

Key findings: online survey

Respondent characteristics

A nationally representative sample of 2,921 undergraduate university students took part in the survey during February 2022. Quotas were set based on Higher Education Statistics Agency data, by gender, ethnicity, region and parental SEG.

- Age: 44% of the respondents were aged 17-19 years, 39% aged 20-22 years and 17% above 23 years old ([footnote 1](#)).
- Ethnic group or background: 70% of respondents identified as English, Welsh, Scottish, Northern Irish or British, 6% as Indian, 4% as Pakistani, 3% as Chinese, and 3% as African ([footnote 2](#)).
- Annual income: 45% reported an income of less than £13,000, 13% reported having £13,000-£18,999, 8% having £19,000-£25,999 per year and 23% stating to have an income greater than £26,000 ([footnote 3](#)).
- Parental socio-economic group: 21% reported the chief income earner in their parental household was a professional/higher managerial (e.g. doctor, lawyer, chairman or managing director of medium or large firm), 34% reported a manager/ senior administrator as their chief income earner (e.g. senior manager, owner of small business, head teacher), 14% identified having a supervisor / clerical / skilled non-manual profession (e.g. teacher, secretary, junior manager, police constable), and 26% in the skilled manual worker, semi-skilled, unskilled manual worker, receiving state benefits for sickness or other category ([footnote 4](#)).
- Country: 80% lived in England, 13% lived in Scotland, 5% lived in Wales, and 2% in Northern Ireland ([footnote 5](#)).
- University type: 40% of respondents studied at Russell Group universities, 22% studied at pre-1992 universities, 34% studied at post-1992 universities and 5% studied at special institutions, UCAS FEs and non-UCAS FEs ([footnote 6](#)).
- Year of undergraduate study: 41% of respondents were 1st year students, 29% were 2nd year students, 20% were 3rd year students, 7% were 4th year students and 2% were 5th year students ([footnote 7](#)).
- Mode of study: 97% of respondents studied full-time and 3% studied part-time ([footnote 8](#)).
- Diet: 50% of respondents reported that they were an omnivore, 18% reported that they were mainly vegetarian but occasionally eat meat (e.g., flexitarian), 10% reported that they were vegetarian, 7% reported that they were pescatarian, and 5% reported that they were mainly vegan ([footnote 9](#)).
- Term-time accommodation: 33% of respondents lived in privately rented accommodation, 31% live in halls of residence without catering, 15% live with parents or guardians and 17% live in halls with catering. First year students (52%) were more likely to live in halls of residence without catering compared to other year groups, with only 15% of 4th year students living in halls ([footnote 10](#)).
- Student kitchens: 17% were shared by 2 people, 37% of student kitchens were shared by 3-4 people, 27% were shared by 5-6 people, and 14% were shared by 7 or more people ([footnote 11](#)).

Food safety behaviours

Cleaning

Almost two thirds (61%) of respondents reported that they did not always wash their hands before eating and half (49%) reported not always washing their hands before preparing or cooking food.

A third of respondents (33%) reported that they do not always wash their hands immediately after handling raw meat, poultry or fish and 60% reported that they did not always wash their after handling frozen chicken products.

Respondents were asked what they typically use when washing dishes at their term-time accommodation. Most respondents reported that they used washing-up liquid (72%), a sponge or cloth (66%) and/or hot water (60%) when washing dishes. However, almost 1 in 10 used handwash or soap (9%) and 7% used their hands rather than sponge or cloth when washing dishes ([footnote 12](#)).

Around 1 in 10 respondents reported that they store (12%) or wash (11%) dirty cutlery, crockery, or pans in their bedroom or in a non-kitchen area ([footnote 13](#)).

Respondents were asked how often, if at all, they experienced a given number of issues with their kitchen sink. Most respondents reported that often (i.e., about once a week or more often): their kitchen sink was filled with dirty dishes, pots or pans (70%), was dirty, greasy or grimy (56%), had left over food in it (60%) ([footnote 14](#)).

When respondents were asked how often they replace their dish sponge or cloth, almost a third (32%) reported that they did this about once a week or more often, almost two-thirds (62%) did this two or three times a month or less often, and 2% reported that they never replace their dish sponge or cloth ([footnote 15](#)). Conversely, when respondents were asked how often they replace their tea towel with a clean one, around 6 in 10 (61%) respondents did this about once a week or more often and around 3 in 10 (29%) did this two or three times a month or less often, however 6% of respondents reported that they do not use a tea towel ([footnote 16](#)).

Chilling

Fridge access and space

The majority (88%) of respondents had access to a fridge in their shared kitchen, however 12% did not report that they had access to a fridge ([footnote 17](#)). A third (33%) reported that the type or quality of food they purchase is limited by the amount of fridge space available ([footnote 18](#)).

Of respondents who had access to a fridge:

- Almost a third (29%) reported that there was not enough space in the fridge to store their food ([footnote 19](#)).
- Most stored their food in an allocated area in their fridge, on either an allocated shelf (48%) or drawer (13%), however over a quarter (28%) stored food wherever there was space, and only 21% stored different types of food in specific areas
- of the fridge (for example, ready-to-eat foods on the top shelf) ([footnote 20](#)).
- Around two-thirds (65%) reported that their fridge had contained food past the use-by date, 64% reported leftovers which had been left for more than two days and 37% reported uncovered (cooked or raw) meats ([footnote 21](#)).
- Around 4 in 10 (42%) did not check the temperature of their fridge, 33% reported that someone in their accommodation checks the temperature of the fridge and 6% did not need to as the fridge contained a temperature alarm ([footnote 22](#)). Of those who check the temperature of their fridge, almost two-thirds (62%) reported doing this at least once a week ([footnote 23](#)). Though many use recommended methods to check the temperature of their fridge (34% check the temperature display built into the fridge; 13% put a thermometer

in the fridge) many use other methods (24% check the setting/gauge; 14% check for ice or condensation; 12% feel food inside to see if it is cold) ([footnote 24](#)).

All respondents were asked what temperature the inside of a fridge should be, 61% of respondents reported that it should be between 0-5 degrees Celsius, in line with FSA recommendations, however 22% reported that the temperature should be above 5 degrees Celsius ([footnote 25](#)).

