

The 2012

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Survey

Level of Effort Analysis

The 2012



Level of Effort Analysis

Authors:

Gillian Prior, TNS BMRB

Rachel Phillips, TNS BMRB

George Kyriakopoulos, TNS BMRB

Joel Williams, TNS BMRB

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1. Executive summary

The Food and You survey, conducted biennially on behalf of the Food Standards Agency, collects information on reported behaviours, attitudes and knowledge in relation to food and food safety. The survey interviews a random-probability sample of approximately 3,000 individuals aged 16 years and older across the UK at each wave. Three waves have been completed so far, in 2010, 2012 and 2014.

This Level of Effort analysis was commissioned at the start of 2014, prior to the start of Wave 3 fieldwork, in order to analyse data from Wave 2 of the survey to explore the relationship between response rates and survey estimates. To test the hypothesis that the Food and You survey does not suffer from systematic nonresponse bias, this report investigates the extent to which response rates to the survey affect the estimates of population parameters derived from the survey data. This Level of Effort analysis of Wave 2 data compares the estimates derived using the final survey dataset to the estimates that would have been derived, if the fieldwork process had settled for a lower response rate.

The Level of Effort analysis results show that, in general, the estimates from the survey data converge with their final value (when the response rate is 54%) when only interviews which were achieved after a relatively small number of contact attempts by the interviewer are considered (and the response rate is relatively low). Furthermore, this finding remains relatively unaffected by sample calibration (i.e. nonresponse weighting), which suggests that the survey estimates are not strongly correlated with the demographic characteristics used for calibrating the data.

Assuming that the observed relationship between estimates and the response rates can be 'projected' beyond the maximum response rate obtained at the end of Wave 2, findings suggest that estimates obtained by the survey are unlikely to be systematically biased due to nonresponse.

2. Introduction

The Food and You survey is the Food Standards Agency's main source of consumer data on reported behaviours, attitudes and knowledge relating to food and food safety. It is a biennial, random-probability survey, with face-to-face interviews with approximately 3,000 people aged 16 years and older across the UK at each wave. Three waves of the Food and You survey have been conducted so far, in 2010, 2012 and 2014. TNS BMRB were commissioned by the Food Standards Agency (FSA) at the start of 2014 to conduct the third wave of fieldwork and reporting for the Food and You survey. Prior to the start of the Wave 3 fieldwork, the Agency asked TNS BMRB to perform a Level of Effort analysis on the data from Wave 2, in order to explore the relationship between response rates and survey estimates.

This report summarises the key findings from this analysis.

3. Level of Effort analysis

3.1 Background

Wave 2 of the Food and You survey in 2012 achieved a response rate of 54%.

High response rates are widely accepted as indicative of limited nonresponse bias within survey data (even though evidence suggests that in some cases the correlation between the two may be weak¹). Increased efforts to engage hard-to-contact individuals with a survey by attempting multiple visits, however, can help to boost response rates and reduce nonresponse bias.² Generally speaking, the estimate of a population parameter using survey data is only (systematically) biased if there is a correlation between (i) an individual's probability of taking part in the survey and (ii) the survey topic. This correlation tends to be weaker, if the reasons for nonresponse are 'generic' (e.g. because some people are rarely at home or because some people refuse to do surveys regardless of topic), rather than explicitly related to the topic.

It is the assumption of TNS BMRB that nonresponse to the Food and You survey is primarily of a generic nature and that, consequently, the estimates using the survey data may be rather insensitive to the obtained response rate.

It is however difficult to prove that estimates from the survey data are not biased by the response rate because there are no higher standard population statistics to compare with the survey estimates. In light of this, TNS BMRB was commissioned by the Food Standards Agency to test the hypothesis that the Food and You survey does not suffer from nonresponse bias in a partial fashion, by performing a Level of Effort analysis.

By using para-data on the number of visits made to each sampled address, the 2012 respondent sample can be stripped back, limiting it to just those who supplied an interview within $\leq x$ visits to the address. The value for x might be 1, 2, 3, 5 etc., and the response rate achieved with fewer calls can be assessed. For Wave 2 of the Food and You survey, the response rates (based on the final eligible sample) after 1, 2, 3 and 5 calls were 12%, 23%, 33% and 43% respectively.

