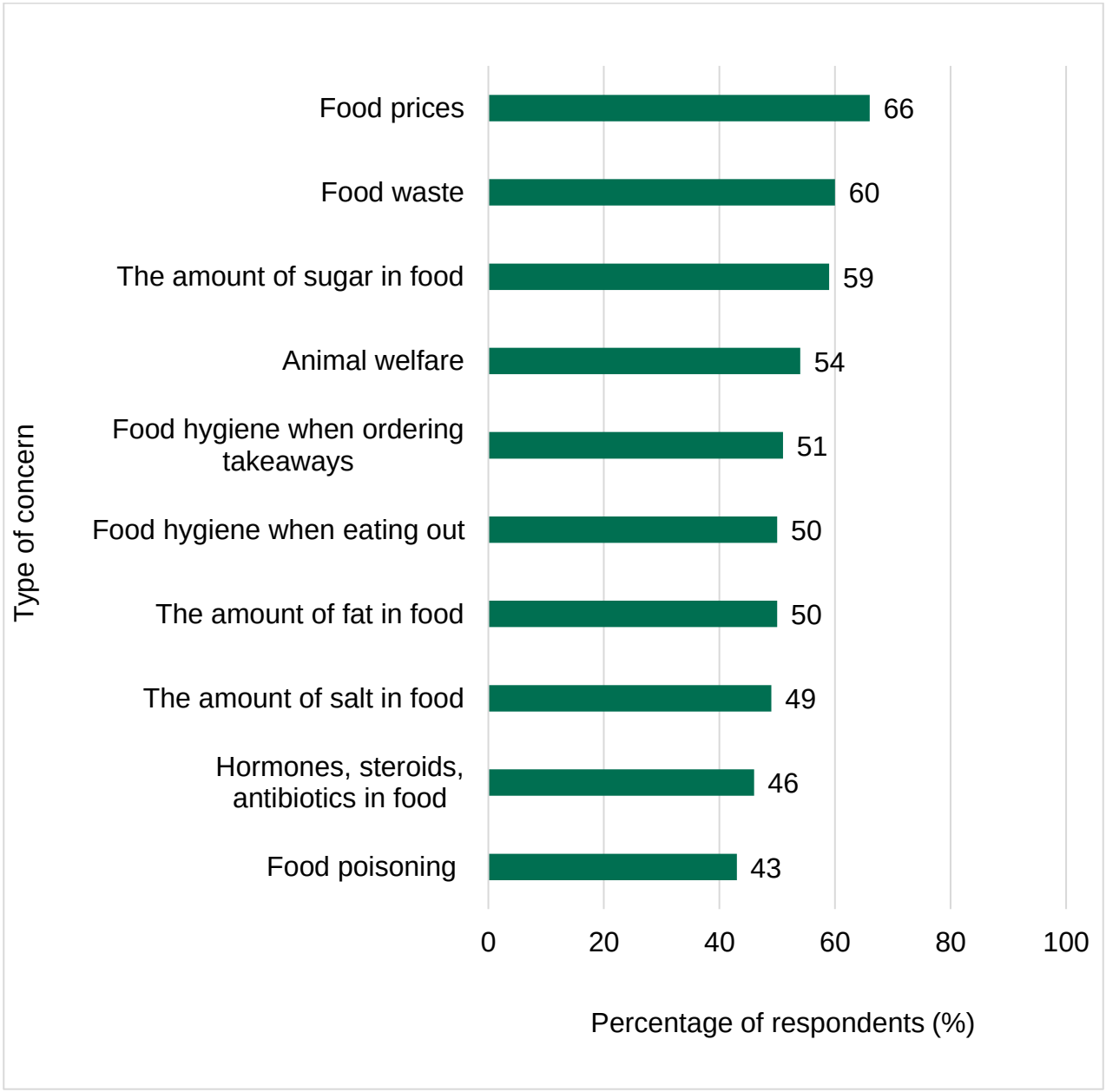


Source: Food and You 2: Wave 5

Respondents who reported having a concern were asked to briefly explain what their concerns were about the food they eat. The most common area of concern related to food production methods (25%), which included the use of additives (such as preservatives and colouring) in food products (11%), the use of pesticides / fertiliser to grow food (10%) and how food has been produced / processed (5%). The second most

common concern related to food safety and hygiene (24%), which included food being cooked / prepared properly (10%) and the safety of food (5%) (Figure 2)[11].

Figure 3. Ten most common prompted food-related concerns.



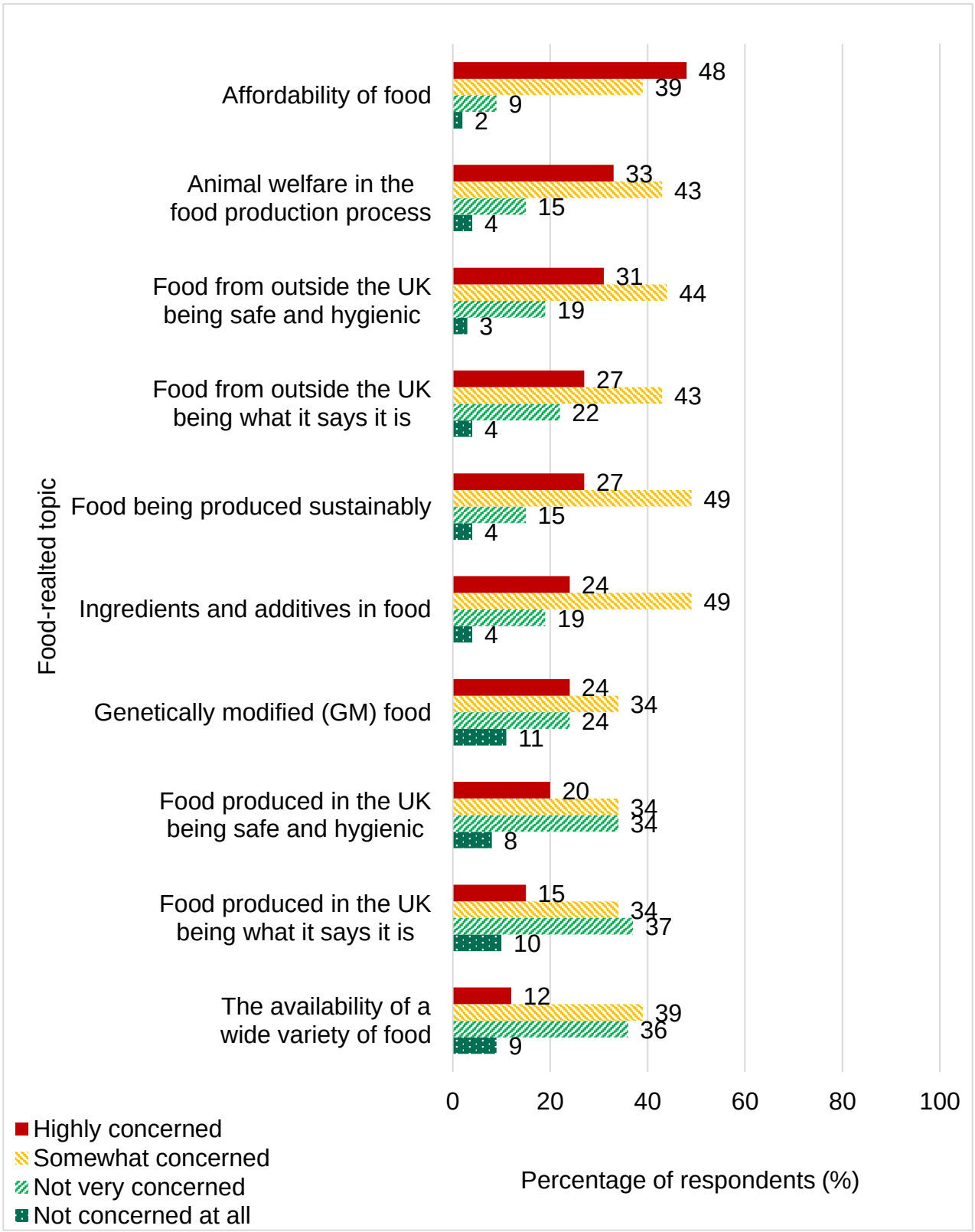
Source: Food and You 2: Wave 5

[11] Question: What are your concerns about the food you eat? Responses: [Open text]. Base= 1346, 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.

Respondents were asked to indicate if they had concerns about several food-related issues, from a list of options. The most common concerns related to food prices (66%), food waste (60%), the amount of sugar in food (59%) and animal welfare (54%). Around half of respondents were concerned about food hygiene when ordering takeaways (51%), food hygiene when eating out (50%), the amount of fat in food (50%) and the amount of salt in food (49%) (Figure 3)[12].

[12] 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, none of these, don't know. Base= 4041, all online respondents.

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



Source: Food and You 2: Wave 5

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 (48%), animal welfare in the food production process (33%) and food from outside the UK being safe and hygienic (31%) (Figure 4)[13].

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

- Household size: households with 5 people or more (57%) were more likely to report that they were highly concerned about the affordability of food compared to smaller households (for example, 43% of 1 person households).

- 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, 54% of those with an income below £19,000 reported that they were highly concerned about the affordability of food compared to 37% of those with an income of more than £96,000.

- Region (England)[14]: levels of concern about the affordability of food varied by region in England. For example, respondents who lived in the North-East of England (59%) and East Midlands (54%) were more likely to report that they were

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[13] 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 = 4041, all online respondents. Please note: some question wording was modified for respondents in England, Wales and Northern Ireland.

[14] Regional differences were only considered if England due to the low base size in Wales and Northern Ireland.

highly concerned about the affordability of food compared to those who lived in the West Midlands (43%) and East of England (43%).

- Food security: respondents with very low food security (77%) were more likely to report that they were highly concerned about the affordability of food than those with low (66%) or marginal (64%) food security. Those with high food security were least likely to report that they were highly concerned about the affordability of food (39%).

- Ethnic group: Asian or Asian British respondents (57%) were more likely to report very high levels of concern about the affordability of food than white respondents (47%).

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 U.S. Adult Food Security Survey Module developed by the United States Department of Agriculture (USDA) to measure consumers’ food security.

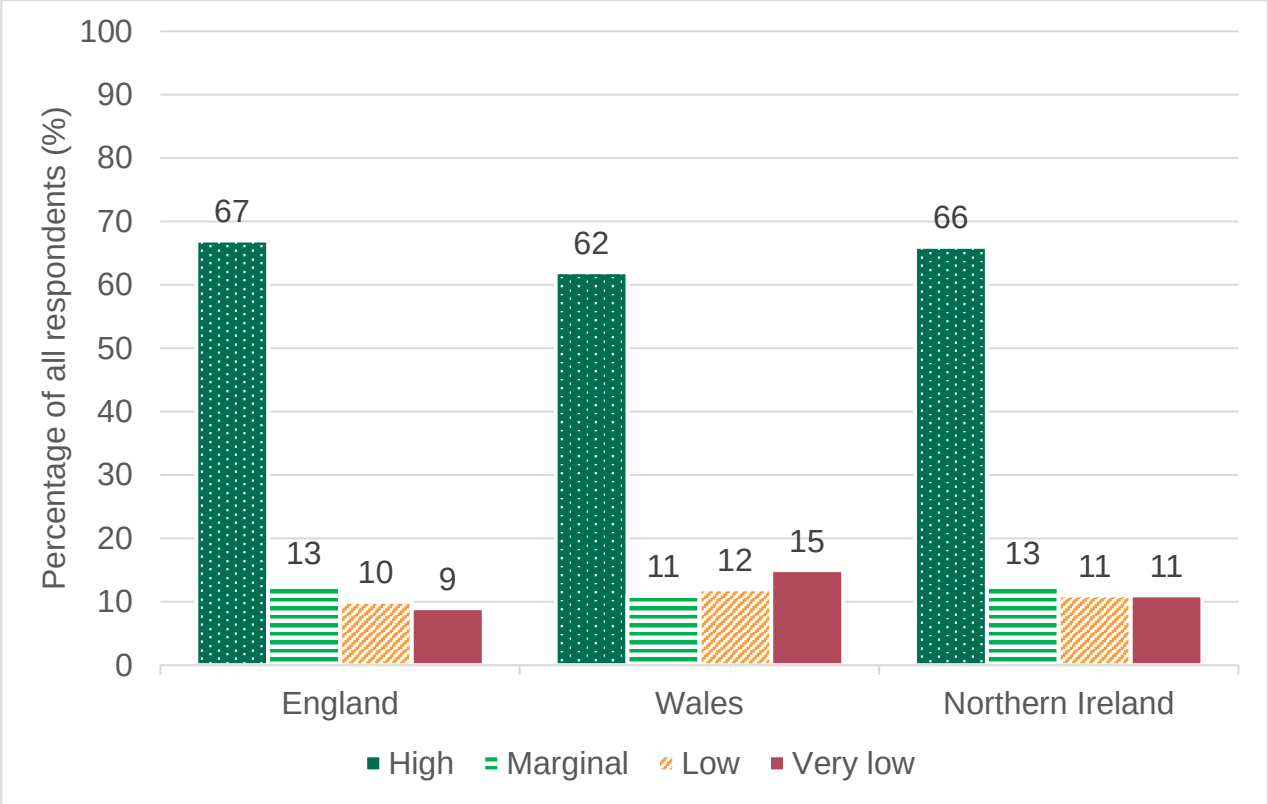
More information on how food security is measured and how classifications are assigned and defined can be found in Annex A and the USDA Food Security website.

Food security

Across England, Wales, and Northern Ireland, 80% of respondents were classified as food secure (67% high, 13% marginal) and 20% of respondents were classified as food insecure (10% low, 10% very low)[15].

[15] Question/Responses: Derived variable, see USDA Food Security guidance and Technical Report. Base= 6770, all respondents. Please note: See Annex A for information about the classifications and definitions of food security levels.

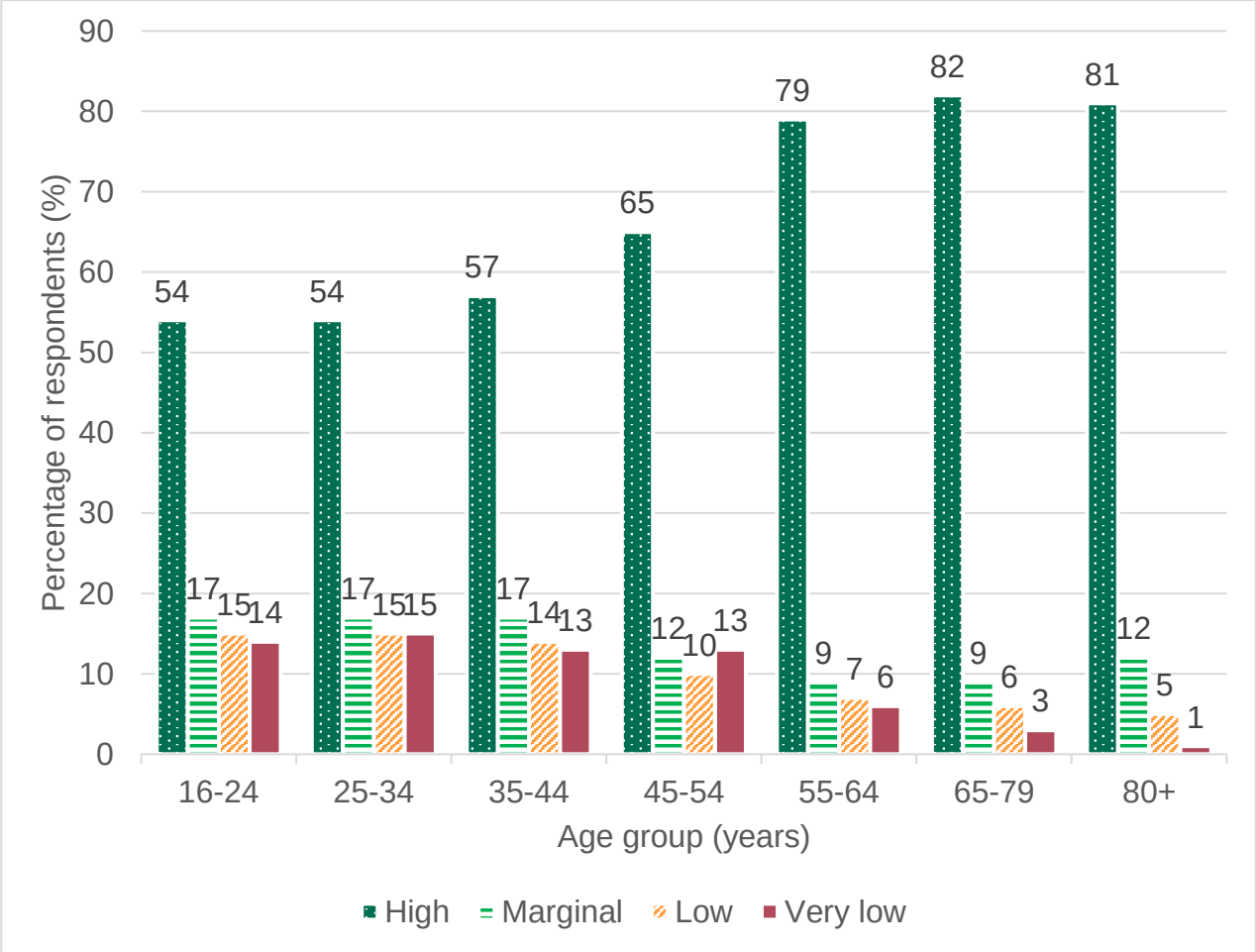
Figure 5. Food security in England, Wales and Northern Ireland.