Freezing and defrosting

The majority (85%) of respondents had access to a freezer in their shared kitchen ([footnote 26](#)). Of these, 59% agreed there was enough space to store their food in the freezer ([footnote 27](#)).

However, 38% of respondents reported that the type or quantity of food they purchase, prepare, or cook is limited by the amount of freezer space available ([footnote 28](#)).

Almost two-thirds (64%) of respondents reported that they had enough space in their kitchen to cool and defrost food ([footnote 29](#)). However, almost 1 in 10 (9%) respondents reported that they defrost or cool food in their bedroom or in a non-kitchen area ([footnote 30](#)).

Respondents were asked which method they use to defrost meat and fish. Less than a third (29%) of respondents reported that they defrost meat or fish in the fridge and 11% reported that they use a microwave, as recommended by the FSA. Around a third (34%) of respondents reported that they leave the meat or fish at room temperature and 13% leave the meat or fish in water ([footnote 31](#)).

Cooking

Most respondents agreed that there was enough space in their kitchen for food preparation (71%) and food storage (68%). However, some respondents reported that the type or quantity of food which they purchase, prepare or cook is limited by the food preparation area (16%) or cooking area (14%) available ([footnote 32](#)). 1 in 10 respondents prepare food (10%) and 8% cook food in a bedroom or non-kitchen area ([footnote 33](#)).

Around 6 in 10 (61%) respondents reported that they always cook food until steaming hot and cooked all the way through, however 39% reported that they do not always do this ([footnote 34](#)). When respondents were asked to indicate how often they eat different meats when they are pink or have pink juices, the majority reported that they never eat chicken or turkey (80%), sausages (77%), pork (72%), or duck (60%) when it is pink or has pink juices. However, fewer respondents reported never eating beef burgers (55%) or red meat (45%) when it is pink ([footnote 35](#)).

Cross-contamination

Over half (54%) of respondents reported washing raw chicken at least occasionally ([footnote 36](#)).

Around 4 in 10 (38%) respondents reported that they store raw meat and poultry at the bottom of the fridge, as recommended by the FSA, however the majority (61%) do not do this (for example, 37% store meat wherever there is space) ([footnote 37](#)), with only 22% of respondents storing raw meat away from cooked foods ([footnote 38](#)).

Use-by dates and 'eat within' information

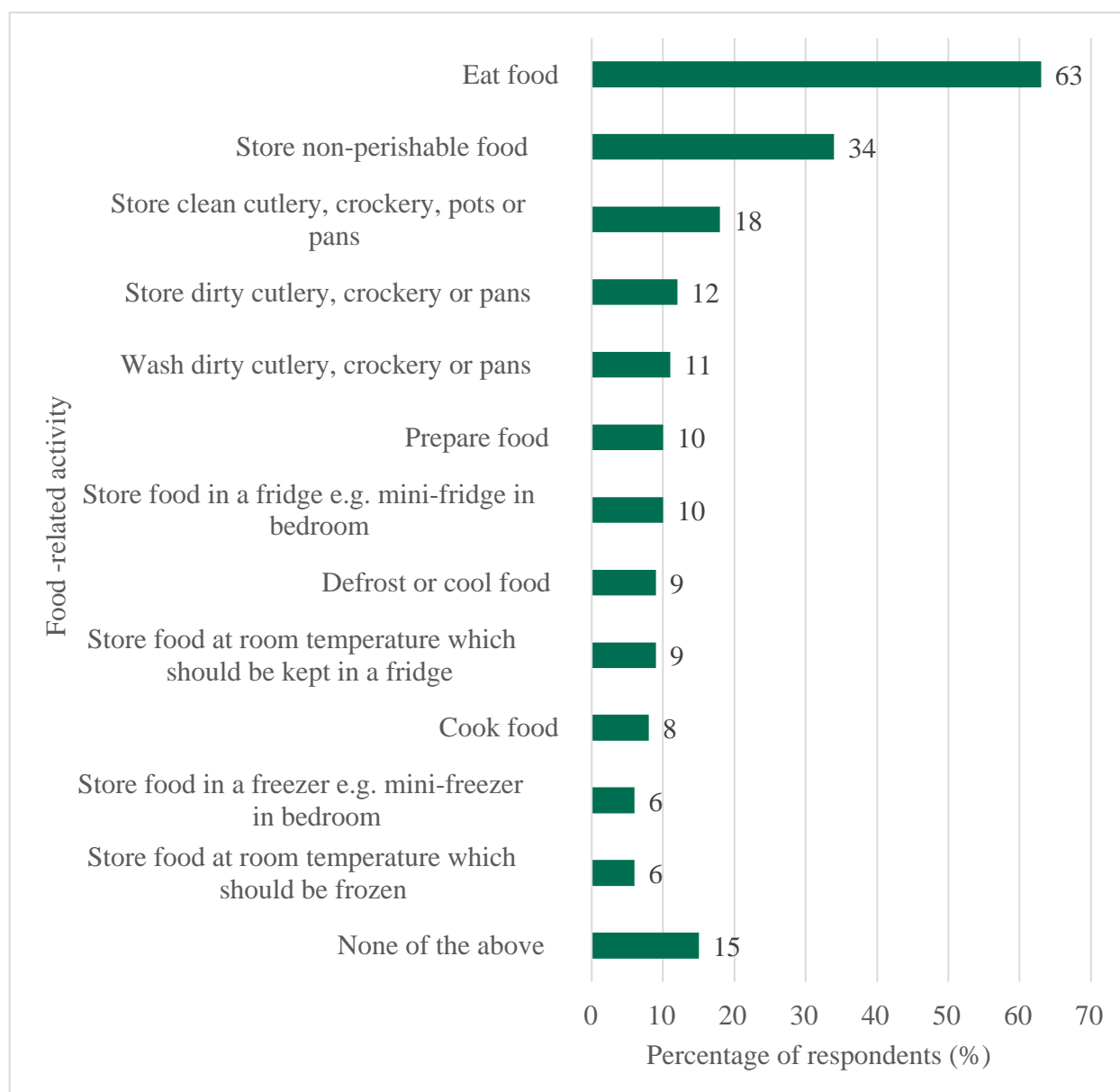
In accordance with FSA recommendations, 60% of respondents identified the use-by date as the information which shows that food is no longer safe to eat. However, 25% of respondents identified the best before date as the date which shows food is no longer safe to eat ([footnote 39](#)), and less than half (45%) of respondents reported that they always check use-by dates before they prepare or cook food ([footnote 40](#)).