By comparing estimates of a number of population parameters using the survey data for each number of attempts required for the interviewer to make contact, it can be assessed how sensitive the estimates are to increases in response rate, at least up to the maximum of 54% - the overall response rate for Wave 2 of the Food and You survey. If it is found that an estimate converges with its final value when only interviews which were achieved after one or two attempts at contact are considered (i.e. when the response rate is very low), it may be inferred that the final estimate (when the response rate is 54%) is unlikely to be systematically biased due to

¹ Groves, R., & Peytcheva, E. (2008). The impact of nonresponse rates on nonresponse bias. *Public Opinion Quarterly*, 72, 1-23.

² Lin I. F., & Schaeffer, N. (1995). Using survey participants to estimate the impact of nonparticipation. *Opinion Quarterly*, 59, 236-258.

nonresponse, as the data from people who participate after a larger number of contact attempts do not change the estimate substantially.

To make this inference, it must be assumed that the observed relationship (whether linear or quadratic) between the estimate and the response rate can be 'projected' beyond the maximum response rate obtained (54% in this case). There is no *a priori* reason for making this assumption but, when nonresponse is largely generic, it is more plausible than assuming the relationship entirely breaks down beyond this point.

Samples can be calibrated to a particular population by applying weights. This process ensures that the profile of the sample, for key demographic variables which are suspected to be correlated with the estimates, aligns with the profile of the population. The role of sample calibration in reducing the risk of nonresponse bias should be acknowledged. Population statistics are available for a number of demographic characteristics,³ allowing the data to be weighted to compensate for any observed biases in the respondent sample structure. This kind of weighting reduces the unexplained variance in response probability and consequently, the risk of nonresponse bias.⁴ As part of the Level of Effort analysis, the effect of calibrating the data can be assessed by comparing how calibrated or non-calibrated population estimates change by the number of visits before an interview is achieved.

3.2 Data and variable selection

Data from the total of 3,231 interviews achieved during the Food and You Wave 2 fieldwork were merged with the number of interviewer visits required to obtain each interview. Interviewers were instructed to make a minimum of six calls to an address before coding a final non-contact outcome code. There was no maximum limit on the number of times that interviewers could call at an address.

As Table 1 illustrates, four sub-samples were derived: the sample achieved with (a) no more than 5 interviewer visits (n1=2,583); (b) no more than 3 interviewer visits (n2=1,955); (c) no more than 2 interviewer visits (n3=1,400); and finally (d) the sample achieved with no more than one interviewer visit (n4=689).⁵ Response rates at these different stages of fieldwork are also presented, as well as the final response rate (54%) and sample achieved (3,231).

³ Gender, age and region of residence are updated annually while other population totals are updated decennially (and gradually lose currency). Only the annually-updated figures tend to be used for calibrating face-to-face interview surveys with probability samples. A wider range of variables (drawn from e.g. the Labour Force Survey) may be used if the survey sample quality is of a lower level than the population data source.

⁴ The formula for nonresponse bias is $R_{xy}S_xS_y/\text{mean of } x$, where R_{xy} is the correlation coefficient between response probability (x) and the survey variable (y), S_x is the population standard deviation of the response probability, and S_y is the population standard deviation of the survey variable. Post-stratification weighting of the type described *must* reduce S_x , and probably reduces S_y . The impact on R_{xy} is not predictable.

⁵ It was decided not to focus the analysis on the sample achieved at no more than 4 interviewer visits, as its size was not substantially different to the size of the sample achieved at no more than 5 interviewer visits.