Source: Food and You 2: Wave 5

Around 8 in 10 respondents were food secure (i.e. had high or marginal food security) in England (80%) and Northern Ireland (78%), and 74% of respondents were food secure in Wales. Approximately 2 in 10 respondents were food insecure (i.e. had low or very low food security) in England (20%) and Northern Ireland (22%), and 26% of respondents were food insecure in Wales (Figure 5).

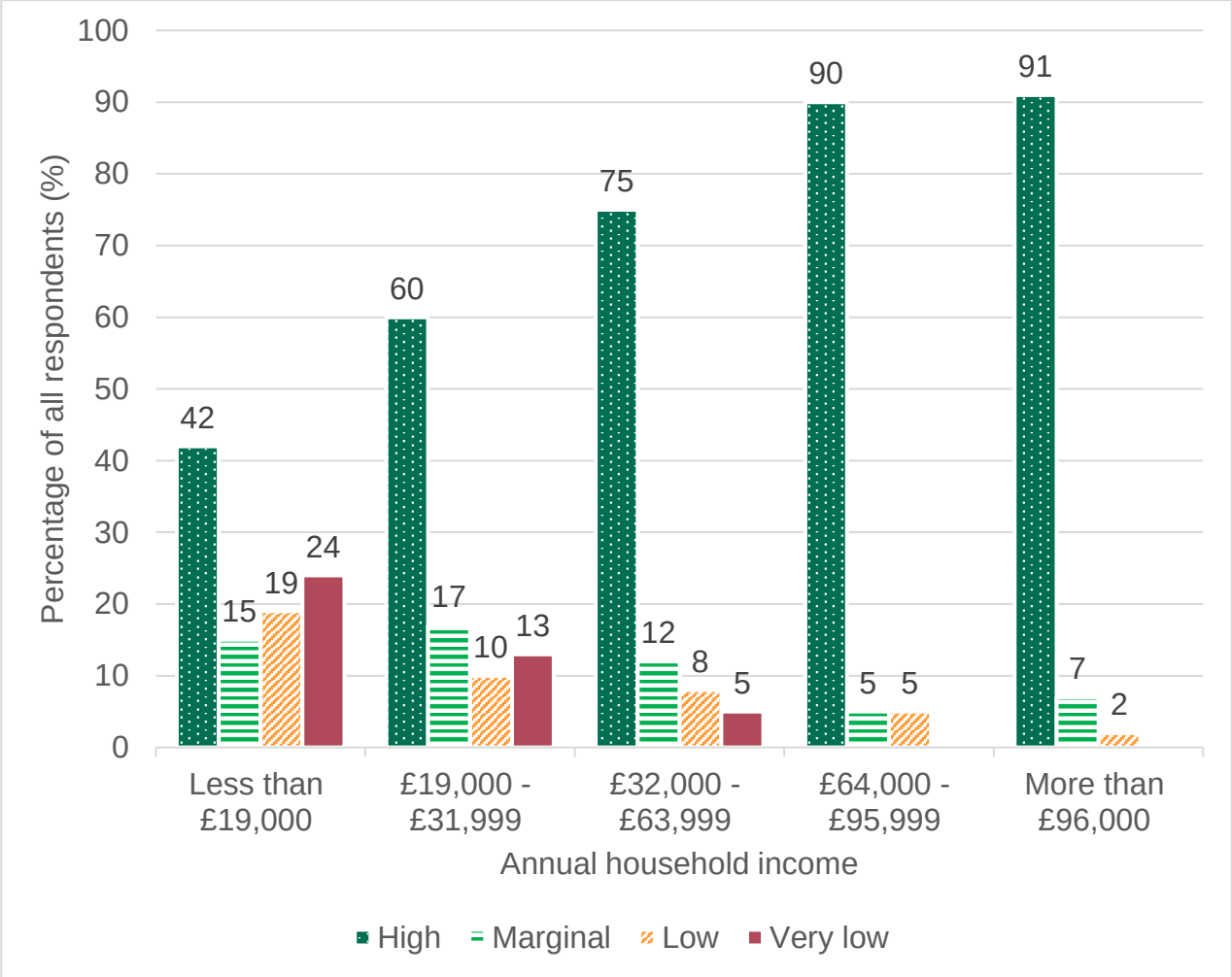
Figure 6. Food security by age group.



Source: Food and You 2: Wave 5

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, 29% (15% low, 14% very low security) of respondents aged 16-24 years were food insecure compared to 6% (5% low, 1% very low security) of those aged 80 years and over (Figure 6).

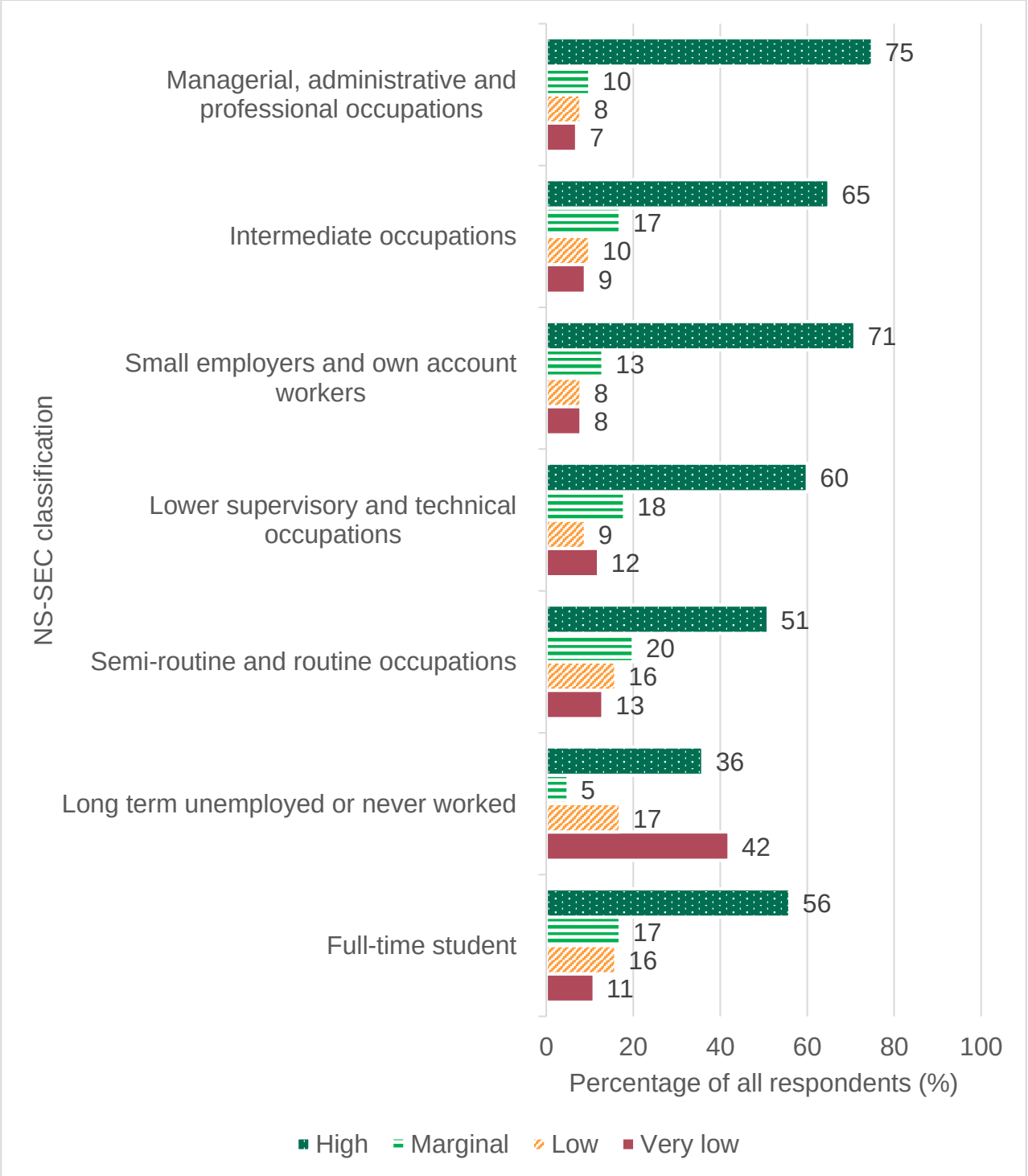
Figure 7. Food security by annual household income.



Source: Food and You 2: Wave 5

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, 43% of those with an annual household income of less than £19,000 reported food insecurity (low 19%, very low 24%) compared to 2% (low 2%, very low 0%) of those with an income of £96,000 or more (Figure 7).

Figure 8. Food security by NS-SEC classification.



Source: Food and You 2: Wave 5

Respondents who were long term unemployed and/or had never worked (59%) were most likely to report that they were food insecure compared to all other occupational groups. Those who were in semi-routine and routine occupations (29%), and full-time students (27%) were more likely to be food insecure than many other occupations groups

(for example, 15% of those in managerial, administrative and professional occupations) (Figure 8).

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 (29%) were more likely to report that they were food insecure compared to those in 1-person (19%) or 2-person (15%) households.
- Children under 16 in household: 29% of households with children under 16 years reported that they were food insecure compared to 17% of households without children under 16 years.
- Region (England): food insecurity varied by region in England. For example, respondents who lived in the North-West of England (25%) and Yorkshire and the Humber (25%) were more likely to report being food insecure compared to those who lived in the South-East (13%) and South-West (15%) of England.
- Long term health condition: respondents with a long-term health condition (29%) were more likely to report being food insecure compared to those without a long-term health condition (16%).

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 (95%) reported that they had not used a food bank or other emergency food provider in the last 12 months, with 3% of respondents reporting that they had[16].

Respondents who had received a food parcel from a food bank or other provider were asked to indicate how often they had received this in the last 12 months. Of these respondents, 34% had received a food parcel on only one occasion in the last 12

[16] 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= 6770, all respondents.

months, 40% had received a food parcel on more than one occasion but less often than every month, and 5% had received a food parcel every month or more often[17].

Free school meals

Respondents with children aged 7-15 years in their household were asked whether these children receive free school meals. Most respondents (74%) with a child(ren) aged 7-15 years in their household reported that the child(ren) do not receive free school meals. Approximately one in four (24%) respondents reported that the child or children receive free school meals[18].

The reported uptake of free school meals also varied between different categories of people in the following ways:

- Annual household income: respondents with a lower income were more likely to report the child(ren) receive free school meals compared to those with a higher income. For example, 47% of respondents with an income of less than £19,000 reported that the child(ren) receive free school meals compared to 9% of those with an income of £32,000-£63,000.
- Food security: respondents with low (37%) or very low (45%) food security were more likely to report the child(ren) receive free school meals compared to those with a high (16%) or marginal (17%) food security.

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[17] Question: How often in the past 12 months have you, or anyone else in your household, received a free food parcel from a food bank or other emergency food provider? Responses: Only once in the last year, Two or three times in the last year, Four to six times in the last year, More than six times but not every month, Every month or more often, Don't know, Prefer not to say. Base= 269, all respondents where anyone in household has used a food bank or emergency food or received a free food parcel from a food bank or other emergency food provider in the last 12 months.

[18] Question: Does any child receive free school meals? Responses: Yes, No, Don't know, Prefer not to say. Base= 1220, all respondents who had child(ren) aged 7 - 15 living in the household. The eligibility criteria for free school meals varies between England, Wales and Northern Ireland.

Chapter 4: Food shopping and labelling

Introduction

The remit of food labelling is held by multiple bodies, that differ between England, Wales and Northern Ireland.

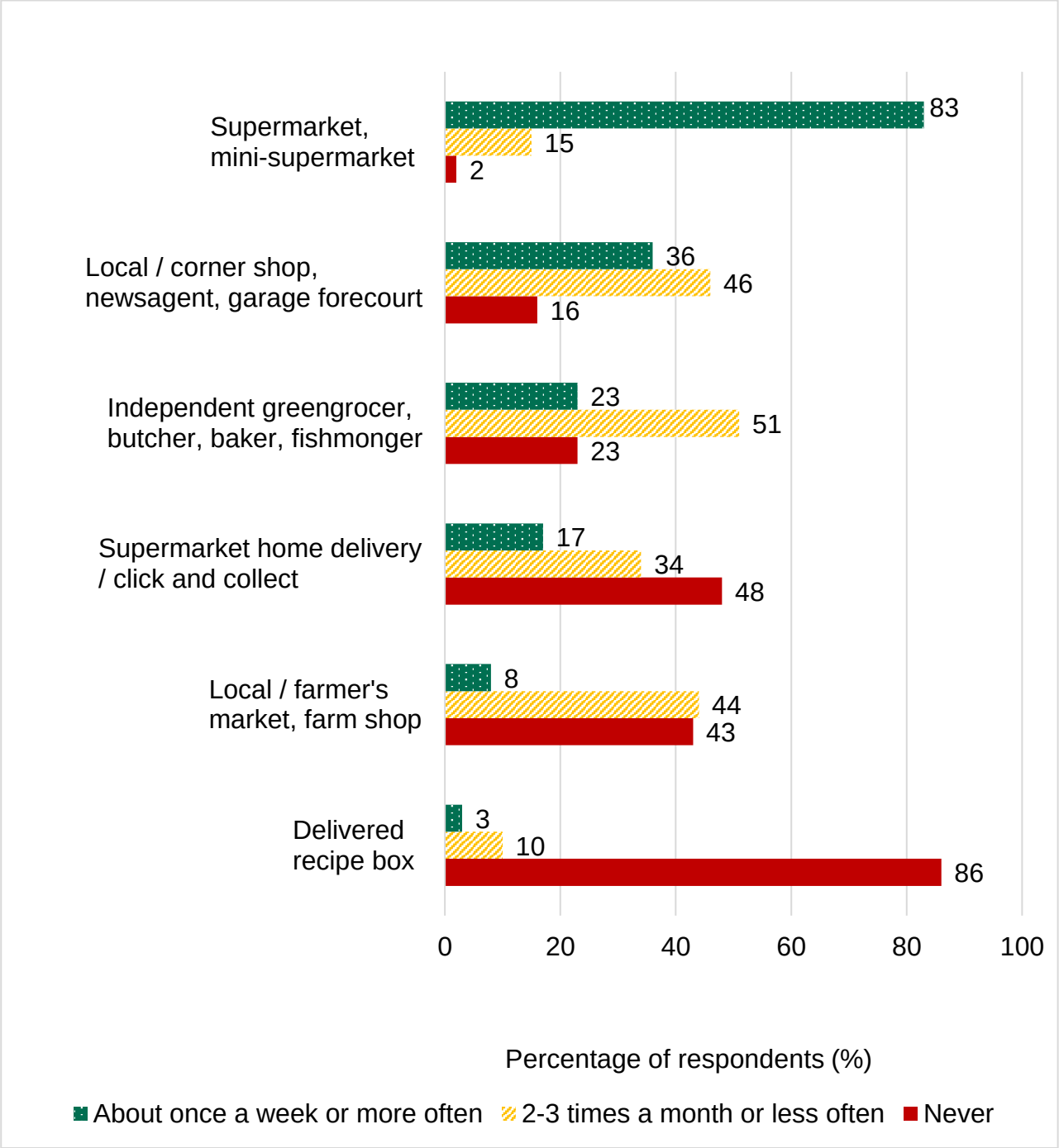
The FSA is responsible for aspects of food labelling which relate to food safety and allergens in England, Wales, and Northern Ireland. In addition, the FSA in Wales is responsible for food labelling related to food composition standards and country of origin. The FSA in Northern Ireland is responsible for food labelling related to food composition standards, country of origin and nutrition[19].