Respondents were asked if they had eaten some types of food, from a given list, past the use-by date in the past month. Of those who had eaten each type of food in the past month, over half (51%) of respondents had eaten bagged salad past the use-by date, almost 4 in 10 had eaten cheese (38%), milk (37%) or plant-based milk (37%) past the use-by date. Almost a third of respondents had eaten cooked meats (32%), or tofu or meat substitutes (32%) past the use-by date ([footnote 41](#)).

Respondents were asked how often, if at all, they followed the 'eat within' (for example, 'eat within 3 days of opening') information for different types of food. Of those who eat each type of food, around three-quarters (77%) of respondents had eaten bagged salad or cheese (74%) after the 'eat within' period, approximately 7 in 10 respondents had plant-based milk (71%), tofu or meat substitutes (69%) or cooked meat (68%) after the 'eat within' period. Over 6 in 10 respondents had consumed milk (64%), or smoked fish (63%) after the 'eat within' period and around half (49%) had eaten raw meat after the 'eat within' period ([footnote 42](#)).

Food-related activities in non-kitchen areas

Figure 2. Percentage of respondents who do food-related activities in non-kitchen area



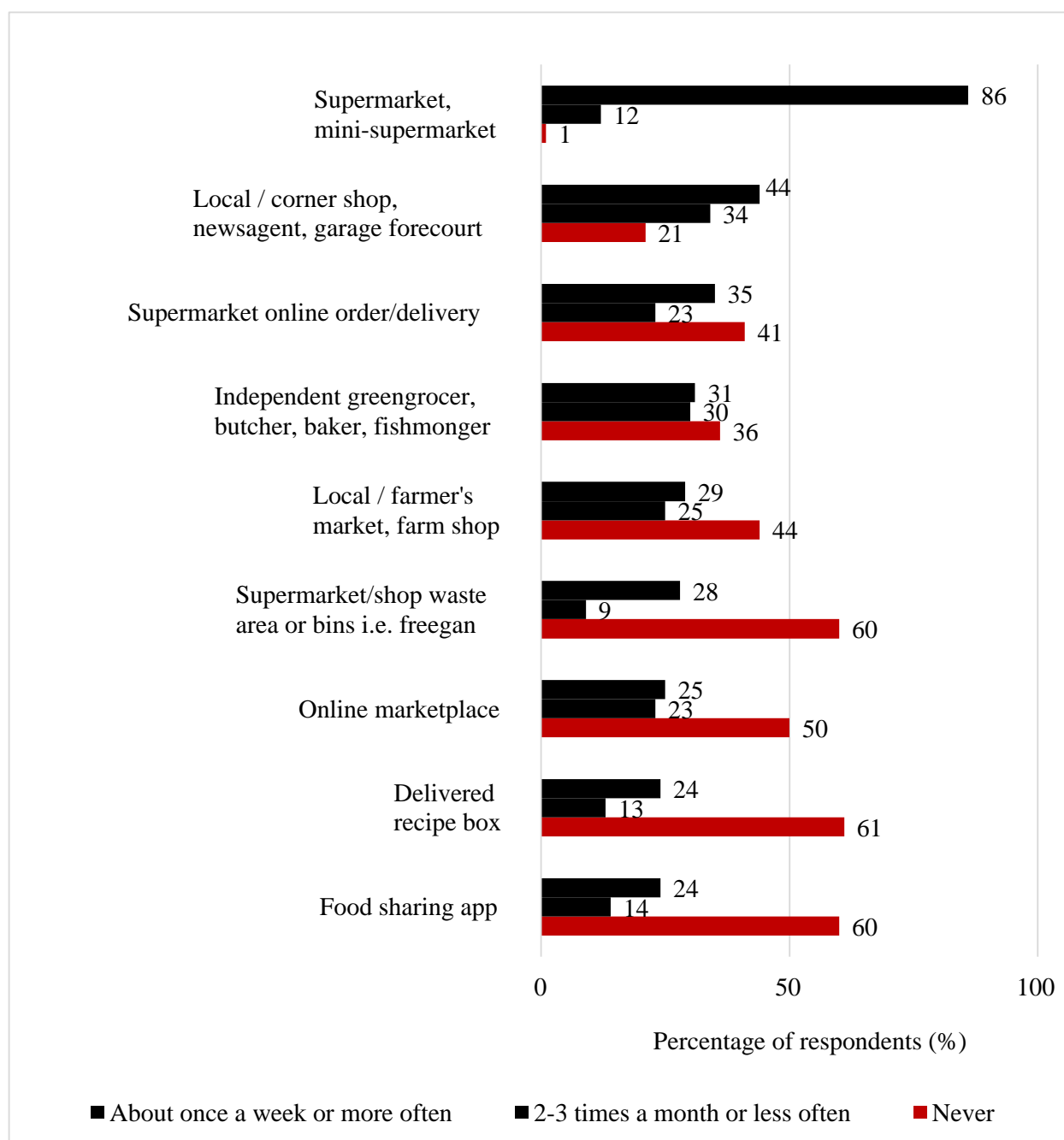
Source: University student kitchen survey 2022

Respondents were asked which, if any, food-related activities they ever do in non-kitchen areas at their term-time accommodation. Almost two-thirds (63%) of respondents reported that they ate food in their bedroom or non-kitchen area. Around 1 in 10 respondents reported that they prepare (10%), defrost or cool (9%) or cook (8%) food in their bedroom or non-kitchen area.

Bedroom or non-kitchen areas are also used to store different types of food. Around a third (34%) reported that they store non-perishable foods (for example, canned foods, pasta, rice) in their bedroom or non-kitchen area. However, a similar percentage of respondents reported that they store chilled food (9%) or frozen food (6%), at room temperature in a non-kitchen area. Many respondents reported that they have used a non-kitchen area for storing clean (18%), dirty (12%), and/or washing (11%) of crockery, cutlery, and pans (Figure 2) ([footnote 43](#)).