Table 1 Sample size and response rate at different stages of fieldwork (by number of visits made)

| | More than 5 visits | Up to 5 visits | Up to 3 visits | Up to 2 visits | 1 visit |
|---------------|--------------------|----------------|----------------|----------------|---------|
| Sample size | 3,231 | 2,583 | 1,955 | 1,400 | 689 |
| Response rate | 54% | 43% | 33% | 23% | 12% |

The analysis featured 299 variables from the Food and You survey dataset (see Appendix 1 for the variables included). Variable selection was driven by the number of people who provided a response for each variable. All variables that were asked to the totality of the sample were included, while routed variables were excluded to avoid analysis of items with low counts. Selected variables were mainly categorical, but some Likert scales were also included. For the purposes of the analysis, each code within the selected variables was treated as a distinct binary variable.⁶

Sub-samples were analysed both before and after being calibrated to population totals, in order to explore the impact of calibration on the relationship between the number of visits required to obtain an interview and population estimates from the survey data.

3.3 Absolute measurement differences

Population estimates for each of the 299 variables for each of the four sub-samples were compared against the final estimates derived from the total sample of 3,231 respondents. Tables 2 and 3 present the frequency distributions of the absolute differences between the final estimates and the estimates based on the sub-samples. In Table 2, these are calculated after the application of design weights (which merely account for bias in the survey data induced by the process of probability sampling), whilst Table 3 presents figures after the sample has been additionally calibrated to match the profile of the population of interest.

As expected, as response rates increase (as data from interviews which were obtained after a greater number of contact attempts are included in the analysis), absolute differences between the population estimates from the 299 variables using the sub-sample data and the final data tend to become smaller. For the sub-sample which included interviews obtained after just one contact attempt, the estimated statistic for over a quarter (29%) of the variables had an absolute difference from the final estimate of 1.5 percentage points or more. For the sub-sample achieved with no more than 5 visits, one per cent of variables had an absolute difference to the final estimation which fell into this category.

The similar proportions featured in Tables 2 and 3 indicate that the sample calibration to the population of interest appears to make very little difference in how sub-sample estimates differ to the final population estimates. This suggests that the

⁶ For example, for a Likert-scale including the options “very concerned”, “fairly concerned”, “neither concerned nor unconcerned”, “fairly unconcerned” and “very unconcerned”, the analysis translated each of the variable values into a binary (true or false) variable: “very concerned: true” versus “very concerned: false”, “fairly unconcerned: true” versus “fairly unconcerned: false” and so on. This approach allows us to quantify the effect of the number of visits at a granular level.

differences in survey variables between the final dataset and the dataset achieved with no more than 5 visits are not strongly correlated with age or working status (the two calibration variables with very different 'early' and 'late' sample distributions).

Table 2 Frequency of absolute-difference bands for population estimates of 299 variables between each sub-sample and the final estimate - Only design weights applied

| Absolute difference | Proportion of variables with this level of difference from the final estimate | | | |
|------------------------------|---|----------------------|----------------------|---------------|
| | After up to 5 visits | After up to 3 visits | After up to 2 visits | After 1 visit |
| Up to 0.1 percentage points | 36% | 24% | 18% | 10% |
| 0.1 to 0.5 percentage points | 44% | 41% | 36% | 29% |
| 0.5 to 1 percentage points | 14% | 22% | 22% | 19% |
| 1 to 1.5 percentage points | 5% | 8% | 11% | 13% |
| Over 1.5 percentage points | 1% | 5% | 14% | 29% |
| Total | 100% | 100% | 100% | 100% |

Table 3 Frequency of absolute-difference bands for population estimates of 299 variables between each sub-sample and the final estimate - Calibration applied

| Absolute difference | Proportion of variables with this level of difference from the final estimate | | | |
|------------------------------|---|----------------------|----------------------|---------------|
| | After up to 5 visits | After up to 3 visits | After up to 2 visits | After 1 visit |
| Up to 0.1 percentage points | 32% | 24% | 18% | 8% |
| 0.1 to 0.5 percentage points | 46% | 40% | 33% | 24% |
| 0.5 to 1 percentage points | 19% | 21% | 24% | 19% |
| 1 to 1.5 percentage points | 3% | 10% | 13% | 15% |
| Over 1.5 percentage points | 0% | 5% | 13% | 33% |
| Total | 100% | 100% | 100% | 100% |

Overall, the majority of the observed absolute differences between all sub-sample estimations and the final estimations are below 1.5 percentage points and become smaller as the number of visits increases. Tables 4 and 5 present the absolute differences in percentiles and further emphasise this point.