The Department for Environment, Food and Rural Affairs (Defra) plays a major role in food production and is responsible for aspects of food labelling such as composition and provenance.

This chapter provides an overview of food purchasing, what respondents look for when they are shopping and confidence in allergen labelling. Defra co-funded questions in this chapter which relate to food provenance, sustainability, and animal welfare.

[19] Nutrition standards and nutrition food labelling is the remit of the Department of Health and Social care in England and the Welsh Government in Wales.

Figure 9. Where respondents buy food from.



Source: Food and You 2: Wave 5

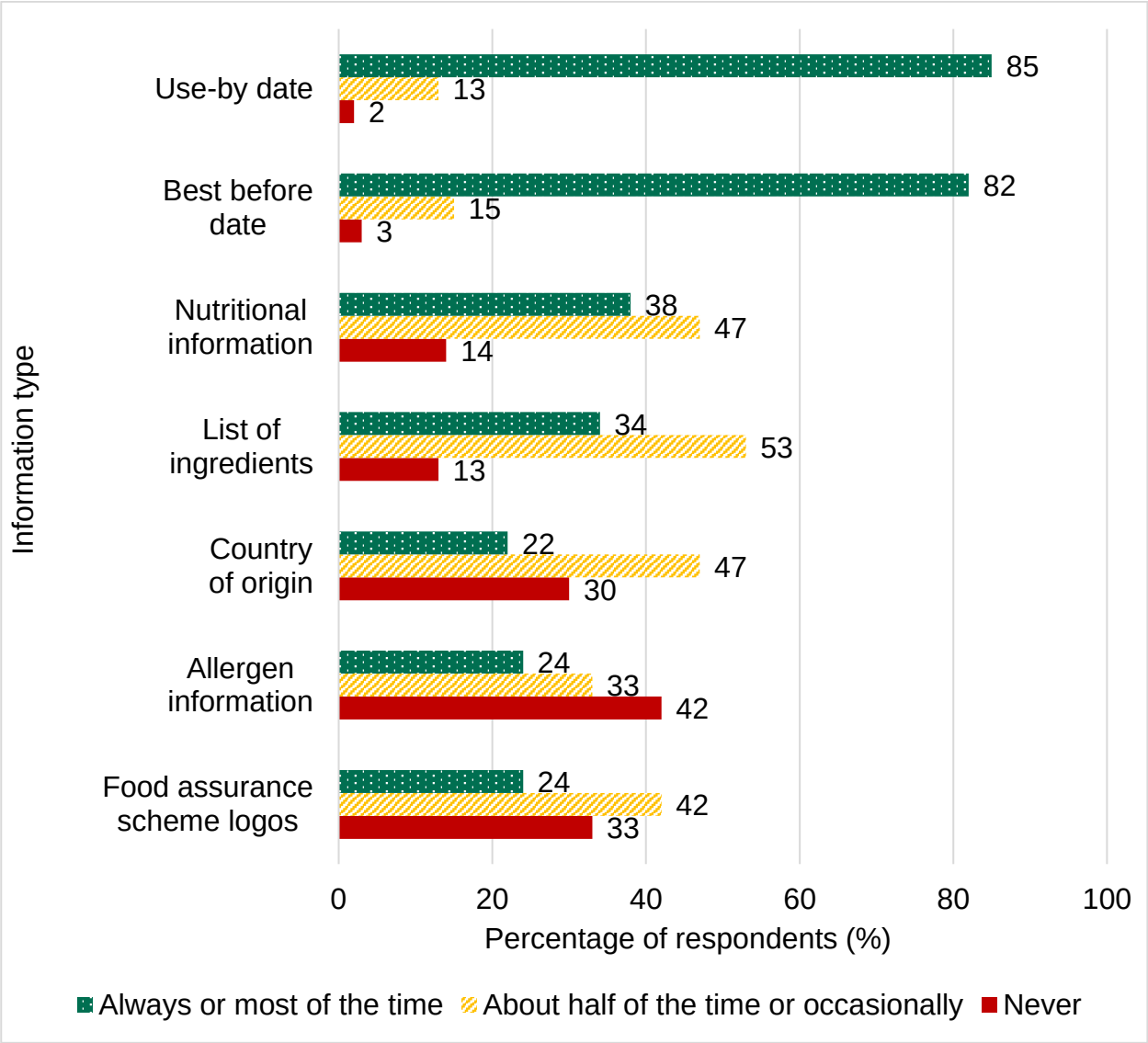
Respondents were asked to indicate where and how frequently they buy food. Most respondents reported that they bought food from a supermarket or mini supermarket about once a week or more often (83%). Around half (51%) of respondents reported that they bought food from independent shops (greengrocers, butchers, bakers, fishmongers)

and 44% bought food from a local / corner shop or newsagents 2-3 times a month or less often (Figure 9)[20].

[20] Question: How often, if at all, do you…a) shop for food in store at a supermarket (including mini supermarkets like Metro/ Local). b) shop for food at independent greengrocers', butchers', bakers' or fishmongers'. c) shop for food at local/corner shops, newsagents' or garage forecourts. d) get a home delivery from a supermarket. e) shop for food at a local market, farmer's market or farm shop. f) get a recipe box delivered (e.g. Hello fresh, Gousto). 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, never, can't remember, I don't do any food shopping. Base= 5160, all online respondents and Version A postal respondents who have at least some responsibility for food shopping for their household.

What do respondents report that they look for when buying food?

Figure 10. What information respondents look for when buying food.



Source: Food and You 2: Wave 5

Respondents were asked to indicate what information they check when buying food. Most respondents reported that they often (i.e. always or most of the time) check the use-by (85%) or best before (82%) date when they bought food. Respondents reported that they check the list of ingredients (53%), nutritional information (47%), country of origin (47%) and food assurance scheme logos (42%) on an occasional basis (i.e. about half the time or occasionally). Allergen information was least often checked by respondents,

(Figure 10)[21]. However, respondents who have a food allergy (72%) or an intolerance (46%) were more likely to often (i.e. always or most of the time) check allergen information when food shopping compared to those without a food hypersensitivity (19%).

Respondents were asked what they consider to be most important from a list of options when choosing which food to buy. The most common attribute that respondents mentioned was price or value for money (57%), followed by quality (40%) and freshness (33%). Around 1 in 5 respondents mentioned use-by dates and/or how long it will keep for (24%), healthiness (22%) and taste (21%)[22].

When asked what information is used to judge the quality of food from a list of options, respondents reported that they most commonly used freshness (54%), taste (46%), and appearance (45%) to judge food quality. Fewer respondents reported that they used the ingredients (28%), price (27%), brand (24%), animal welfare (16%) and country of origin (10%) to judge food quality. Assurance schemes (9%), environmental impact (7%) and

[21] Question: When shopping for food, how often, if at all, do you check…a) use-by dates. b) best before dates. c) list of ingredients. d) allergen information. e) nutritional information. f) country of origin. g) food assurance scheme logos. responses: always, most of the time, about half the time, occasionally, never, don't know. Base= 3771, all online respondents who ever do food shopping.

[22] Question: What is most important to you when you are choosing which foods to buy? Responses: price/value for money, quality, freshness, taste, appearance of food, healthiness, use-by date/how long it will keep for, country of origin, ingredients, that it is ethical or eco-friendly, farming methods for example, organic or free-range farming, how it is made or how it is produced, choice/availability/variety, buying what my household/ children want, trust in supplier, safety of product, convenience/how easy it is to cook or prepare, other, don't know. Base= 6770, all respondents.

convenience (3%) were reported to be least used by respondents when judging food quality[23].

Respondents were asked their views on animal welfare, food provenance and the environmental impact of food. Most respondents reported that, it was important to buy meat, eggs and dairy which are produced with high standards of animal welfare (90%), support British farmers and food producers (87%), and to buy food which has a low environmental impact (84%)[24].

The importance placed on buying food which has a low environmental impact varied between different categories of people in the following ways:

- Age group: older respondents were more likely to consider buying food which has a low environmental impact to be important than younger respondents. For example, 90% of those aged 55 years or over considered it important to buy food which has a low environmental impact compared to 73% of those aged 16-25 years.
- Household size: respondents who lived in smaller households were more likely to consider buying food which has a low environmental impact to be important than those who lived in larger households. For example, 90% of those who lived in 1-person households considered it important to buy food which has a low environmental impact compared to 76% of those who lived in households of 5 or more people.

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[23] Question: What do you use to judge the quality of food? Responses: taste, appearance, country of origin, convenience, ingredients, animal welfare, freshness, assurance schemes, brand, price, environmental impact, other. Base= 6770, all respondents.

[24] Question: How important is it to you…a) to support British [if Northern Ireland: UK and Irish] farmers and food producers. b) to buy meat, eggs and dairy which are produced with high standards of animal welfare. c) to buy food which has a low environmental impact. Responses: very important, somewhat important, not very important, not at all important, don't know. Base= 6770, all respondents.

- NS-SEC: respondents in most occupational groups (for example, 88% of those in managerial, administrative, and professional occupations) were more likely to consider buying food which has a low environmental impact as important compared to full-time students (74%) and those who were long term unemployed and/or never worked (68%).
- Region (England): the likelihood that respondents would consider buying food which has a low environmental impact as important varied by region. For example, respondents who lived in the East (90%) and South-East (89%) of England were more likely to consider buying food which has a low environmental impact as important compared to those who lived in the East Midlands (79%) and West Midlands (78%).
- Ethnic group: white respondents (86%) were more likely to consider buying food which has a low environmental impact as important than Asian or Asian British respondents (74%).
- Responsibility for cooking: respondents who were responsible for cooking (85%) were more likely to consider buying food which has a low environmental impact as important compared to those who do not cook (75%).
- Responsibility for shopping: respondents who were responsible for shopping (86%) were more likely to consider buying food which has a low environmental impact as important compared to those who never do food shopping (69%).

Respondents were asked how frequently they check for information about the environmental impact and animal welfare of food when shopping. Almost a third (31%) of respondents reported that they often (i.e., always or most of the time) checked for information about the environmental impact when purchasing food and 40% of respondents reported that they often checked for information about animal welfare[25]. Respondents were asked to indicate how often, where possible, they buy food which was produced in Britain, has animal welfare information or which had a low environmental impact. Around 6 in 10 respondents often (i.e., always or most of the time) buy food

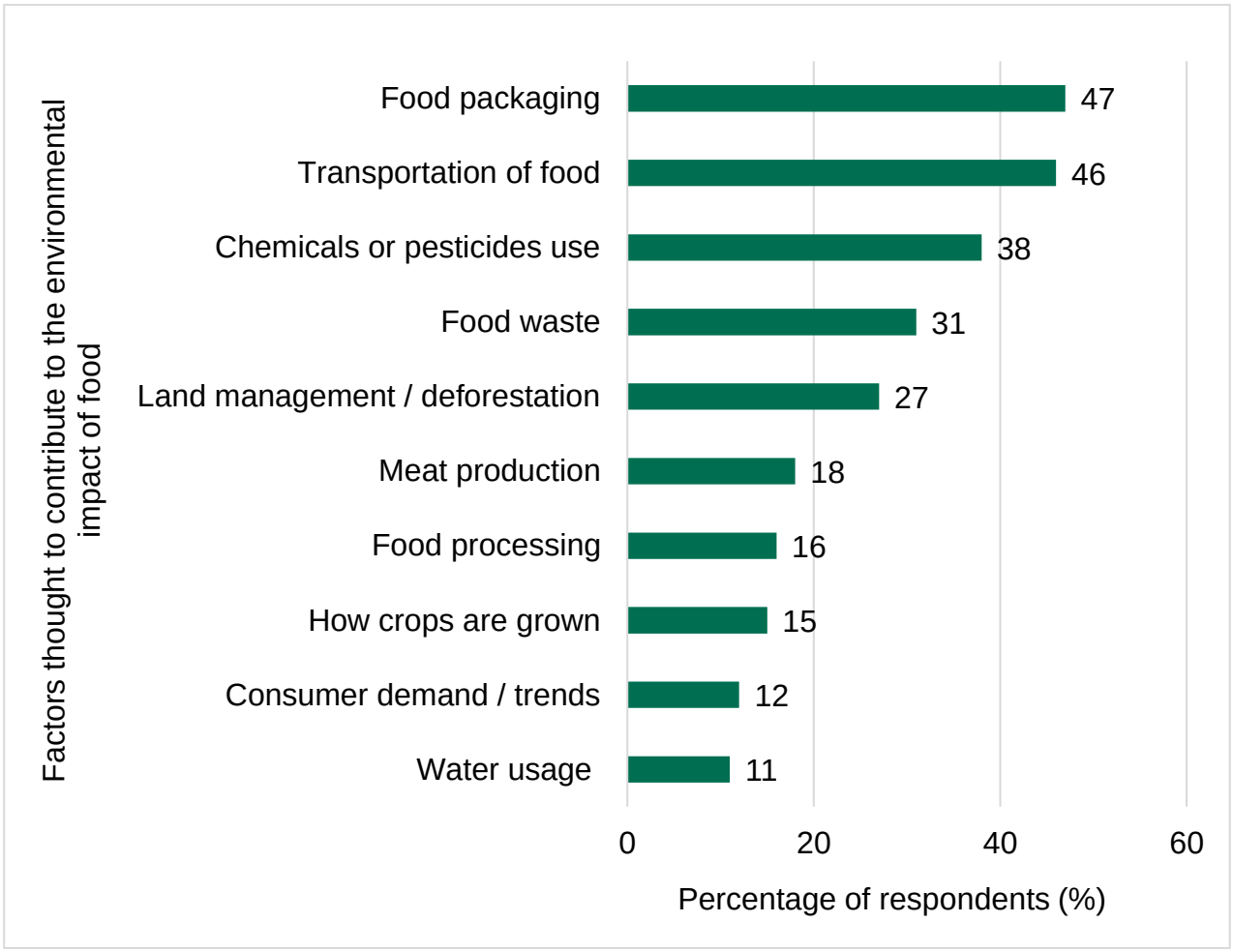
[25] Question: When purchasing food, how often do you do the following…a) check for information on animal welfare. b) check for information on environmental impact. Responses: always, most of the time, about half the time, occasionally, never, don't know. Base=6770, all respondents.

produced in Britain (60%), or buy meat, eggs and dairy which has information on animal welfare (61%), and 41% often buy food which has a low environmental impact[26]. A third (33%) of respondents thought that meat, eggs, and dairy products show enough information about animal welfare, and 21% thought that food products show enough information about their environmental impact[27].

[26] Question: How often do you do the following, where possible? A) Buy food produced in Britain [If Northern Ireland: 'the UK and Ireland']? B) Buy meat, eggs and dairy which has information on animal welfare. C) Buy food which has a low environmental impact. Responses: Always, Most of the time, About half the time, Occasionally, Never, Don't know. Base= 6770, all respondents.

[27] Question: To what extent do you agree or disagree with the following? a) meat, eggs and dairy products show enough information about animal welfare. b) food products show enough information about their environmental impact. Responses: strongly agree, agree, neither agree nor disagree, disagree, strongly disagree, don't know. Base= 6770, all respondents.

Figure 11. Factors thought to contribute most to the environmental impact of food.