Accessing food

Figure 3: Means of accessing food



Source: University student kitchen survey 2022

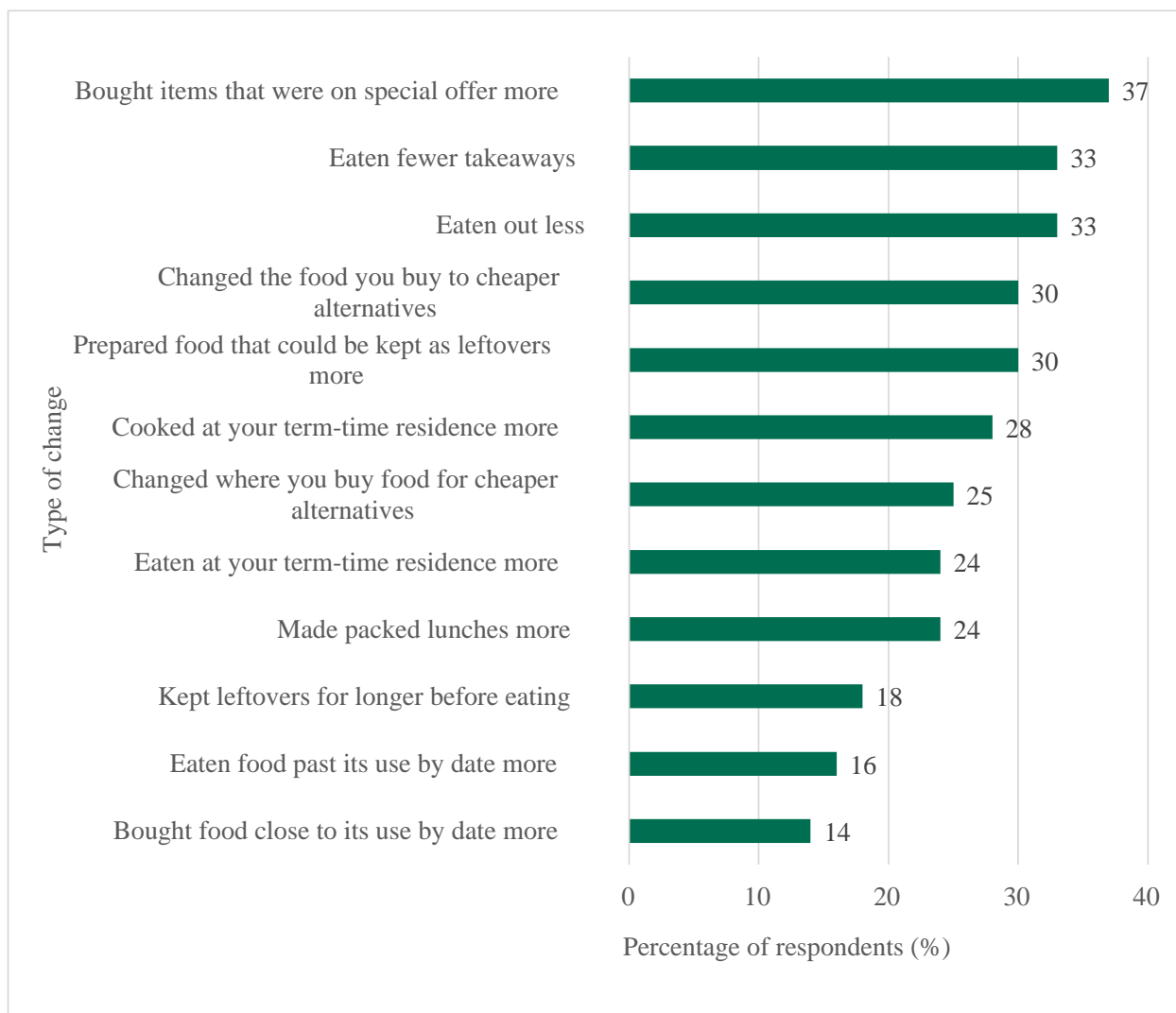
Respondents were asked to indicate where and how frequently they buy food. Most respondents reported that they bought food from a supermarket or mini supermarket about once a week or more often (86%). Over 4 in 10 (44%) respondents reported that they bought food from local/corner shops (for example, newsagent, garage forecourt) and 35% of respondents had food delivered from a supermarket. Many respondents reported that they buy food using online platforms - 25% have shopped for food using an online marketplace (for example, Amazon, Etsy, Gumtree, Facebook Marketplace), and 24% got food through a food sharing app (for example, Olio, Too Good To Go) (Figure 3) ([footnote 44](#)).

Almost 4 in 10 (37%) respondents reported that they have got food from the bins or waste area of a supermarket or shop, with almost 3 in 10 (28%) respondents doing this about once a week or more often, and around 1 in 10 (9%) respondents doing this 2-3 times a month or less often. The likelihood that respondents reported that they had got food from the bins or waste area of a supermarket or shop varied between different groups of people in the following ways:

- Age group: Older respondents were more likely to have got food from supermarket / shop waste areas or bins than younger respondents. For example, 56% of those aged 23-25 years had got food from supermarket / shop waste areas or bins, compared to 28% of those aged 17-19 years.
- Gender: Men (54%) were more likely to have got food from supermarket / shop waste areas or bins than women (26%).
- University group: respondents at a post-1992 university (43%) were more likely to have got food from supermarket / shop waste areas or bins than those at a Russell groups university (33%) ([footnote 45](#)) or pre-1992 university (30%).
- Course year: respondents in the second (43%), third (44%) or fourth (40%) year were more likely to have got food from supermarket / shop waste areas or bins than those in the first year (28%).
- Parental SEG: respondents with a parent/guardian in a professional or higher managerial occupation (55%) were more likely to have got food from supermarket / shop waste areas or bins than those who had a parent/guardian in other occupational groups (for example, 25% of those with a parent/guardian in a supervisor, clerical or skilled non-manual occupation).
- Diet: respondents who were vegan (64%), pescatarian (63%) or vegetarian (43%) were more likely to have got food from supermarket / shop waste areas or bins than those who were omnivore (26%).
- Country: respondents in England (39%) were more likely to have got food from supermarket / shop waste areas or bins than respondents in Wales (25%) or Scotland (21%)** ([footnote 46](#)).
- Region: respondents in London (60%) or the North West (48%) were more likely to have got food from supermarket / shop waste areas or bins than those in the South West (18%).
- Food security: respondents who were food insecure were more likely to have got food from supermarket / shop waste areas or bins (55%) than those who were food secure (22%).