Average absolute differences decrease as the data from interviews where a greater number of contact attempts were made are included in the analysis, from an average difference of 1.24 percentage points for the one visit sample to an average difference of 0.30 percentage points when data from interviews conducted after up to 5 contact attempts are included. Again, the similarities of the frequency distributions presented in Tables 4 and 5 indicate that sample calibration to the target population profile does not substantially affect the way population estimates change depending on the number of visits before an interview is achieved; calibrated or not, the magnitude of our population estimates' absolute differences varies similarly by the number of visits to secure an interview.

Table 4 Percentiles of absolute differences between population estimates of 299 variables for each sub-sample and the final estimate - Only design weights applied

| Percentiles of absolute difference | Proportion of variables with this level of difference from the final estimate | | | |
|------------------------------------|---|----------------------|----------------------|---------------|
| | After up to 5 visits | After up to 3 visits | After up to 2 visits | After 1 visit |
| 10th | 0.02% | 0.03% | 0.05% | 0.10% |
| 20th | 0.04% | 0.08% | 0.12% | 0.21% |
| 30th | 0.08% | 0.13% | 0.20% | 0.31% |
| 40th | 0.11% | 0.21% | 0.32% | 0.52% |
| 50th | 0.16% | 0.29% | 0.46% | 0.77% |
| 60th | 0.25% | 0.42% | 0.62% | 1.05% |
| 70th | 0.36% | 0.57% | 0.85% | 1.41% |
| 80th | 0.50% | 0.77% | 1.21% | 2.09% |
| 90th | 0.74% | 1.16% | 1.84% | 2.99% |
| 95th | 1.05% | 1.51% | 2.49% | 4.17% |
| 99th | 1.45% | 2.61% | 4.02% | 6.85% |
| 100th | 1.73% | 4.10% | 6.69% | 10.26% |
| Mean | 0.30% | 0.47% | 0.75% | 1.24% |

Table 5 Percentiles of absolute differences between population estimates of 299 variables for each sub-sample and the final estimate – Calibration applied

| Percentiles of absolute difference | Proportion of variables with this level of difference from the final estimate | | | |
|------------------------------------|---|----------------------|----------------------|---------------|
| | After up to 5 visits | After up to 3 visits | After up to 2 visits | After 1 visit |
| 10th | 0.02% | 0.04% | 0.06% | 0.13% |
| 20th | 0.05% | 0.08% | 0.13% | 0.27% |
| 30th | 0.08% | 0.14% | 0.22% | 0.45% |
| 40th | 0.13% | 0.21% | 0.36% | 0.66% |
| 50th | 0.19% | 0.30% | 0.49% | 0.94% |
| 60th | 0.27% | 0.43% | 0.67% | 1.26% |
| 70th | 0.38% | 0.60% | 0.86% | 1.63% |
| 80th | 0.53% | 0.80% | 1.20% | 2.18% |
| 90th | 0.74% | 1.23% | 1.67% | 3.23% |
| 95th | 0.94% | 1.47% | 2.18% | 4.19% |
| 99th | 1.16% | 1.95% | 3.40% | 6.29% |
| 100th | 1.82% | 2.87% | 4.80% | 11.17% |
| Mean | 0.30% | 0.48% | 0.72% | 1.38% |

It takes very large sample sizes to routinely detect very small differences of the scale estimated here. Consequently, each individual estimate has a relatively wide margin of error. Therefore, it is best to assess the estimates in aggregate, to report the *tendency* through averages and distributional percentiles rather than focusing on individual variables. Focusing on variables which have the largest absolute differences between a sub-sample estimate and final estimate for special inspection is sensible, since we would expect that bigger differences will signpost us to the variables that are more sensitive to the number of visits prior to an interview (and therefore sensitive to response rates). However, we must note that the largest differences may in fact reflect sample variance more than sample bias, so should not be treated as a definitive list of the most problematic items.