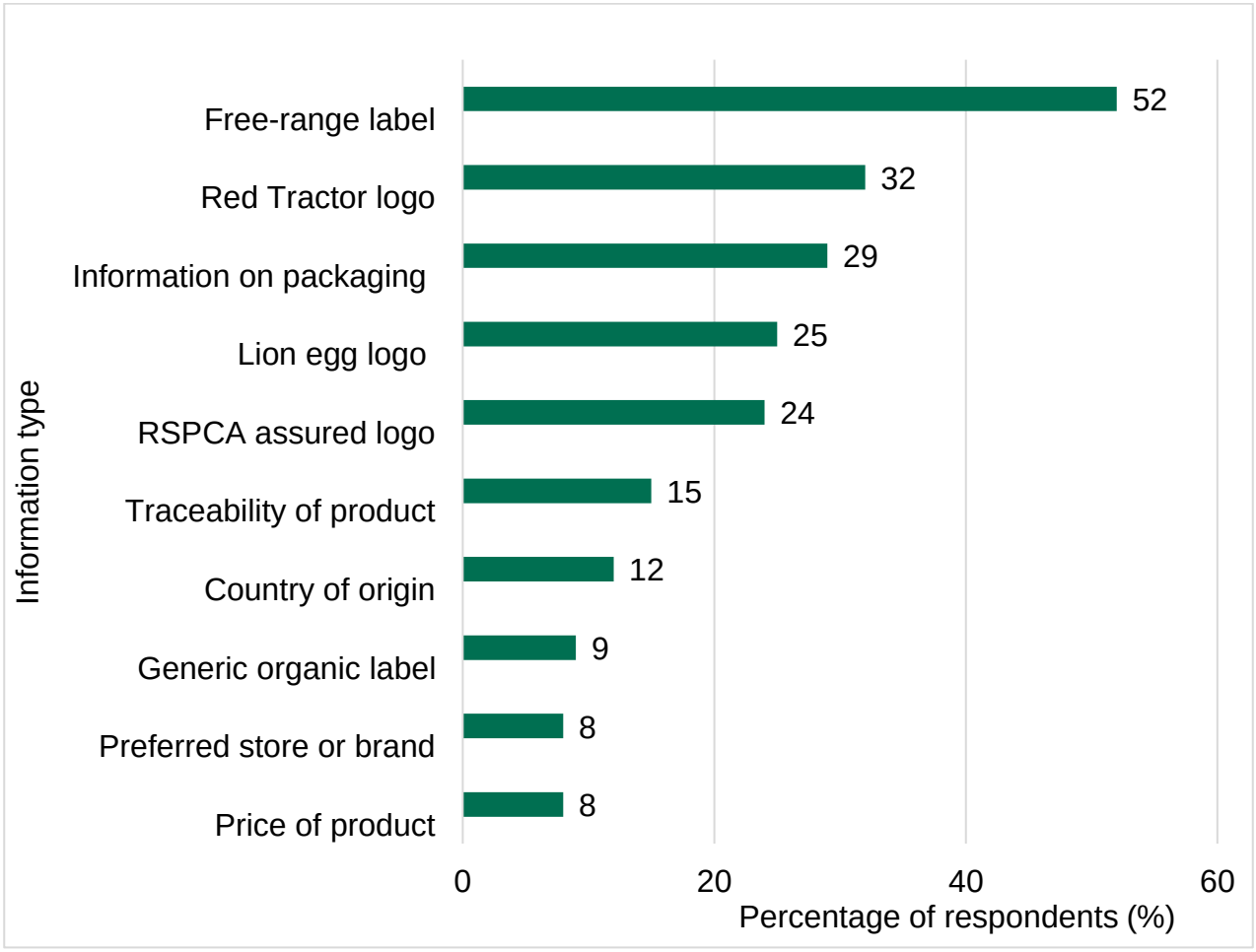


Source: Food and You 2: Wave 5

Respondents were asked, from a list of options, what they think contributes most to the environmental impact of food. The factors thought to contribute most to the environmental impact of food were food packaging (47%) and the transportation of food (46%). The use of chemicals and pesticides (38%), food waste (31%), land management and/or deforestation (27%), and meat production (18%), were also considered as contributors to the environmental impact of food (Figure 11).[28]

[28] Question: What do you think contributes to the environmental impact of food? Responses: food packaging, chemicals or pesticides, transportation of food, land management/deforestation, food waste, production of meat, the way in which crops are grown, food processing, consumer demand/trends, water usage, other, don't know. Base= 6770, all respondents.

Figure 12. What would indicate high animal welfare standards of meat, eggs, and dairy products to respondents.



Source: Food and You 2: Wave 5

When respondents were asked, from a list of options, what would indicate whether a product containing meat, eggs or dairy had been produced with high standards of animal welfare the most common indicator mentioned was a free-range label (52%). Other indicators of animal welfare standards were the Red Tractor logo (32%) and information on packaging (29%) (Figure 12)[29].

[29] Question: What would indicate to you whether a product containing meat, eggs or dairy had been produced with high standards of animal welfare? Responses: free-range label, information on packaging, country of origin, traceability of product, preferred store or brand, appearance of product, price of product, generic organic label, Red Tractor logo, RSPCA assured logo, Lion egg logo, Soil Association logo, Marine Stewardship (MSC) logo, other certification/logo [open text], other [open text], don't know. Base= 6770, all respondents.

Confidence in allergen labelling

Respondents who go food shopping and take into consideration a person who has a food allergy or intolerance were asked how confident they were that the information provided on food labelling allows them to identify foods that will cause a bad or unpleasant physical reaction. Overall, 83% of respondents stated that they were confident (i.e., very confident or fairly confident) in the information provided[30].

Respondents were asked how confident they were in identifying foods that will cause a bad or unpleasant physical reaction when buying foods which are sold loose, such as at a bakery or deli- counter. Respondents who bought food loose were more confident in identifying these foods from supermarkets in-store (67%), from an online supermarket (67%) and when shopping at independent food shops (63%) compared to buying food from food markets or stalls (52%)[31].

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[30] Question: How confident are you that the information provided on food labels allows you to identify foods that will cause you, or another member of your household, a bad or unpleasant physical reaction? Responses: very confident, fairly confident, not very confident, not at all confident, it varies from place to place, don't know. Base= 2365, all respondents who consider the dietary requirements of themselves/someone else in the household when shopping.

[31] Question: When buying food that is sold loose (e.g. at a bakery or deli counter), how confident are you that you can identify foods that will cause you or another member of your household a bad or unpleasant physical reaction? Consider food sold loose from the following sources…a) supermarkets in store. b) supermarkets online. c) independent food shops. d) food markets/stalls. Responses: very confident, fairly confident, not very confident, not at all confident, it varies from place to place, don't know. Base A=2256, B=1857, C=2166, D=2036, all online respondents, and those who completed the version A postal questionnaire, who consider the dietary requirements of themselves/someone else in the household when shopping, excluding `I don't buy food from here'/`I don't buy food sold loose'.

Chapter 5: Online platforms

Introduction

An online food platform is a technology business that facilitates the exchange of food between vendor(s) and consumer(s). Any business selling food online, including food delivery businesses, must be registered as a food business[32]. The FSA provides guidance for food businesses, which use online platforms[33]. A food safety officer from the local authority will inspect a business to check that it follows food hygiene law so that the food is safe to eat.

Food and You 2 asked respondents about their use and experiences with different types of online platforms which enable transactions involving food. A range of online platforms were asked about including food business and delivery websites, food sharing apps and social media marketplaces.

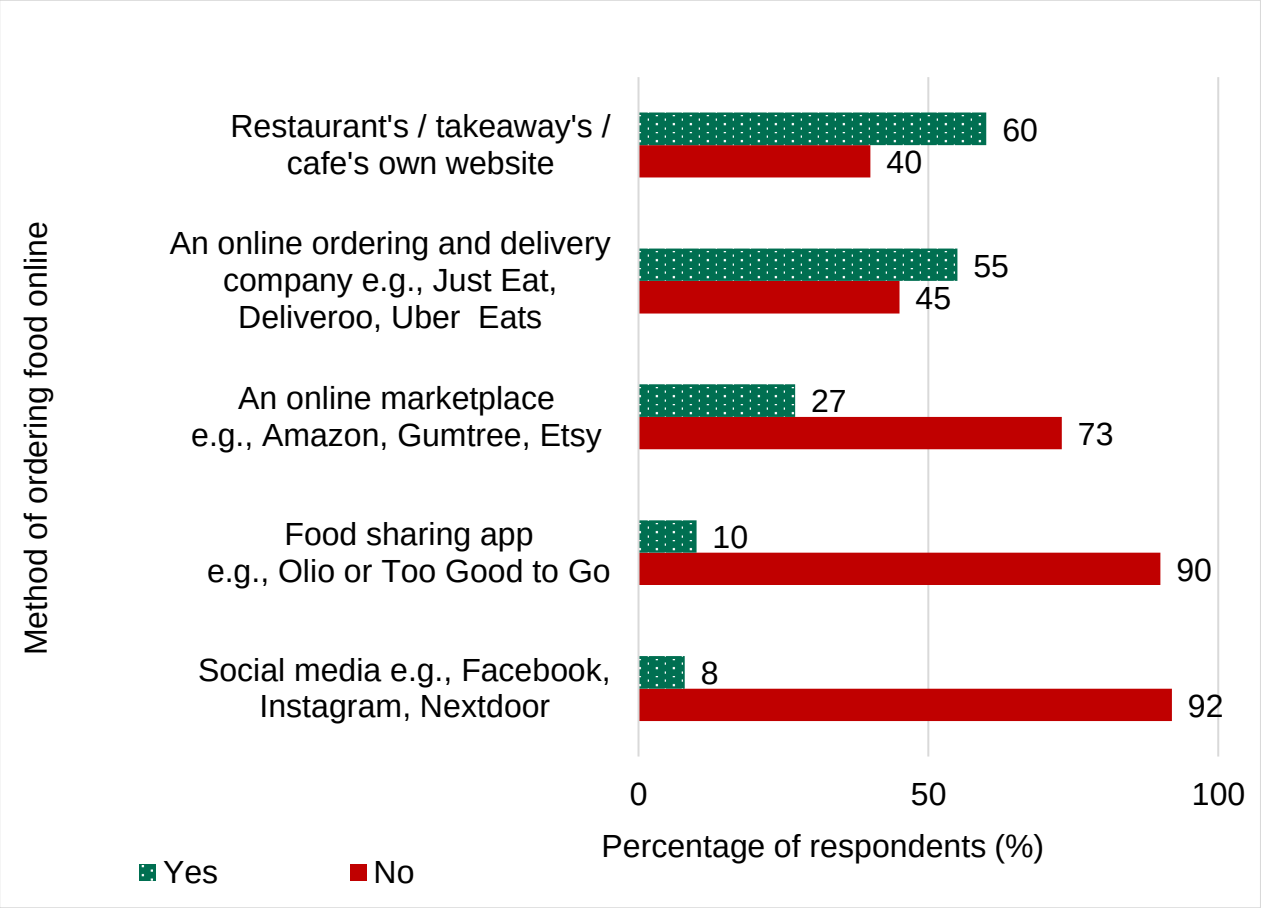
This chapter provides an overview of respondents' use of online platforms, including how frequently people use online platforms to buy food or drink, and the types of food and drink people order through these platforms. It also provides information on people's awareness and use of food hygiene ratings and allergen information on online platforms.

[32] Advice to businesses selling food online, FSA. Regulation (EC) no 178/2002 of the European parliament and of the council of 28 January 2002.

[33] Distance selling, mail order and delivery, FSA. Food safety for food delivery, FSA.

Which online platforms are used to order food or drink online?

Figure 13. Where respondents order food or drink from online.



Source: Food and You 2: Wave 5

Respondents were asked to indicate if they have ever ordered food or drink online from a number of different platforms. Over half of respondents reported that they had ordered food or drink from the websites of a restaurant, takeaway or café (60%) or from an online ordering and delivery company (for example, Just Eat, Deliveroo, Uber Eats) (55%). Around a quarter (27%) of respondents had ordered via an online marketplace (for example Amazon, Gumtree, Etsy) and around 1 in 10 had ordered food or drink through

a food sharing app (for example Olio, Too Good To Go) (10%) or social media platforms (for example, Facebook, Instagram, Nextdoor) (8%) (Figure 13)[34].

Use of online marketplaces to order food or drink varied between different categories of people in the following ways:

- Age group: younger adults were more likely to have ordered food or drink from an online marketplace compared to older adults. For example, 40% of those aged 16-24 years had ordered food or drink from an online marketplace compared to 11% of those aged 65-79 years.
- Household size: respondents who lived in households with 3 or more people (for example, 32% of those in 3-person households) were more likely to have ordered food or drink from an online marketplace than those living in 1-person households (20%).
- Food security: respondents with low (42%) or very low (44%) food security were more likely to have ordered food or drink from an online marketplace than those with marginal (30%), or high (21%) food security.
- Responsibility for cooking: those who cook (28%) were more likely to have ordered food or drink from an online marketplace than those who never cook (16%).

Use of social media to order food or drink varied between different categories of people in the following ways:

- Age group: adults aged 54 years or under (for example, 15% of those aged 25-34 years) were more likely to have ordered food or drink from social media than those aged 55 years or over (for example, 1% of those aged 65-79 years or over).

[34] Question: Have you ever ordered food or drink online through...? a) a restaurant's, cafe's or takeaway's own website. b) an online ordering and delivery company e.g. Just Eat, Deliveroo or Uber Eats, etc. c) an online marketplace, e.g. Amazon, Gumtree, Etsy, etc. d) social media, e.g. Facebook, Instagram, Nextdoor, etc. e) a food sharing app, e.g. Olio or Too Good To Go, etc. Responses: yes, no. Base= 4041, all online respondents.

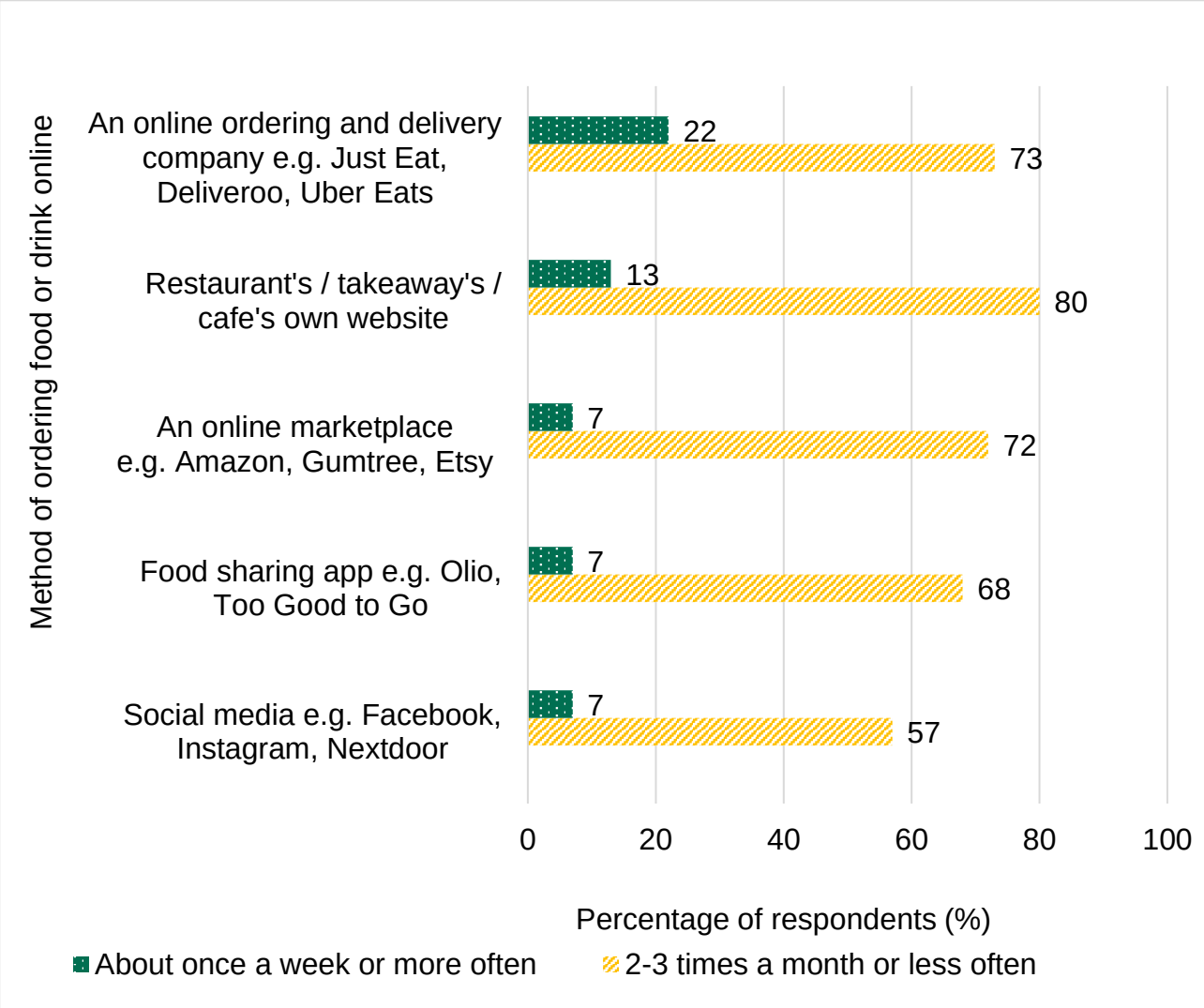
- Food security: respondents with low (15%) or very low (18%) food security were more likely to have ordered food or drink from social media than those with marginal (6%) or high (5%) food security.