Food-related behaviours and eating habits

Figure 4: Changes in eating habits in the previous 12 months



Source: University student kitchen survey 2022

Respondents were asked about changes to eating habits in the last 12 months. The majority (88%) reported change and those respondents were asked to indicate the reason for the change.

The most common changes related to what and where respondents ate (33% eaten fewer takeaways, 33% eaten out less, 28% cooked at term-time residence more, 24% eaten at term-time residence more), reducing food costs (37% bought items on special offer, 30% changed the food they buy for cheaper alternatives, 25% changed where they buy food for cheaper alternatives) and increased food management behaviours (30% prepared food that could be kept as leftovers more, 24% made packed lunches more). Eating habits had changed for most respondents with only 12% indicating that there had been no change in their eating habits in the last 12 months (Figure 4) [\(footnote 47\)](#). The main causes of reported changes in eating habits were financial reasons (45%), going/returning to university (41%), health reasons (30%) and COVID-19 and lockdown (24%) [\(footnote 48\)](#).

Food security

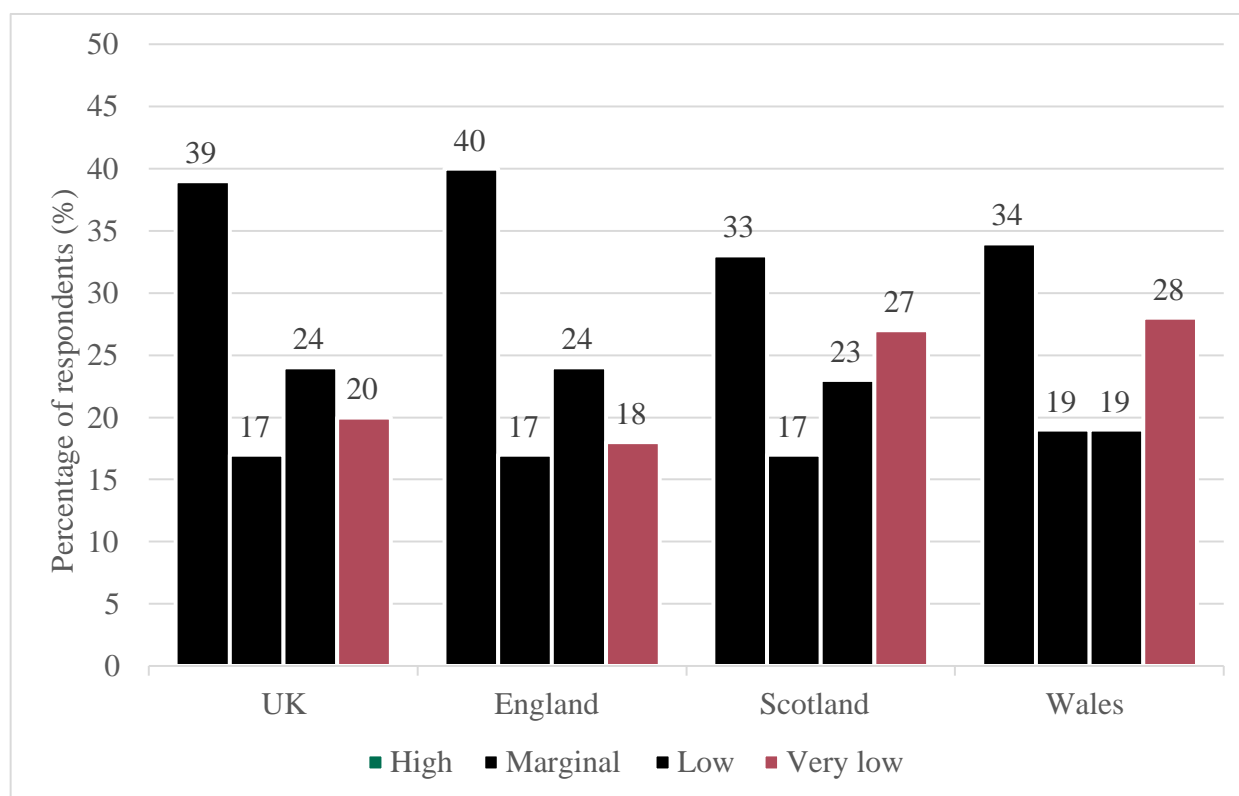
This chapter reports the level of food security and food bank use.

“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.

A modified version of the [U.S. Adult Food Security Survey Module \(Opens in a new window\)](#), developed by the United States Department of Agriculture (USDA), was used to measure food security at the level of respondents. Those with high or marginal food security are referred to as food secure. Those with low or very low food security are referred to as food insecure. The following categories define ranges of food security:

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

Figure 5: Food security classification by country



Source: University student kitchen survey 2022

Across the UK, over half (56%) of respondents were classified as food secure (39% high, 17% marginal) and 44% of respondents were classified as food insecure (24% low, 20% very low). Across England, Scotland and Wales respondents had comparable levels of high, marginal, and low food security. However, those in Scotland (27%)* and Wales (28%) were more likely to report very low food security than those in England (18%) (Figure 5) [\(footnote 49\)](#) [\(footnote 50\)](#)

Table 1: Food Security classifications by HEI region (England)

| Region | Very low | Low | Food insecure | Marginal | High | Food secure |
|--------------------|----------|-----|---------------|----------|------|-------------|
| North West | 17% | 43% | 60% | 11% | 29% | 40% |
| Yorkshire & Humber | 13% | 34% | 47% | 15% | 38% | 53% |
| South East | 20% | 24% | 44% | 19% | 37% | 56% |
| North East | 24% | 20% | 44% | 15% | 42% | 57% |
| London | 17% | 25% | 42% | 18% | 40% | 57% |

| Region | Very low | Low | Food insecure | Marginal | High | Food secure |
|---------------|----------|-----|---------------|----------|------|-------------|
| East | 23% | 19% | 42% | 15% | 43% | 58% |
| West Midlands | 20% | 19% | 39% | 15% | 45% | 60% |
| South West | 22% | 12% | 34% | 16% | 49% | 65% |
| East Midlands | 17% | 16% | 33% | 25% | 42% | 67% |
| England | 18% | 24% | 42% | 17% | 40% | 57% |

Source: University student kitchen survey 2022

Table 1 shows that across England, respondents at universities in the North West (60%: 43% low, 17% very low) were more likely to report that they were food insecure compared to those in the East Midlands (33%: 16% low, 17% very low) and South West (35%: 12% low, 22% very low).