Although ranking the magnitude of differences is likely to be unreliable, for interest, Table 6 shows the ten variables where the largest absolute differences were detected between calibrated final data and calibrated data from interviews achieved from a maximum of 5 visits. This illustrates the largest expected differences between a feasible 'restricted' field practice (maximum of 5 visits per address) and actual practice at Wave 2 (maximum number of visits determined by what is practical). The largest differences range from 1.2 to 1.8 percentage points.

Table 6 Top 10 items with highest absolute difference between fully calibrated final data and fully calibrated data from interviews achieved from a maximum of 5 visits

| Variable | | Estimate from complete sample | Estimate at up to 5 visits | Absolute Difference | Signed Difference | 95% CI - Lower Bound | 95% CI - Upper Bound |
|---|--|-------------------------------|----------------------------|---------------------|-------------------|----------------------|----------------------|
| > To what extent are you concerned or unconcerned by genetically Modified (GM) foods? | Neither concerned nor unconcerned | 23.80% | 21.98% | 1.82% | -1.82% | -2.75% | -0.88% |
| > To what extent are you concerned or unconcerned by the use of additives (such as preservatives and colouring) in food products | Neither concerned nor unconcerned | 14.14% | 12.43% | 1.71% | -1.71% | -2.60% | -0.82% |
| > What is the maximum time after the use by date that you would eat cooked meat? | Between 1 and 2 days | 30.19% | 28.61% | 1.57% | -1.57% | -2.60% | -0.54% |
| > To what extent are you concerned or unconcerned by the overall safety of food produced in the UK? | Neither concerned nor unconcerned | 19.88% | 18.31% | 1.57% | -1.57% | -2.51% | -0.63% |
| > How can you tell whether an egg is safe to eat or use in cooking? - Use by date | Use by date | 28.11% | 29.53% | 1.42% | 1.42% | 0.64% | 2.20% |
| > To what extent are you concerned or unconcerned by the use of pesticides to grow food | Very concerned | 24.98% | 26.33% | 1.35% | 1.35% | 0.55% | 2.15% |
| > Maximum number of days you would keep a packet of smoked fish e.g. smoked mackerel or smoked salmon in the fridge once opened before deciding you would definitely not eat or drink it? | Not applicable - don't eat or use this food item | 26.91% | 25.61% | 1.30% | -1.30% | -2.26% | -0.33% |
| > What is the maximum time after the best before end date that you would eat eggs? | Never | 44.84% | 43.59% | 1.25% | -1.25% | -2.26% | -0.24% |
| > To what extent are you concerned or unconcerned by food hygiene at home? | Fairly unconcerned | 20.78% | 19.57% | 1.21% | -1.21% | -2.07% | -0.34% |
| > How often do you wipe down the surfaces in your kitchen? | More than once a day | 37.50% | 38.70% | 1.20% | 1.20% | 0.26% | 2.13% |

Table 7 focuses on a set of estimates that the Food Standards Agency deems as particularly important and presents the differences between the estimates from the fully calibrated final dataset and the fully calibrated dataset achieved from a maximum of 5 interviewer visits. With the maximum observed difference being at 0.67 percentage points, Table 7 suggests that these key estimates appear to not be particularly sensitive to the number of visits attempted prior to an interview (and thus to the response rate achieved).

Table 7 Key variables: estimates, differences between fully calibrated final data and fully calibrated data from interviews achieved from a maximum of 5 visits and their confidence intervals