Use of food sharing apps to order food or drink varied between different categories of people in the following ways:

- Age group: younger adults were more likely to have ordered food or drink from a food sharing app than older adults. For example, 21% of adults aged 25-34 had ordered food or drink from a food sharing app compared to 1% of those aged 65-79 years.
- NS-SEC: full-time students (22%) were more likely to have ordered food or drink from a food sharing app than those in other occupational groups (for example, 4% of those in lower supervisory and technical occupations).
- Food security: respondents with very low (17%), low (16%) and marginal (16%) food security were more likely to have ordered food or drink from a food sharing app than those with high (7%) food security**.

How often do respondents order food or drink through online platforms?

Figure 14. How often respondents order food or drink from different online platforms.



Source: Food and You 2: Wave 5

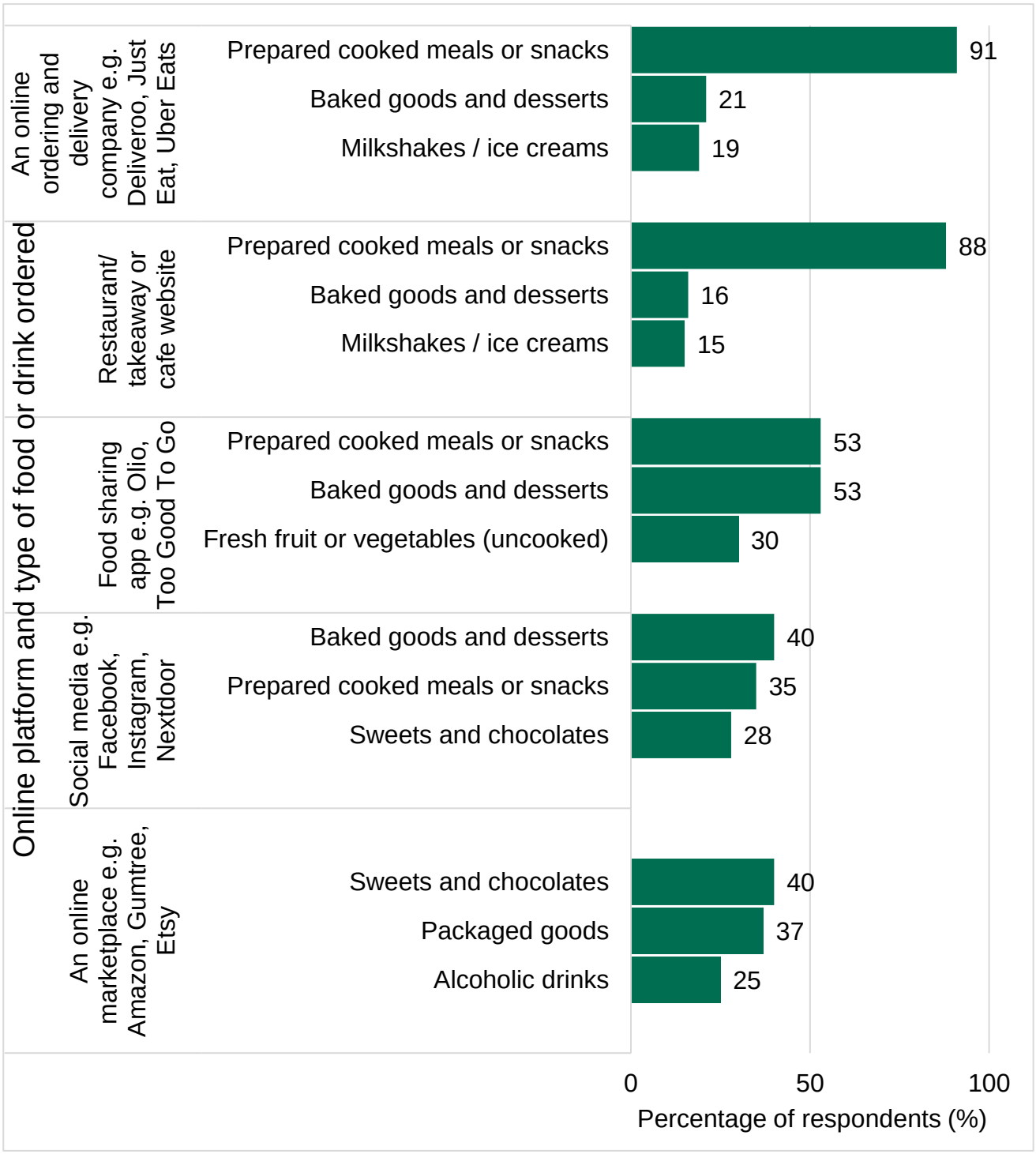
Respondents who had ordered food or drink from a range of online platforms were asked how frequently they ordered food or drink from that platform. Most respondents ordered food or drink from each type of online platforms 2-3 times a month or less often, with a minority using these types of platforms at least once a week. For example, 22% of respondents ordered food or drink from an online ordering and delivery company (for

example, Just Eat, Deliveroo, Uber Eats) about once a week or more often, 73% of respondents did this 2-3 times a month or less often (Figure 14)[35].

[35] Question: How often do you order food or drink online...? A) a restaurant's, cafe's or takeaway's own website. b) an online ordering and delivery company e.g. Just Eat, Deliveroo or Uber Eats, etc. C) an online marketplace, e.g. Amazon, Gumtree, Etsy, etc. d) social media, e.g. Facebook, Instagram, Nextdoor, etc. e) a food sharing app, e.g. Olio or Too Good to Go, etc. 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, never, can't remember. Base A= 2984, B= 2443, C= 1536, D= 678, E= 670, all online respondents and those who completed version A postal questionnaire who have ever ordered food or drink through A/B/C/D/E.

What types of food and drink do respondents order through different online platforms?

Figure 15. The type of food or drink ordered by online platform.



Source: Food and You 2: Wave 5

Respondents who completed the survey online and had ordered food or drink from a range of online platforms were asked what food or drink they had ordered from the platform(s). The most common type of food or drink ordered varied by the platform. Prepared cooked meals or snacks and baked goods and desserts were the products most commonly ordered through online ordering and delivery companies (for example, Just Eat, Deliveroo, Uber Eats), restaurant, takeaway or café websites, food sharing apps (for example, Olio, Too Good To Go), and social media (for example, Facebook, Instagram, Nextdoor). However, sweets and chocolates, and packaged goods were most commonly ordered via online marketplaces (for example, Amazon, Gumtree, Etsy) (Figure 15) [36].

Use of FHRS on online platforms

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. 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. The FSA runs the scheme in partnership with local authorities in England, Wales, and Northern Ireland.

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[36] Question: In the last 12 months, what food or drink have you ordered online...? a) directly through a restaurant's, cafe's or takeaway's own website. b) through an online ordering and delivery company e.g. Just Eat, Deliveroo or Uber Eats, etc. c) an online marketplace, e.g. Amazon, Gumtree, Etsy, etc. d) through social media, e.g. Facebook, Instagram, Nextdoor, etc. e) through a food sharing app, e.g. Olio or Too Good to Go, etc. Responses: prepared cooked meals or snacks, baked goods and desserts, such as cheesecakes, cakes, biscuits, breads etc or dough/mixes to make these, milkshakes / ice creams, protein shakes, fresh fruit or vegetables (uncooked), dairy products, such as milk, cheese, yoghurt, butter etc, alcoholic drinks, such as beer, wine, spirits, cocktails, non-alcoholic drinks, other (please specify). Base A= 2165, B= 1808, C= 855, D= 199, E= 266, all online respondents who have ever ordered food or drink online through…A/B/C/D/E.

Respondents who had ordered food or drink through an online platform and had heard of the FHRS were asked how frequently they checked for FHRS ratings when ordering food and drink online. Almost half (46%) of respondents often (i.e., always or most of the time) check the FHRS ratings, 31% of respondents did this on an occasional basis (i.e. about half of the time or occasionally), and 22% of respondents never checked the FHRS rating[37].

Respondents who reported looking for FHRS ratings when ordering food or drink online were asked how often the ratings were easy to find. Almost half (48%) of respondents reported that the ratings were often (i.e., always or most of the time) easy to find, 40% reported that the ratings were occasionally (i.e., about half of the time or occasionally) easy to find and 3% reported that the ratings were never easy to find[38].

Hypersensitivities and use of online platforms

Food hypersensitivity is a term that refers to a bad or unpleasant physical reaction which occurs as a result of consuming a specific food. There are different types of food hypersensitivity including, food allergy, food intolerance and coeliac disease[39].
The FSA provides guidance for food businesses on providing allergen information to their customers. By law[40], food businesses in the UK must inform customers if they use any of

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[37] Question: When you order food and drink online, how often do you look for Food Hygiene Rating Scheme (FHRS) ratings? Responses: always, most of the time, about half of the time, occasionally, never, don't know. Base= 2642, all respondents who have ordered food and drink online and have heard of the Food Hygiene Rating System (FHRS).

[38] Question: When you look for FHRS ratings when ordering food and drink online, how often are they easy to find? Responses: always, most of the time, about half of the time, occasionally, never, don't know. Base= 2039, all online respondents who look for Food Hygiene Rating Scheme ratings when ordering food or drink online.

[39] FSA Explains: Food hypersensitivities. Overview: Food Allergy, NHS. Food Intolerance, NHS. Overview: Coeliac disease, NHS.

[40] 42 Regulation (EU) No 1169/2011 of the European Parliament and of the Council of 25 October 2011.

the 14 most potent and prevalent allergens in the food and drink they provide[41]. The allergen labelling required differs depending on how food is being sold and the type of food being sold. If food is sold online allergen information should be available to a customer before the purchase of the food is completed and when the food is delivered, Allergen guidance for food businesses, FSA.

Respondents who have a hypersensitivity, or live with someone who has a hypersensitivity, were asked how often they look for information which allows them to identify food that may cause a bad or unpleasant reaction when ordering food or drink online. A fifth (20%) of respondents always looked for information that would allow them to identify food that might cause them a bad or unpleasant reaction, and 38% of respondents looked for this information less often (i.e., most of the time, about half of the time, occasionally). However, around 4 in 10 (37%) respondents never looked for information that would allow them to identify food that might cause a bad or unpleasant reaction when ordering food or drink online[42].

[41] 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).

[42] Question: When you order food and drink online, how often do you look for information that allows you to identify food that might cause you or another member of your household a bad or unpleasant physical reaction? Responses: always, most of the time, about half of the time, occasionally, never, don't know, i don't order food and drink online. Base= 2476, all respondents who have ordered food or drink online and 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, and/or live with at least one other adult or child in their household.

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.

Since people are responsible for the safe preparation and storage of food in their home, Food and You 2 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; the brief module which includes a limited number of key questions which are fielded annually, and a full version which includes additional questions and is fielded every 2 years. The full 'Eating at home' module is reported in this chapter[43].

This chapter provides an overview of respondent knowledge, attitudes and behaviours relating to food safety, diet, 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 and after touching raw food, before handling ready-to-eat food.

[43] The full 'Eating at home' module was last reported in the Food and You 2: Wave 1 Key Findings report. The brief module was last reported in the Food and You 2: Wave 2 Key Findings report.

Around half (49%) of respondents reported that they always wash their hands before eating. However, 48% of respondents reported that they do not always (i.e., most of the time or less often) wash their hands before eating and 2% never do this[44][45].

Around three-quarters (74%) of respondents reported that they always wash their hands before preparing or cooking food. However, 25% of respondents reported that they do not always (i.e., most of the time or less often) wash their hands before preparing or cooking food[46].

Most respondents (92%) reported that they always wash their hands immediately after handling raw meat, poultry, or fish. However, 7% of respondents reported that they do not always (i.e., most of the time or less often) wash their hands immediately after handling raw meat, poultry or fish[47].

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. Around a third (34%) of respondents reported that they always washed their hands, used hand

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[44] 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, i don't cook, don't know. Base= 6770, all respondents.

[45] Please note: this sentence was amended in November 2024 to correct an error in the text. The text previous read "preparing or cooking food" rather than "eating".

[46] 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, i don't cook, don't know. Base= 6246, all respondents who ever do some food preparation or cooking for their household.

[47] 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= 6031, all online respondents and those who completed the version B 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'.

sanitising gel or wipes when they ate outside of their home, 58% did this less often (i.e., most of the time or less often) and 7% never did this[48].

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, 59% of respondents 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 18% of respondents did not know what temperature the inside of their fridge should be[49].

Over half of respondents who have a fridge reported that they monitored the temperature, either manually (48%) or via an internal temperature alarm (11%)[50]. Of the

[48] 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= 6770, all respondents.

[49] 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=6763, all respondents excluding those who don't have a fridge.

[50] 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= 6760, all respondents excluding those who don't have a fridge.

respondents who monitor the temperature of their fridge, 80% reported that they check the temperature of their fridge at least once a month, as recommended by the FSA[51].

Defrosting

The FSA recommends that food is defrosted in the fridge, or, if this is not possible to use a microwave on the defrost setting. Respondents are advised not to defrost foods at room temperature.

Respondents were asked which method they typically use to defrost meat and fish. Around 4 in 10 (41%) respondents reported that they defrost meat or fish in the fridge and 6% reported that they use a microwave. Less than half of respondents (45%) reported that they leave the meat or fish at room temperature and 6% leave the meat or fish in water[52].

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.