The reported level of food security varied between different groups of people in the following ways:

- Age group: older respondents were more likely to report that they were food secure compared to younger respondents. For example, 57% of those aged 32 years and over reported that they were food insecure compared to 40% of those aged 17-19 years.
- Gender: men (49%) were more likely to report that they were food insecure than women (40%)**.
- University group: respondents at a post-1992 university (53%) were more likely to report that they were food insecure compared to those at a Russell group university (35%) ([footnote 51](#)).
- Type of accommodation: respondents who lived in their parents' or guardians' home (28%) were less likely to report that they were food insecure compared to those who lived in other types of accommodation (for example, 51% of those who lived in halls of residence with catering provided were food insecure).
- Diet: those in many dietary groups (for example, 63% of vegans) were more likely to report that they were food insecure compared to omnivores (34%).

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 (90%) reported that they had not used a food bank or other emergency food provider in the last 12 months, however almost 1 in 10 (8%) respondents reported that they had ([footnote 52](#)).

The reported level of food bank use varied between different categories of people in the following ways:

- Age group: older respondents were more likely to report that they had used a food bank or other emergency food provider compared to younger respondents. For example, 27% of those aged 32 years or over had used a food bank or other emergency food provider compared to 5% of those aged 17-19 years.
- Course year: respondents who were in their fourth year of study (16%) were more likely to report that they had used a food bank or other emergency food provider compared to those who were in their first year (6%).
- Mode of study: respondents who studied part-time (20%) were more likely to report that they had used a food bank or other emergency food provider compared to those who studied full-time (7%).
- University region (England): respondents in the London (15%) were more likely to report that they had used a food bank or other emergency food provider compared to those in Yorkshire and Humberside (2%) and Eastern England (2%).
- Food security: food insecure respondents (16%) were more likely to report that they had used a food bank or other emergency food provider compared to those who were food

secure (2%).

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, almost a quarter (22%) had received a food parcel on only one occasion in the last 12 months, two-thirds (66%) had received a food parcel on more than one occasion but less often than every month, and 4% had received a food parcel every month or more often **55**.

Conclusion

This research explored the knowledge, attitudes and behaviours of university students relating to food safety, food security, diet and other food related behaviours, and identified experiences and challenges faced by this group. We have identified several key findings which relate to food safety and hygiene behaviours: students find it difficult to maintain cleanliness in shared kitchens, with many not following recommended food safety and hygiene behaviours; some students engage in food-related behaviours in non-kitchen areas including the storage and preparation of food; fridges present several food safety challenges with many lacking adequate fridge space, often allocating 'one shelf per person' and fridges containing old and expired food; and, some students are sourcing food from shop waste bins (i.e., 'freeganism'), a behaviour which may be an emerging trend in the student community. In addition, we have evidenced that students have relatively high levels of food insecurity (44%), compared to the most recent national statistic from [Food and You 2](#) (Wave 4, 18%, for adults in England, Wales and Northern Ireland), particularly amongst students at Universities based in the North West of England (60%). The current findings demonstrate that students are a unique group of consumers which would benefit from informed and targeted communications.

The use of co-creation sessions provided several novel insights are new areas of food safety concern including the use of bin diving to source food, tendency to allocate 'one shelf per person' in the fridge, and poor cleanliness relating to the kitchen sink, dish sponges, cloths, and kitchen bins. These insights demonstrate the power of engaging consumers as stakeholders to advance our understanding of consumer knowledge, attitudes, and behaviours, especially when exploring the food safety risks of 'overlooked' groups.

The current findings reveal several areas which could benefit from further research, such as exploring the motivations of those who 'bin dive' (i.e., which may have many drivers, including sustainability concerns) and trialling interventions to improve to food safety behaviours in the student population (e.g., providing more fridge space, or colour coded areas in the fridge). This research has identified new areas of food safety concern which are not captured in FSA consumer surveys, inclusion of these topics in future research or existing surveys would provide an opportunity to develop understanding of the prevalence of the identified food safety risks of the wider population.

1. Question: What is your age? Response: Open text. Base = 2921, all respondents.
2. Question: Which one of the following best describes your ethnic group or background? Responses: English/Welsh/Scottish/Northern Irish/British, Irish, Gypsy or Irish Traveller, any other white background, White and Black Caribbean, White and Black African, White and Asian, any other mixed/multiple ethnic background, Indian, Pakistani, Bangladeshi, Chinese, any other Asian/Asian British background, Caribbean, African, any other Black/Black British group, Arab, any other ethnic group, prefer not to say. Base = 2921, all respondents. Please note: Percentages do not add up to 100 as not all ethnic groups or background are reported, see data tables for complete data.

3. Question: Thinking about your annual income, which of the following groups represents your total income before deductions for income tax, National Insurance etc? This includes your student loan, income from working, grants, and any money from your parents, relatives, or guardians. Responses: Less than £13,000, £13,000-£18,999, £19,000-£25,999, £26,000-£31,999, £32,000-£47,999, £48,000-£63,999, £64,000-£95,999, More than £96,000, Prefer not to say, I don't know. Base = 2921, all respondents.
4. Question: Which of the following best describes the occupation of the chief income earner in your parental/guardian household? Responses: A - Professional / higher managerial (e.g. doctor, lawyer, chairman or managing director of medium or large firm), B - Manager / senior administrator (e.g. senior manager, owner of small business, head teacher), C1 - Supervisor / clerical / skilled non-manual (e.g. teacher, secretary, junior manager, police constable), C2 - Skilled manual worker (e.g. fireman, plumber, electrician, hairdresser), D - Semi-skilled / unskilled manual worker (e.g. assembler, postman, shop assistant), E - Receiving state benefits for sickness, unemployment, old age or any other reason, Other, Prefer not to say. Base = 2921, all respondents.
5. Question: Are an undergraduate student at a university in England, Scotland, Wales or Northern Ireland? Responses: Yes, England; Yes, Scotland; Yes, Northern Ireland; No. Base = 2921, all respondents.
6. Question: Which university do you study at...? Responses: [List all universities] Base = 2921, all respondents.
7. Question: Which year of undergraduate study are you currently in? Responses: 1st year, 2nd year, 3rd year, 4th year, 5th year, placement or industry year, other. Base = 2921, all respondents.
8. Question: What is your mode of study? Responses: full-time, part-time. Base = 2921, all respondents.
9. Question: Do you consider yourself to be any of the following? Responses: Vegetarian - A person who does not eat meat or fish; Pescatarian - A person who does not eat meat but does eat fish; Vegan - A person who does not eat or use animal products; Mainly vegetarian but occasionally eat meat e.g. flexitarian; Omnivore - A person who eats meat and/or fish; Other; Prefer not to say.
10. Question: What type of housing do you usually live in during term-time? Responses: Halls of residence without catering, Halls of residence with catering provided, Private rental (landlord/agency) e.g. house, flat or lodger, Own property, At parental/guardian home, Other. Base = 2921, all respondents.
11. Question: How many people in total (including yourself) use your kitchen area? Responses: Only me, 2 people, 3-4 people, 5-6 people, 7-8 people, 9 or more people. Base = 2921, all respondents.
12. Question: What do you usually use to wash dishes? Responses: Washing-up liquid, Dish sponge or cloth, Hot water, Dish brush, Dishwasher, Stainless steel scourer, Handwash or

hand soap, Hands only (no sponge or cloth), Other, please specify, I do not wash dishes.
Base = 2921, all respondents.

13. Question: Do you ever do any of the following activities in your bedroom or a non-kitchen area in your accommodation? Responses: Eat food; Store non-perishable food for example, canned foods, pasta, rice; Store clean cutlery, crockery, pots or pans; Store dirty cutlery crockery or pans; Wash dirty cutlery, crockery or pans; Prepare food, Store food in a fridge for example, mini-fridge in bedroom; Defrost or cool food; Store food at room temperature which should be kept in a fridge e.g. milk, yogurt; Cook food; Store food in a freezer for example, mini-freezer in bedroom; Store food at room temperature which should be frozen for example, frozen chicken nuggets, frozen peas; None of the above. Base = 2921, all respondents.
14. Question: How often, if at all, do you experience the following issues with your kitchen sink? A) Sink filled with dirty dishes, pots or pans. B) Old food left in sink or sink trap. C) Sink is dirty, grimy, or greasy. 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 = 2921, all respondents.
15. Question: How often do you usually replace the dish sponge or cloth? 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, Don't know. Base = 1934, those who use a dish sponge / cloth to wash dishes.
16. Question: If you use a tea towel, how often is the tea towel usually replaced with a clean one? 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, Don't know. Base = 2921, all respondents.
17. Question: Which of the following items, if any, do you have access to in the kitchen? Responses: Fridge, Freezer, Oven, Microwave, Kettle, Toaster, Hobs, Dishwasher, None of the above. Base = 2921, all respondents.
18. Question: Is the type or quantity of food you purchase, prepare or cook ever limited by the availability of the following facilities? Responses: Food preparation area, Fridge space, Freezer space, Cupboard space, Eating area, Cooking area, Equipment such as pans and sharp knives, None of the above. Base = 2921, all respondents.
19. Question: In your kitchen area to what extent do you agree or disagree that there is enough space to store your food in the fridge. Responses: Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree. Base = 2594, those who have access to a fridge in the kitchen.
20. Question: Typically, where in the fridge do you store your food? Responses: On an allocated shelf, In an allocated drawer, In the door of the fridge, Wherever there is space, I store different types of food in specific areas of the fridge i.e. ready-to-eat foods on the top shelf, raw meat and fish on the bottom shelf, fruit and vegetables stored in the bottom drawer, Other (please specify). Base = 2560, those who have access to a fridge in the kitchen.

21. Question: Does your fridge ever contain the following items, this can include food which belongs to other people? A) Food past the use-by date. B) Uncovered raw or cooked meat. C) Leftovers that have been left for longer than 2 days. Responses: Yes, No, Don't know. Base = 2594, those who have access to a fridge in the kitchen.
22. 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= 2912, those who have a fridge.
23. 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, Don't know, Base= 915, those in households where someone checks their fridge temperature.
24. Question: How do you, or someone else, normally check the temperature of the fridge at your term-time residence? Responses: I check the setting/gauge, I check the temperature display built into the fridge, I put a thermometer in the fridge and check, I check for ice or condensation, I feel food inside to see if it is cold, Don't know. Base = 915, those who ever check their fridge temperature.
25. 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= 2921, all respondents.
26. Question: Which university do you study at...? Responses: [List all universities] Base = 2921, all respondents.
27. Question: In your kitchen area to what extent do you agree or disagree that there is enough space to store your food in the freezer. Responses: Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree. Base = 2530, those who have access to a freezer in the kitchen.
28. Question: What is your mode of study? Responses: full-time, part-time. Base = 2921, all respondents.
29. Question: In your kitchen area to what extent do you agree or disagree that there is enough space for ...A) Food preparation. B) Food storage. C) Eating food. D) Cooling or defrosting food. Responses: Agree, Neither agree nor disagree, Disagree, Strongly disagree. Base = 2921, all respondents.
30. Question: Which one of the following best describes your ethnic group or background? Responses: English/Welsh/Scottish/Northern Irish/British, Irish, Gypsy or Irish Traveller, any other white background, White and Black Caribbean, White and Black African, White and Asian, any other mixed/multiple ethnic background, Indian, Pakistani, Bangladeshi, Chinese, any other Asian/Asian British background, Caribbean, African, any other

Black/Black British group, Arab, any other ethnic group, prefer not to say. Base = 2921, all respondents. Please note: Percentages do not add up to 100 as not all ethnic groups or background are reported, see data tables for complete data.