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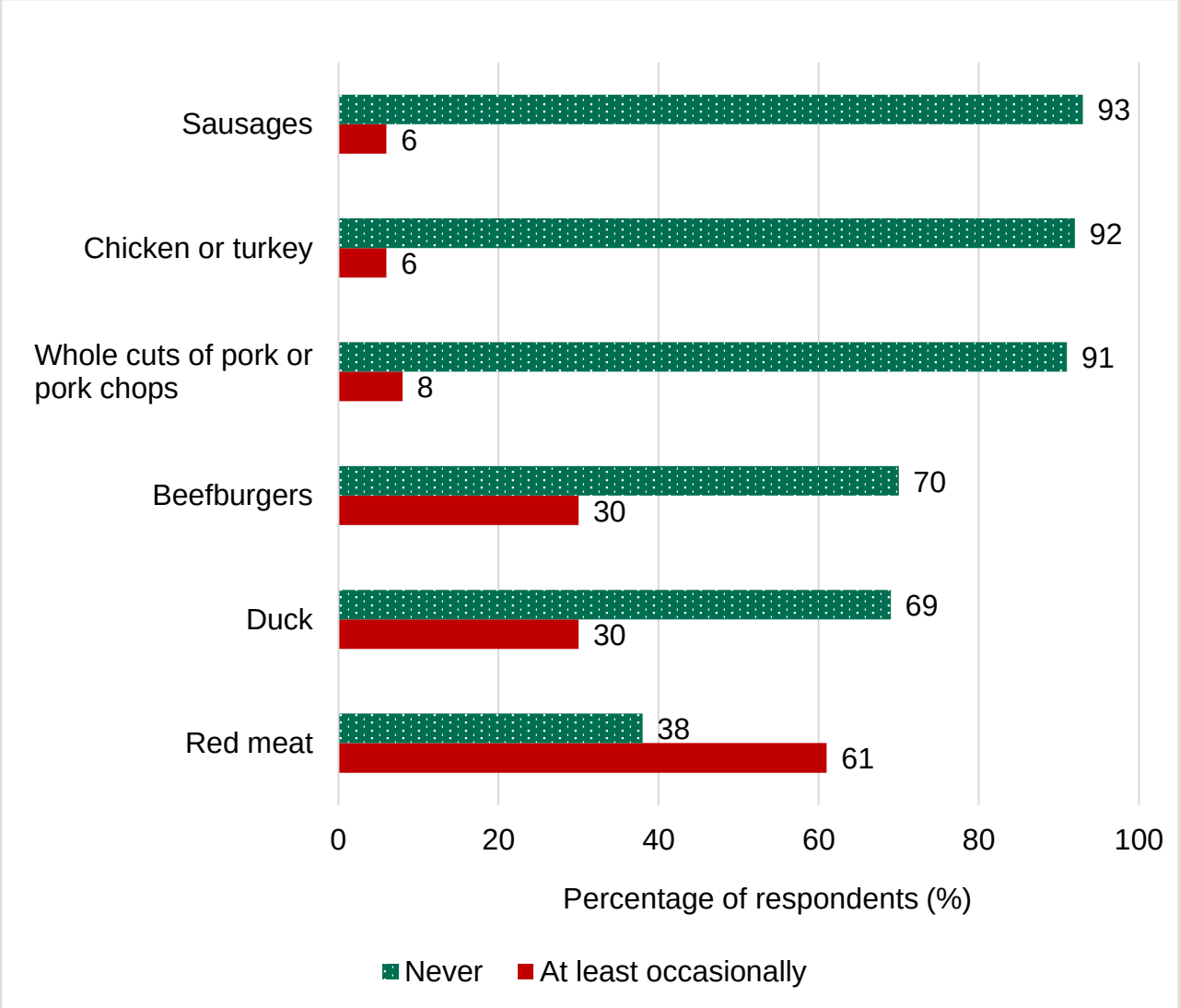
[51] Question: How often, if at all, do you or someone else in your household check the temperature of the fridge? Responses: at least daily, 2-3 times a week, once a week, less than once a week but more than once a month, once a month, four times a year, 1-2 times a year, never/less often, don't know. Base= 3394, all respondents where someone in household checks fridge temperature.

[52] Question: Typically, how do you defrost frozen meat or fish? Responses: place the meat or fish in water, leave the meat or fish at room temperature (e.g. on the worktop on a plate, in a container or in its packaging), leave the meat or fish in the fridge, defrost the meat or fish in the microwave oven, some other way, don't know. Base= 4482, all online respondents and those who answered the version B postal questionnaire who ever do some food preparation or cooking for their household, excluding those who never defrost meat or fish.

The majority (78%) of respondents reported that they always cook food until it is steaming hot and cooked all the way through, however 22% reported that they do not always do this[53].

Figure 16. How often respondents eat different types of meat when it is pink or has pink juices



Source: Food and You 2: Wave 5

[53] 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= 6246, all respondents who ever do some food preparation or cooking for their household.

Respondents were asked to indicate how often they eat different types of meat when the meat is pink or has pink juices[54]. Around 9 in 10 respondents reported that they never eat sausages (93%), chicken or turkey (92%), or whole cuts of pork or pork chops (91%) when it is pink or has pink juices. Most respondents reported that they never eat beef burgers (70%) or duck (69%) when it is pink or has pink juices. However, 61% of respondents reported eating (i.e., at least occasionally) red meat when it is pink or has pink juices (Figure 16)[55].

Respondents were asked how often, if at all, they consume raw oysters or raw (unpasteurised) milk. Most respondents reported that they never eat raw oysters (87%) or raw milk (91%)[56].

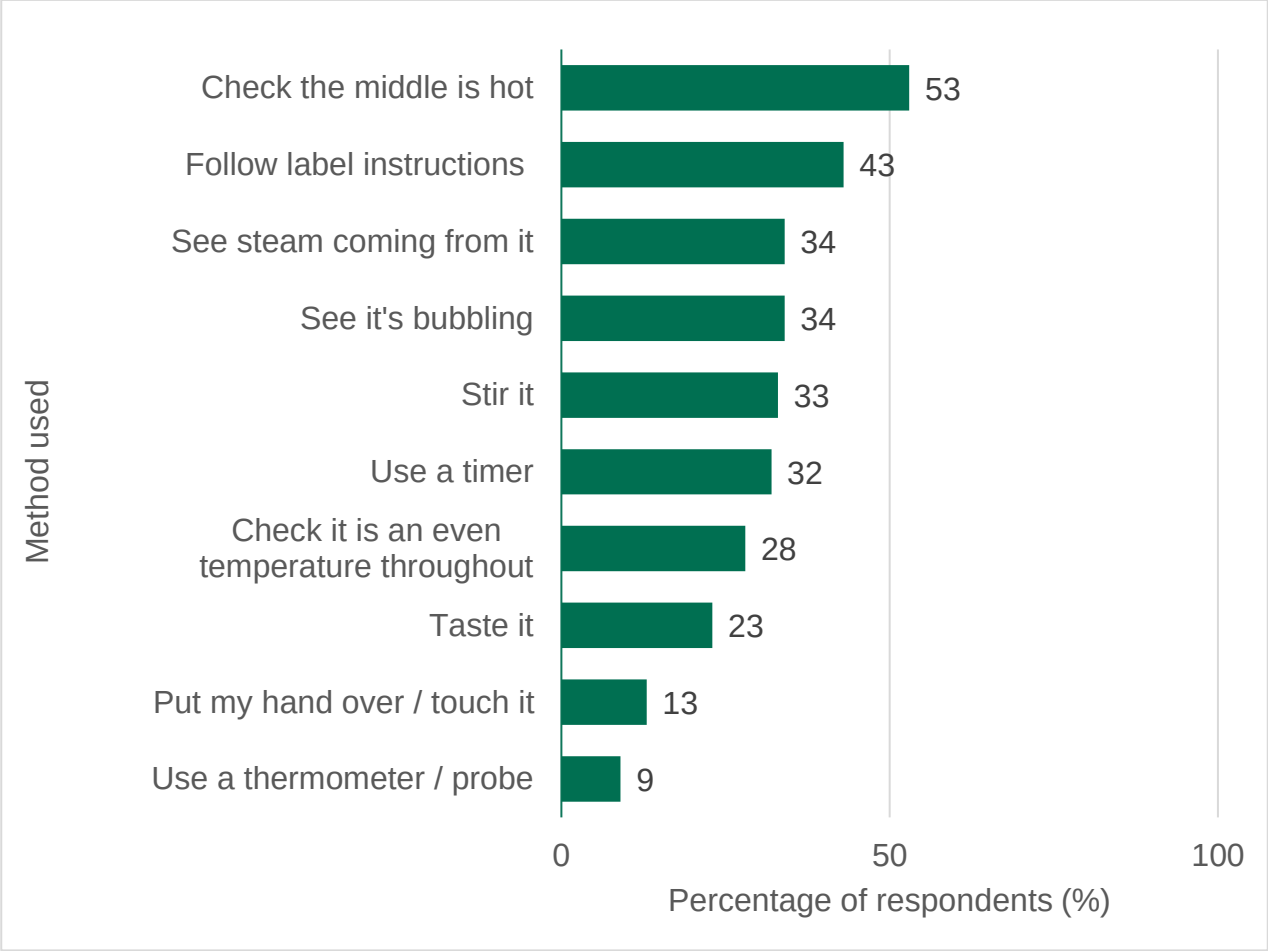
[54] Data on the consumption of red meat, duck, beefburgers, sausages and pork when the meat is pink or has pink or red juices is available from Food and You 2: Wave 1 .

[55] Question: How often, if at all, do you eat...a=chicken or turkey, b=red meat, c=duck, d=beefburgers, e=sausages, f=whole cuts of pork or pork chops… 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 A=6261, B=3637, C= 2815, D=3465, E=3590, F=3355, all respondents who are not vegan, pescatarian or vegetarian, and who do eat A/B/C/D/E/F

[56] Question: How often, if at all, do you eat...b = raw oysters/ c= raw (that is, unpasteurised) milk? Responses: about once a week or more often, about once a fortnight, about once a month, about once every 3 months, about once a year, less than once a year, never, don't know. Base B=6512, C= 6717, all online respondents who are not…B= vegan or vegetarian / C = vegan…and all those who answered the postal questionnaires.

Reheating

Figure 17. How respondents check whether reheated food is ready to eat.



Source: Food & You 2: Wave 5

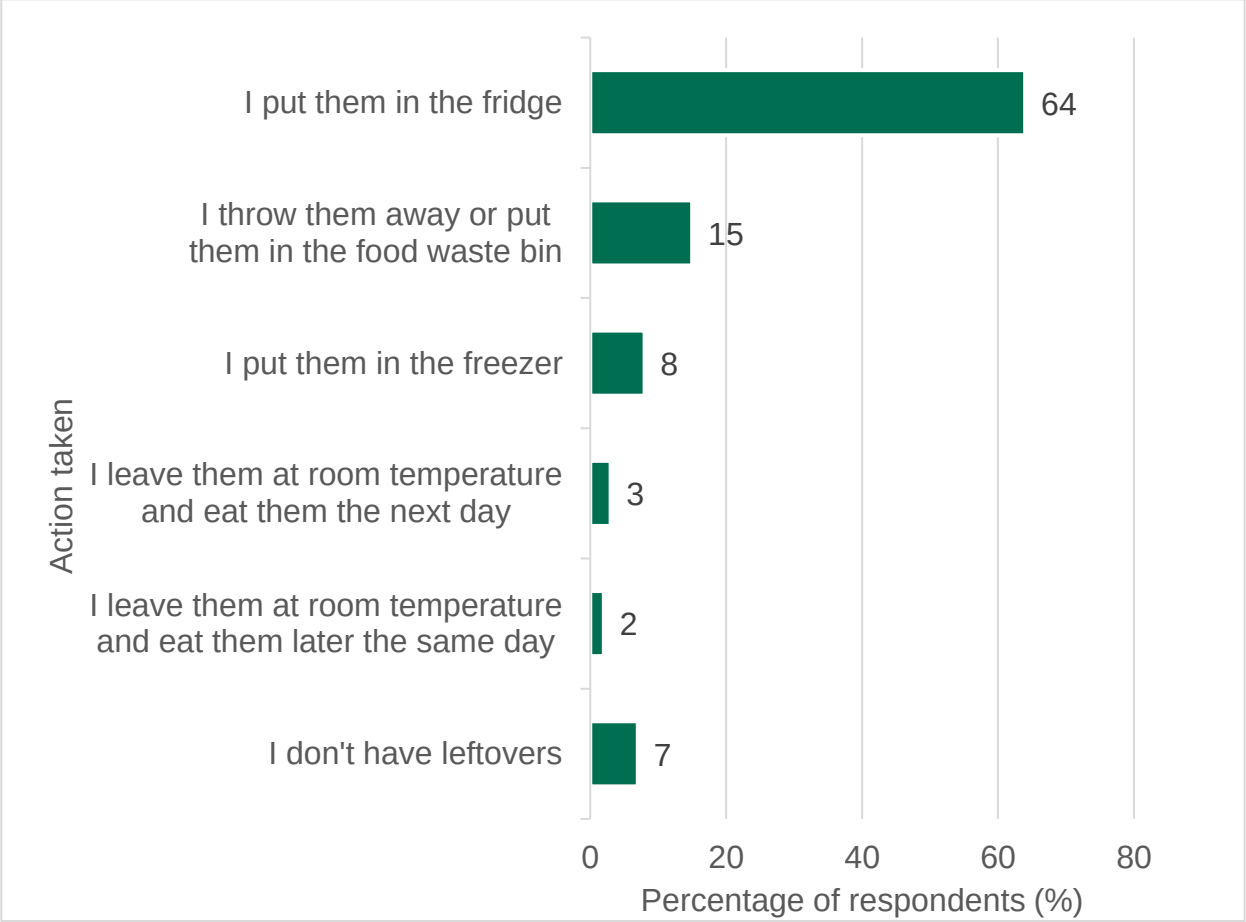
Respondents were asked to indicate how they check food is ready to eat when they reheat it. The most common method was to check the middle is hot (53%), and the least common method was to use a thermometer or probe (9%) (Figure 17)[57].

[57] 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= 5907, all respondents who ever do some food preparation or cooking for their household, excluding ‘I don't reheat food’ and ‘not stated’.

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 (83%), 9% would reheat food twice, and 3% would reheat food more than twice[58].

Leftovers

Figure 18. What respondents do with leftovers following a meal.



Respondents were asked what they generally do with leftovers after a meal. Most respondents reported that they put leftovers in the fridge (64%). Some respondents reported throwing leftovers away or putting them in a food bin (15%). A small proportion

[58] 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= 5918, all respondents who reheat food.

of respondents said they left any leftovers at room temperature and ate them either the same day (2%) or the next day (3%) (Figure 18)[59].

Respondents who reported that they put leftovers in the fridge or freezer were asked to indicate how soon after cooking they would typically put leftovers into the fridge or freezer. Many respondents reported that they typically placed leftovers in the fridge or freezer within 1 hour (33%) or 1-2 hours of cooking (41%). Around a fifth (19%) of respondents put leftovers in the fridge or freezer after more than two hours, and 5% would put leftovers in the fridge or freezer straight away[60].

Respondents were asked how long they would keep leftovers in the fridge for. Around two-thirds (68%) of respondents reported that they would eat leftovers within 2 days, around a quarter (23%) of respondents reported that they would eat leftovers within 3-5 days and 1% would eat leftovers after 5 days or longer[61].

Avoiding cross-contamination

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

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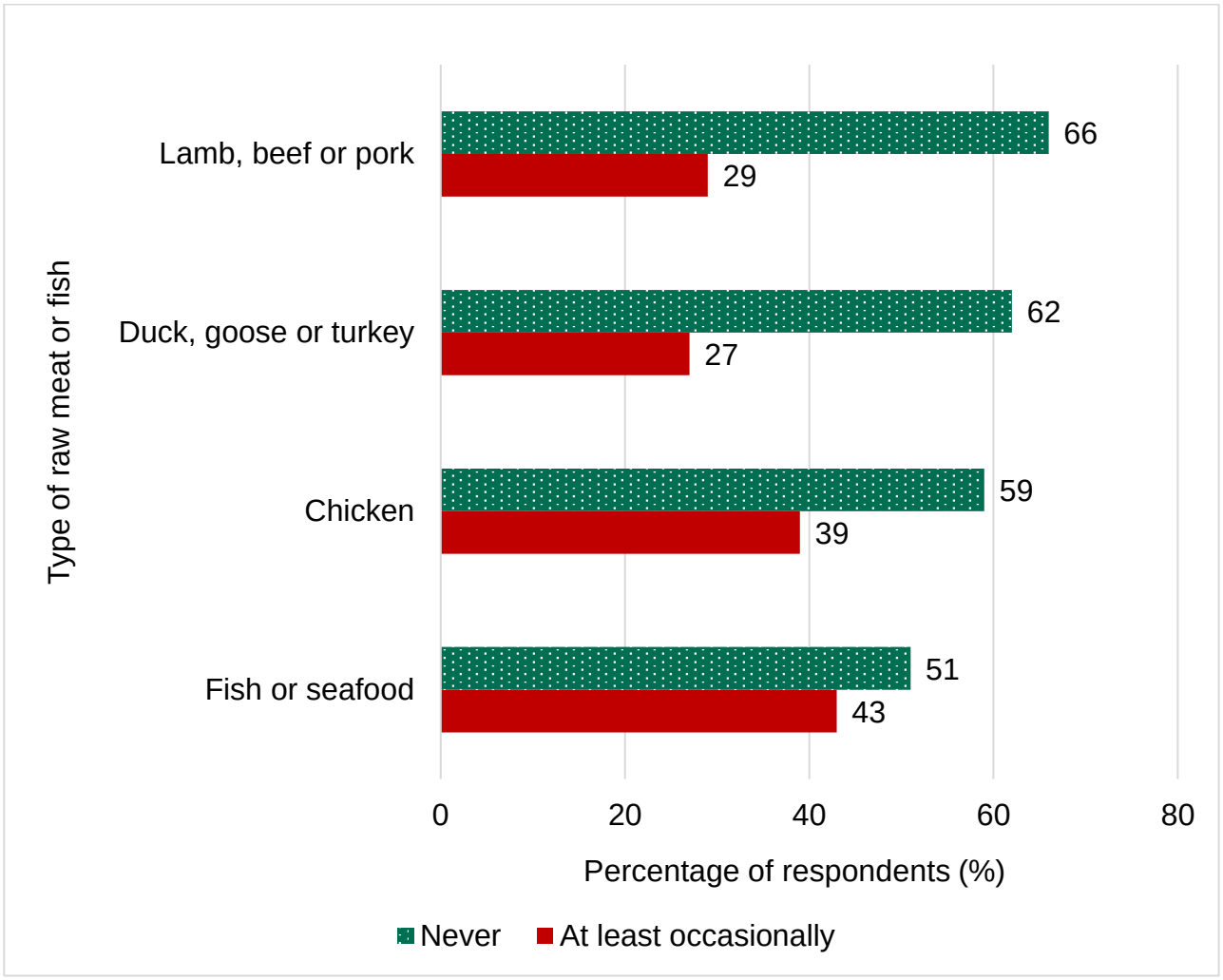
[59] Question: Generally, what do you do with any leftovers following a meal? Responses: I throw them away or put them in the food waste bin, I leave them at room temperature and eat them later the same day, I leave them at room temperature and eat them the next day, I put them in the fridge, I put them in the freezer, I don't have leftovers. Base= 5513, all online respondents, and those answering the version A postal questionnaire.

[60] Question: Typically, how soon after cooking do you put any leftovers in the fridge or freezer? Responses: straight away, within 1 hour of cooking, 1 - 2 hours after cooking, more than 2 hours after cooking**,** don't know. Base= 3897, all online respondents. and all those who completed the version A postal questionnaire, who leave leftovers in a fridge or freezer.

[61] 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= 6770, all respondents.

Figure 19. How often respondents wash different types of raw meat or fish.



Source: Food and You 2: Wave 5

Around 4 in 10 respondents reported that they wash (i.e., at least occasionally or more often) fish or seafood (43%) or raw chicken (39%), 29% of respondents reported that they wash lamb, beef or pork, and 27% of respondents reported that they wash raw duck, goose or turkey (Figure 19)[62].

[62] Question: How often, if at all, do you do the following? a=wash raw chicken, b= wash raw duck, goose or turkey, c= wash raw lamb, beef or pork, d= wash raw fish or seafood. Responses: always, most of the time, about half of the time, occasionally, never, don't know. Base = 6246, all respondents who ever do some food preparation or cooking for their household.

Chopping board use

Respondents were asked how they use chopping boards when they prepare raw meat and other foods. Around half of respondents (53%) reported that they use different chopping boards for raw meat and other foods and 34% of respondents reported that they wash the chopping board between preparing raw meat and other foods. Fewer respondents reported using the same chopping board (without washing) (9%) or turning the chopping board over between preparing raw meat and other foods (4%)[63].

Respondents who use the same chopping board to prepare raw meat and other foods were asked in which order they prepare the foods. Around two-thirds (64%) of respondents reported that they prepare other foods before raw meat. Fewer respondents reported that they prepare raw meat before other foods (20%) and 14% of respondents reported that they don't think about the order in which they prepare foods. [64]

[63] Question: Typically, how do you use chopping boards when preparing a meal with raw meat? Responses: I use a different chopping board for raw meat and other foods, I wash the chopping board between preparing raw meat and other foods, I turn the chopping board over between preparing raw meat and other foods, I use the same chopping board for preparing raw meat and other foods (without washing the board), I don't use chopping boards, I don't cook with raw meat. Base= 4348, all online respondents, and those who answered the version B postal questionnaire, who ever do some food preparation or cooking for their household, excluding those who don't use chopping boards or those who don't cook with raw meat.

[64] Question: When you use the same chopping board to prepare raw meat and other foods, in which order do you prepare food? Responses: I prepare raw meat before other foods, I prepare other foods before raw meat, I don't think about the order I prepare foods, Don't know. Base=312, all online respondents and all those who completed the version B postal questionnaire who do some food preparation or cooking and use the same chopping board to prepare meat and other foods without washing the board.

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 (65%) or away from cooked foods (43%). Around a third of respondents reported storing raw meat and poultry in a sealed container (33%) or covered with film/foil (32%), with fewer keeping the product on a plate (14%)[65].

Most (63%) respondents reported storing raw meat and poultry at the bottom of the fridge, as recommended by the FSA. However, 23% of respondents reported storing raw meat and poultry wherever there is space in the fridge, 12% of respondents reported storing raw meat and poultry in the middle of the fridge, and 6% at the top of the fridge[66].

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.

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[65] 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= 6069, all respondents 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.

[66] 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= 5984, all respondents 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.

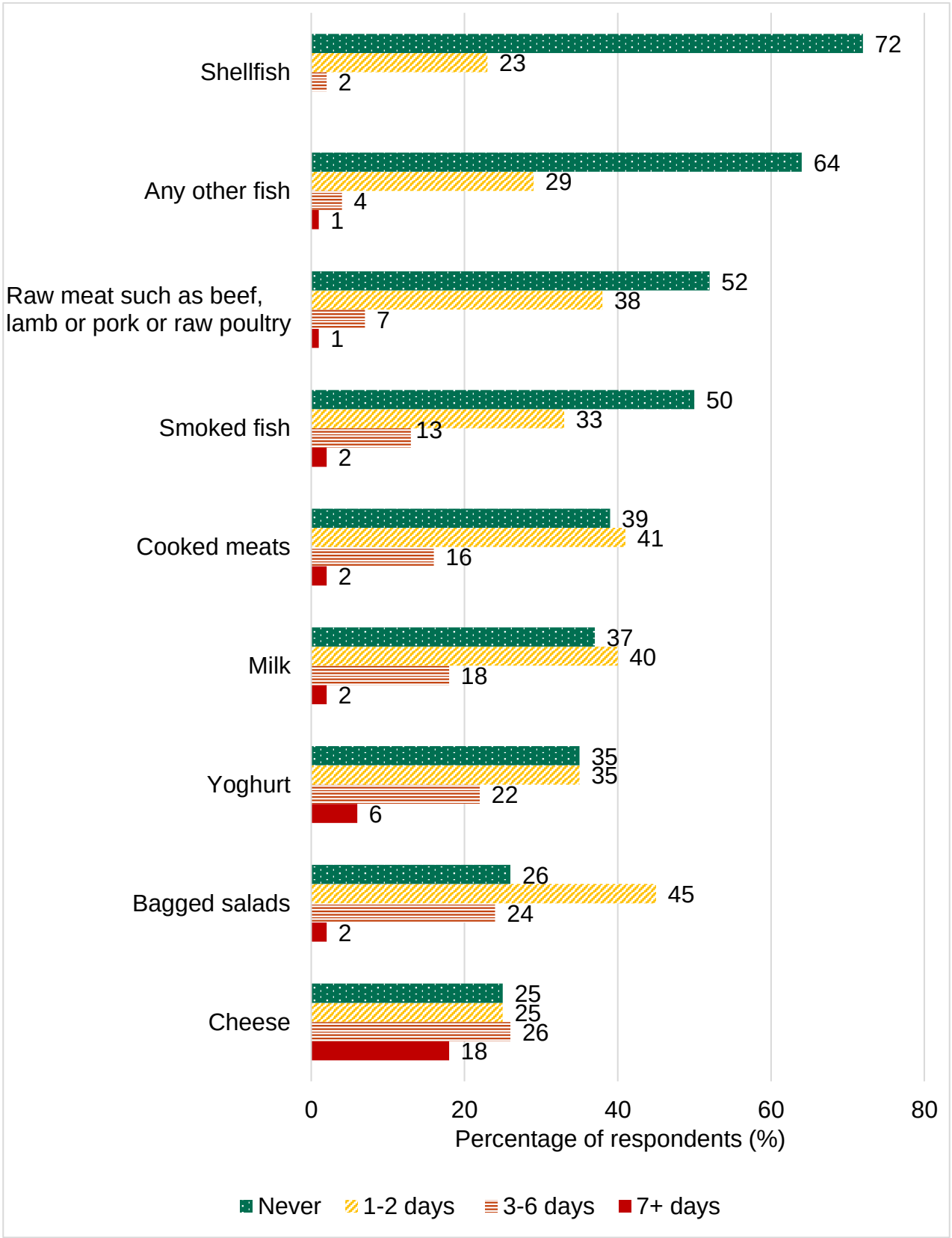
Respondents were asked to indicate which date shows that food is no longer safe to eat. Two-thirds (66%) of respondents correctly identified the use-by date as the information which shows that food is no longer safe to eat. However, some respondents identified the best before date (9%) as the date which shows food is no longer safe to eat[67].

Around two-thirds (65%) of respondents reported that they always check use-by dates before they cook or prepare food. Around a third (32%) of respondents reported checking use-by less often (i.e., most of the time or less often), and just 1% reported never checking use-by dates[68].

[67] 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= 6770, all respondents.

[68] 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= 6246, all respondents who ever do some food preparation or cooking for their household.

Figure 20. How long after the use-by date respondents would consume different foods.



Source: Food & You 2: Wave 5

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. Of these respondents, most reported that they would not eat shellfish (72%), or other fish (64%) past the use-by date. Around half of respondents would not eat raw meat (52%) or smoked fish (50%) past the use-by date. When foods are eaten past the use-by date, they are typically eaten 1-2 days after the use-by date (for example, 45% of respondents would eat bagged salads 1-2 days after the use-by date). Of the specified foods, respondents reported that they would be most likely to eat bagged salad (71%) and cheese (69%) after the use-by date. Around 6 in 10 respondents would eat yoghurt (63%), milk (59%) and cooked meats (59%) after the use-by date. Around 2 in 10 (18%) respondents would eat cheese 1 week or more after the use-by date (Figure 20)[69].

Respondents were asked what they usually do with food they have bought which is about to go out of date. Around a third of respondents would eat the food (36%) or freeze it by the use-by date (29%). Fewer respondents would throw away the food after the use-by date (11%) or keep it and eat it after the use-by date (7%), however, 15% of respondents reported that it varies too much to say[70].

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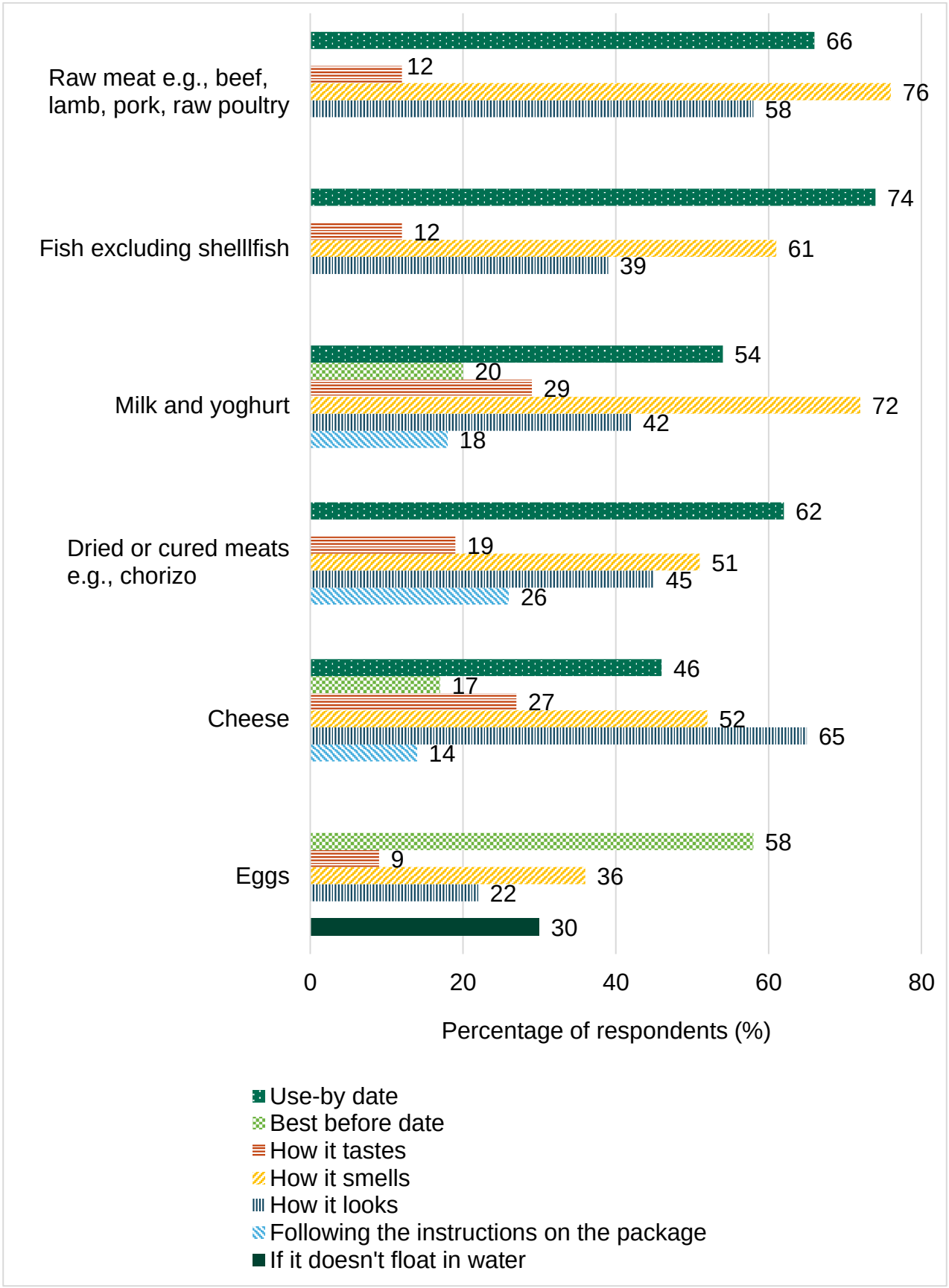
[69] Question: When, if at all, is the latest you would eat or drink the following items after their use-by date? a= cooked meats, b=smoked fish, c=bagged salads, d=cheese, e=milk, f= raw meat such as beef/pork/lamb/raw poultry, g=shellfish, h=any other fish, i=yoghurt. Responses: 1-2 days after the 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= 4793, B=3744, C=4788, D=5033, E=4976, F= 4686, G=3248, H=4229, I=4798, all online respondents and those who completed the version B postal questionnaire, who eat A/B/C/D/F/F/G/H/I.

[70] Question: When food you have bought is about to go past its use-by date, which of the following do you usually do? Responses: I eat it by the use-by date, I freeze it by the use-by date, I throw it away (after the use-by date), I keep it and eat it after the use-by date, it varies too much to say, I don't check use-by dates. Base = 6770, all respondents.

Figure 21. How respondents tell whether different foods are safe to eat or cook with.



Source: Food & You 2: Wave 5

Respondents were asked to indicate how they tell whether different foods are safe to eat or cook with. The method which respondents used to assess whether food is safe to eat or cook varied by food type. Smell was most often used to assess raw meat (76%) and milk and yogurt (72%). Respondents most often relied on the use-by date to assess fish (74%) and dried or cured meats (62%). Eggs were typically assessed using the best before date (58%) and cheese was most often assessed by how it looks (65%) (Figure 21).[71].