31. 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 (please specify), I never defrost meat or fish, Don't know. Base = 2051, those who ever do any food preparation / cooking in their term-time kitchen and eat meat or fish.
32. Question: What is your mode of study? Responses: full-time, part-time. Base = 2921, all respondents.
33. Question: Which one of the following best describes your ethnic group or background? Responses: English/Welsh/Scottish/Northern Irish/British, Irish, Gypsy or Irish Traveller, any other white background, White and Black Caribbean, White and Black African, White and Asian, any other mixed/multiple ethnic background, Indian, Pakistani, Bangladeshi, Chinese, any other Asian/Asian British background, Caribbean, African, any other Black/Black British group, Arab, any other ethnic group, prefer not to say. Base = 2921, all respondents. Please note: Percentages do not add up to 100 as not all ethnic groups or background are reported, see data tables for complete data.
34. 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 the time, Occasionally, Never, Don't know. Base = 2668, those who ever do any food preparation / cooking in their term-time kitchen.
35. Question: How often, if at all, do you do the following eat ...A/B/C/D/E/F... when the meat is pink or has pink or red juices? A) chicken or turkey. B = red meat. C = duck. D = beef burgers. E = sausages. F = whole cuts of pork or pork chops. Responses: Always, Most of the time, About half the time, Occasionally, Never, I don't eat that type of meat. Base A= 2034, B = 1908, C = 1411, D = 1897, E = 1878, F = 1607, those who eat A/B/C/D/E/F.
36. Question: How often, if at all, do you do the following...wash raw chicken. Responses: Always, Most of the time, About half the time, Occasionally, Never, Don't know, I don't cook with this type of meat / fish. Base=2668, those who ever do any food preparation / cooking in their term-time kitchen.
37. 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, Don't know. Base=1730, those who store raw meat in the fridge.
38. Question: How, if at all, do you store raw meat and poultry in the fridge? Responses: Away from cooked foods, Covered with film / foil, In a sealed container, In its original packaging, On a plate, I don't buy or store meat or poultry, I don't store raw meat/poultry in the fridge, I don't have a fridge, Don't know. Base=1962, those who ever do any food preparation / cooking in their term-time kitchen and eat meat.

39. 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, It depends, None of these, Don't know. Base = 2921, all respondents.
40. 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 the time, Occasionally, Never, Don't know, It varies too much to say. Base=2668, those who ever do any food preparation / cooking in their term-time kitchen.
41. Question: In the last month have you eaten any of the following foods that has gone past its use by date? A) Cooked meat e.g. ham B) Smoked fish C) Bagged salad D) Cheese E) Milk F) Tofu or meat substitutes e.g. Quorn, Beyond Burger G) Plant-based milk alternative e.g. soy milk, oat milk, almond milk H) Raw meats e.g. chicken, mince. Responses: Yes, this happened every week; Yes, this happened some weeks but not every week; Yes, this happened in one week in the last month; No, never; Don't know/can't remember; I haven't eaten/drunk this in the last month; Prefer not to say. Base A= 1828, B = 1536, C= 2408, D= 2430, E= 2363, F = 2061, G= 2140, H= 1957, those who have eaten/drunk A/B/C/D/E/F/G/H in the last month.
42. 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 tells you how long food should be stored once opened? A) Cooked meat e.g. ham B) Smoked fish C) Bagged salad D) Cheese E) Milk F) Tofu or meat substitutes e.g. Quorn, Beyond Burger G) Plant-based milk alternative e.g. soy milk, oat milk, almond milk H) Raw meats e.g. chicken, mince. Responses: Always, Most of the time, About half the time, Occasionally, Never, Don't know, I don't eat/cook with that food. Base A= 1858, B = 1580, C= 2142, D= 2529, E= 2417, F = 2013, G= 2116, H= 1983, those who eat /cook with A/B/C/D/E/F/G/H.
43. Question: Which one of the following best describes your ethnic group or background? Responses: English/Welsh/Scottish/Northern Irish/British, Irish, Gypsy or Irish Traveller, any other white background, White and Black Caribbean, White and Black African, White and Asian, any other mixed/multiple ethnic background, Indian, Pakistani, Bangladeshi, Chinese, any other Asian/Asian British background, Caribbean, African, any other Black/Black British group, Arab, any other ethnic group, prefer not to say. Base = 2921, all respondents. Please note: Percentages do not add up to 100 as not all ethnic groups or background are reported, see data tables for complete data.
44. 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) Shop for food using an online marketplace e.g. Amazon, Etsy, Gumtree, Facebook Marketplace? E) Get food through a food sharing app e.g. Olio F) get a delivery to your term-residence from a supermarket? (This includes food ordered online that is delivered to you) G) ... shop at a local market, farmers market or farm shop (this includes farm deliveries e.g. vegetable boxes) H) ... get a recipe box delivered (e.g. Hello Fresh, Gousto)? (This includes recipe boxes ordered online that are delivered to you) I) ...get food from supermarket or shop waste area or bins i.e. freegan). 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= 2749, those who ever do

food shopping themselves at their term-time residence.

45. The Further and Higher Education Act 1992 was passed in [England, Wales and Scotland](#). The act enables former polytechnics, central institutions and similar organisations to be given university status.
46. The data for Northern Ireland is not reported as the base size is below 100 and therefore is not representative.
47. 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 your term-time residence more, Cooked at your term-time residence 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= 2921, all respondents.
48. 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, Going to/returning to university, Other, Prefer not to say. Base= 2560, all respondents who have made at least one change to their eating habits in the last 12 months.
49. A modified version of the [U.S. Adult Food Security Survey Module](#) was used to measure developed by the United States Department of Agriculture (USDA) to measure food security at the level of respondents.
50. Question/Responses: Derived variable, see [USDA Food Security guidance](#) and Technical Report. Base= 2921, all respondents. Please note: the data for Northern Ireland is not reported as the base size is below 100 and therefore is not representative.
51. "Post-1992 universities", also known as "new universities" or "modern universities", refer to the former polytechnics, central institutions or colleges of higher education that were given university status by the Further and Higher Education Act 1992 passed in [England, Wales](#) and [Scotland](#) (as well as colleges that have been granted university status since then). Founded in 1994, Russell Group universities tend to be long-established and rank high in university league tables, with a focus on research and often high entry requirements.
52. 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= 2921, all respondents.