'Eat within' information

Some foods have instructions on the label which advise that the food should be eaten within a few days of opening. Respondents were asked to indicate how often they follow this recommendation. Around a quarter (26%) of respondents reported that they always follow the on-pack instruction. However, most respondents (68%) reported that they do not always (i.e., most of the time or less often) follow the on-pack instructions and 5% reported that they never do this[72].

Awareness of antimicrobial resistance (AMR) and antibiotic resistance

Antimicrobial resistance (AMR) is when antimicrobial drugs, such as antibiotics, stop working effectively on the bacteria they are designed to kill. Bacteria which are resistant

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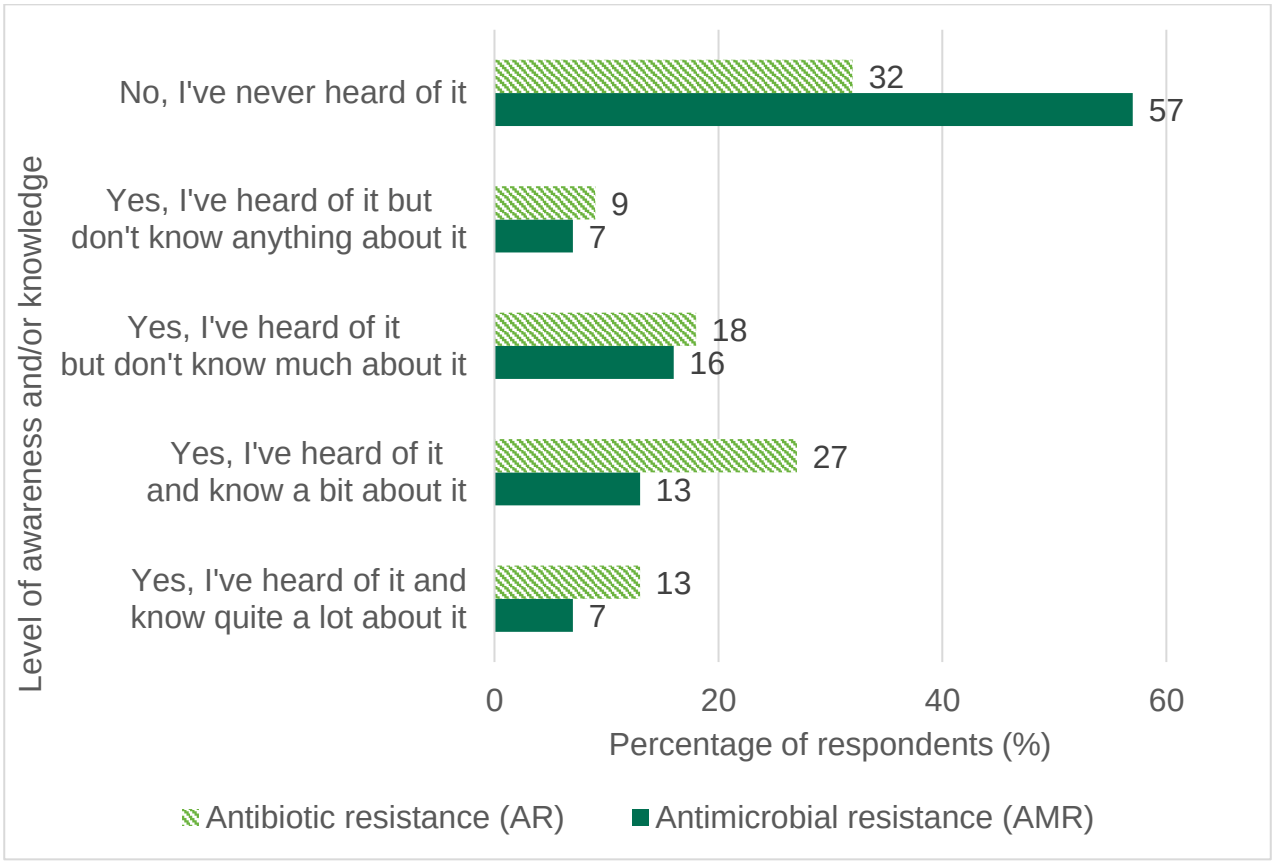
[71] Question: How do you tell whether it is safe to eat or cook with...? a) raw meat like beef, lamb, pork or poultry, b) milk and yoghurt, c) cheese, d) eggs, e) fish (excluding shellfish), f) dried or cured meats. responses: how it looks; how it smells; how it tastes; use-by date; best before date; b/c/f) follow pack instructions e.g. with within 3 days of opening; d) it doesn't float in water. Base A=4922, B=5068, C= 5091, D=5026, E=4136, F=4234, all online respondents who completed version B of the postal questionnaire, excluding those who don't eat/cook…A/B/C/D/E/F.

[72] Question: Some foods have an instruction to eat the food within a few days of opening on the label (e.g. `consume within 3 days of opening'). How often, if at all, do you follow instructions on food packaging which tell you how long food should be stored once opened? Responses: always, most of the time, about half of the time, occasionally, never, don't know. Base=6246, all respondents who ever do some food preparation or cooking for their household.

to antimicrobial drugs can be spread to humans in the food chain in various ways including cross-contamination when food is handled without the right food hygiene practices.

Figure 22. Awareness and knowledge of antimicrobial resistance and antibiotic resistance



Source: Food and You 2: Wave 5

Respondents were asked if they had ever heard of antimicrobial resistance (AMR) or antibiotic resistance. Respondents were more likely to report awareness and knowledge of antibiotic resistance than antimicrobial resistance (AMR). For example, 57% of

respondents had never heard of AMR and 32% of respondents had never heard of antibiotic resistance (Figure 22)[73].

Chapter 7: Food-related behaviours and eating habits

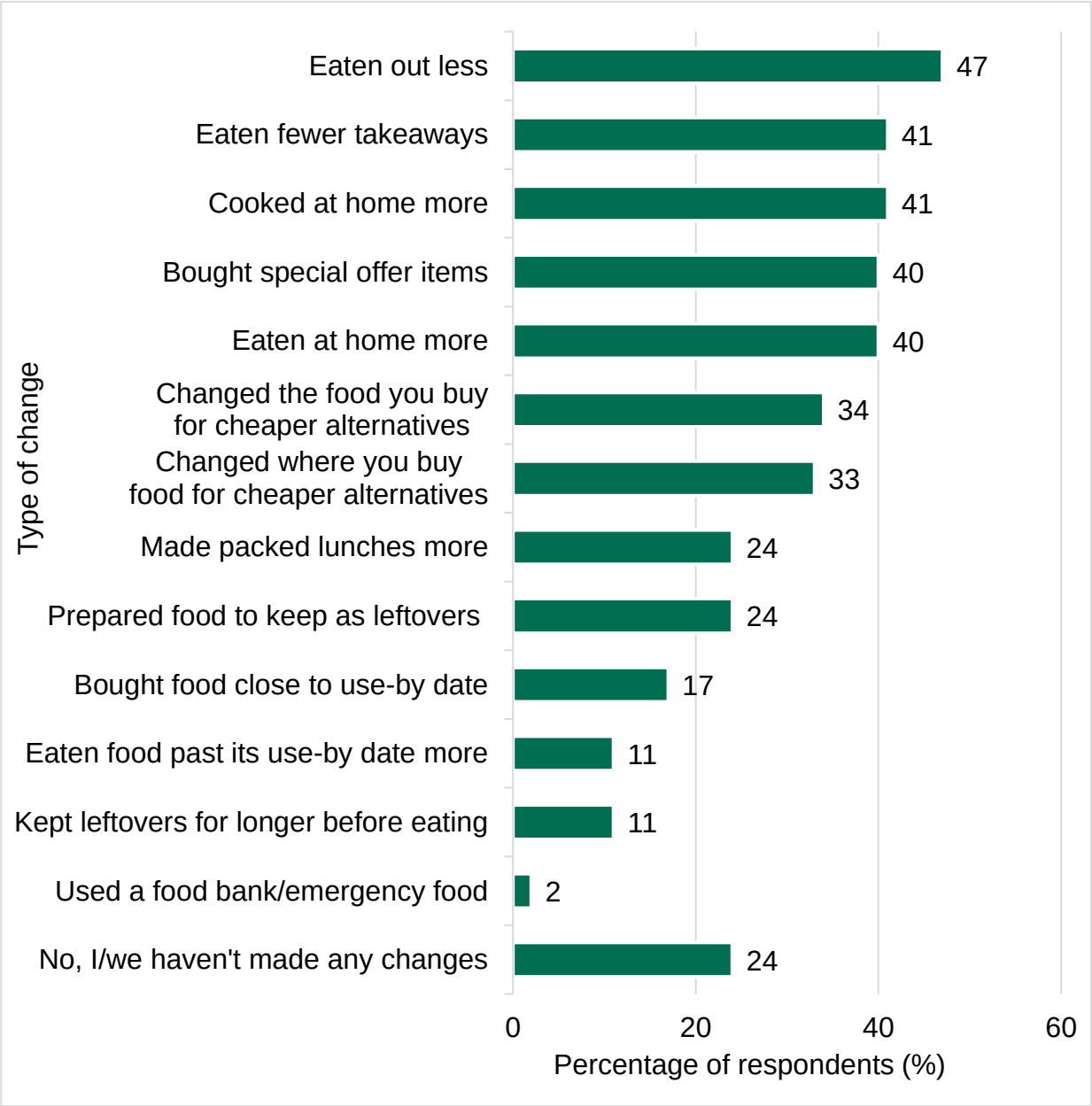
Introduction

The FSA is working to protect public health and consumers' wider interests. To monitor a range of food-related behaviours, Food and You 2 asks respondents about their food shopping habits, food safety in the home, whether specific foods are eaten, and if their eating habits have changed.

[73] Question: Have you ever heard of...A/B? A) Antimicrobial resistance (AMR)? B) Antibiotic resistance? 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= 5298, all online respondents, and those answering the version B postal questionnaire.

Changes in eating habits

Figure 23. Changes in eating habits in the last 12 months.



Eating habits had changed for most respondents with only 24% of respondents indicating that there had been no change in their eating habits in the last 12 months. The most common changes related to what and where respondents ate (47% ate out less, 41% ate fewer takeaways, 41% cooked more at home, 40% ate at home more), reducing food costs (40% bought items on special offer, 34% changed the food they buy for cheaper alternatives, 33% changed where they buy food for cheaper alternatives) and increased food management behaviours (24% prepared food that could be kept as leftovers, 24%

made more packed lunches). In addition, 17% of respondents reported that they had bought food close to its use-by date more, 11% had eaten food past its use-by date more and 11% kept leftovers for longer before eating (Figure 23)[74].

Respondents who reported a change in their eating habits in the last 12 months were asked to indicate why their eating habits had changed. The main causes of reported changes in eating habits were financial reasons (69%), health reasons (47%), and because of COVID-19 and lockdown (41%). A small proportion of respondents reported changes in eating habits due to food safety reasons (i.e., to avoid food poisoning) (6%)[75].

[74] Question: Have you, or has anyone in your household, made any of these changes to your eating habits in the last 12 months? Responses: eaten out less, eaten at home more, cooked at home more, eaten fewer takeaways, bought items that were on special offer more, prepared food that could be kept as leftovers more, changed where you buy food for cheaper alternatives, changed the food you buy to cheaper alternatives, made packed lunches more, bought food close to its use-by date more, eaten food past its use-by date more, kept leftovers for longer before eating, used a food bank/emergency food, other, no, I/we haven't made any changes. Base= 4041, all online respondents.

[75] Question: Thinking about the changes to eating habits that you have made in the last 12 months, why did you make these changes? Responses: financial reasons, health reasons, food safety reasons (i.e. to avoid food poisoning), due to the bad or unpleasant physical reaction that certain foods cause, because of lockdown/covid-19, other, prefer not to say. Base= 3199, all online respondents who have made at least one change to their eating habits in the last 12 months.

The likelihood changes to eating habits were made due to financial reasons varied between different categories of people in the following ways:

- Age group: respondents aged between 25 and 54 years (for example, 84% of those aged 25-34 years) were more likely to have made changes to eating habits due to financial reasons compared to those aged 16-24 years (63%), and those aged 65-79 years (48%) were least likely to have made changes to eating habits due to financial reasons.
- Annual household income: respondents with a lower income were more likely to have made changes to eating habits due to financial reasons compared to those with a higher income. For example, 74% of those with an annual income of less than £19,000 had made changes to eating habits due to financial reasons compared to 55% of those with an annual income of more than £96,000.
- NS-SEC: respondents in semi-routine and routine occupations (78%) and lower supervisory and technical occupations (76%) were more likely to have made changes to eating habits due to financial reasons compared to those in most other occupational groups. Full-time students (58%) were least likely to have made changes to eating habits due to financial reasons.
- Region (England): the likelihood respondents made changes to eating habits due to financial reasons varied by region. For example, respondents in the South-West of England (79%) and North-West of England (76%) were more likely to have made changes to eating habits due to financial reasons compared to those in London (62%) and the West Midlands (63%).
- Food security: respondents with very low (97%) or low (82%) food security were more likely to have made changes to eating habits due to financial reasons compared to those with marginal food security (71%), and those with high food security (60%) were least likely to have made changes to eating habits due to financial reasons.
- Ethnic group: 71% of white respondents have made changes to eating habits due to financial reasons compared to 60% Asian or Asian British respondents.
- Responsibility for cooking: respondents who were responsible for cooking (70%) were more likely to have made changes to eating habits due to financial reasons compared to those who do not cook (55%).

Annex A: Food and You 2: Wave 5

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.

Previous publications in this series include:

- 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)

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 5 was conducted between 26th April and 24th July 2022.

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.

After four weeks of fieldwork, the number of completed online surveys was lower in Wave 5 than at the same point in previous waves meaning that the sample was likely to fall below the target of 4,000 households. To increase the sample, the invitation letters were sent to 2,000 randomly selected addresses from the reserve sample. Further details are available in the Technical Report.

The sample of main and reserve addresses[76] 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 'Version A' and 'Version B' postal questionnaires. Key modules were included in both versions of the survey. 'Version A' included additional questions about online platforms and food

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

hypersensitivities. ‘Version B’ included additional questions for the ’Eating at Home’ and ‘Food We Can Trust’ modules. 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, an ethnographic study which used a combination of observation, video observation and interviews to gain insight into domestic kitchen practices. This study will be updated through Kitchen Life 2, which is in progress now and due to report in 2023.

The minimum target sample size for the 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 5 a total of 6,770 adults from 4,727 households across England (3,424 adults), Northern Ireland (1,875 adults), and Wales (1,471 adults), completed the survey. An overall response rate of 25.4% was achieved (England 30.7%, Wales 29.1%, Northern Ireland 27.2%). Sixty per cent (59.7%) of respondents completed the survey online and 40.3% completed the postal version of the survey. The postal responses from 105 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 5 data are available in the Technical Report.

The data have been checked and verified by four members of the Ipsos research team and two 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 Ipsos. Quantum (statistical software) was used by Ipsos 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

1. 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.

2. 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).

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. 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.

References

- Advisory Committee for Social Science (ACSS)
- Census 2011. Office of National Statistics
- Duffy, B., Smith, K., Terhanian, G., & Bremer, J. (2005). Comparing data from online and face-to-face surveys. *International Journal of Market Research*, *47*(6), 615-639. https://doi.org/10.1177/147078530504700602
- Food and You (2010-2019)
- Food Standards Agency. Introducing Food and You 2. (March, 2020). https://www.food.gov.uk/news-alerts/news/introducing-food-and-you-2
- Gaskell, G. (2019). Review of FSA's Food and You Survey. 2 April 2019 ACSS Meeting – Food and You Review Report (Paper 3.5).
- United States Department of Agriculture (USDA). Food security.
- Wills, W., Meah, A., Dickinson, A., & Short, F. (2013). Domestic kitchen practices: Findings from the 'Kitchen Life' study. University of Hertfordshire Report for the Food Standards Agency
- World Food Summit 1996, Rome Declaration on World Food Security.

For enquiries about this publication, contact the Food Standards Agency.

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