| Variable | | Estimate from complete sample | Estimate at up to 5 visits | Absolute Difference | Signed Difference | 95% CI - Lower Bound | 95% CI - Upper Bound |
|--|------------------|-------------------------------|----------------------------|---------------------|-------------------|----------------------|----------------------|
| > Thinking about when you are storing, preparing and cooking food in the kitchen do you cook food until it is steaming hot throughout? | Always | 79.04% | 78.72% | 0.32% | -0.32% | -1.16% | 0.51% |
| | Most of the time | 11.55% | 11.97% | 0.42% | 0.42% | -0.17% | 1.01% |
| | Sometimes | 4.25% | 4.38% | 0.13% | 0.13% | -0.19% | 0.45% |
| | Never | 0.83% | 0.86% | 0.03% | 0.03% | -0.02% | 0.08% |
| | Don't Know | 0.10% | 0.12% | 0.02% | 0.02% | -0.02% | 0.06% |
| | Not applicable | 4.23% | 3.95% | 0.28% | -0.28% | -0.90% | 0.34% |
| > Thinking about when you are storing, preparing and cooking food in the kitchen do you eat chicken or turkey if the meat is pink or has pink or red juices? | Always | 0.83% | 1.01% | 0.18% | 0.18% | 0.07% | 0.29% |
| | Most of the time | 0.75% | 0.68% | 0.07% | -0.07% | -0.26% | 0.12% |
| | Sometimes | 3.46% | 3.44% | 0.02% | -0.02% | -0.41% | 0.37% |
| | Never | 90.46% | 90.25% | 0.20% | -0.20% | -0.75% | 0.34% |
| | Don't Know | 0.14% | 0.05% | 0.09% | -0.09% | -0.23% | 0.05% |
| | Not applicable | 4.37% | 4.57% | 0.20% | 0.20% | -0.11% | 0.52% |
| > Thinking about when you are storing, preparing and cooking food in the kitchen do you use different chopping boards for different foods? | Always | 46.34% | 46.31% | 0.03% | -0.03% | -1.05% | 0.99% |
| | Most of the time | 10.40% | 10.22% | 0.17% | -0.17% | -0.84% | 0.49% |
| | Sometimes | 10.39% | 10.55% | 0.16% | 0.16% | -0.40% | 0.72% |
| | Never | 26.17% | 26.51% | 0.34% | 0.34% | -0.53% | 1.21% |
| | Don't Know | 0.01% | 0.01% | 0.00% | 0.00% | -0.01% | 0.01% |
| | Not applicable | 6.68% | 6.39% | 0.29% | -0.29% | -0.87% | 0.29% |

Table 7 Key variables: estimates, differences between fully calibrated final data and fully calibrated data from interviews achieved from a maximum of 5 visits and their confidence intervals (cont'd)

| Variable | | Estimate from complete sample | Estimate at up to 5 visits | Absolute Difference | Signed Difference | 95% CI - Lower Bound | 95% CI - Upper Bound |
|--|---------------------------------|-------------------------------|----------------------------|---------------------|-------------------|----------------------|----------------------|
| > Thinking about when you are storing, preparing and cooking food in the kitchen do you wash hands before starting to prepare or cook food? | Always | 81.32% | 81.36% | 0.03% | 0.03% | -0.83% | 0.89% |
| | Most of the time | 8.79% | 8.74% | 0.04% | -0.04% | -0.67% | 0.58% |
| | Sometimes | 6.12% | 6.10% | 0.02% | -0.02% | -0.58% | 0.53% |
| | Never | 1.15% | 1.10% | 0.06% | -0.06% | -0.27% | 0.15% |
| | Not applicable | 2.61% | 2.71% | 0.09% | 0.09% | -0.26% | 0.44% |
| > Thinking about when you are storing, preparing and cooking food in the kitchen do you wash hands immediately after handling raw meat, poultry or fish? | Always | 84.48% | 84.60% | 0.11% | 0.11% | -0.67% | 0.90% |
| | Most of the time | 4.69% | 4.56% | 0.13% | -0.13% | -0.56% | 0.30% |
| | Sometimes | 3.19% | 3.07% | 0.12% | -0.12% | -0.48% | 0.23% |
| | Never | 1.07% | 1.08% | 0.00% | 0.00% | -0.19% | 0.19% |
| | Not applicable | 6.56% | 6.69% | 0.14% | 0.14% | -0.46% | 0.73% |
| > Thinking about when you are storing, preparing and cooking food in the kitchen do you wash raw meat or poultry? | Always | 38.39% | 38.22% | 0.17% | -0.17% | -1.12% | 0.78% |
| | Most of the time | 6.12% | 6.79% | 0.67% | 0.67% | 0.30% | 1.04% |
| | Sometimes | 13.40% | 13.35% | 0.04% | -0.04% | -0.66% | 0.57% |
| | Never | 32.15% | 31.70% | 0.46% | -0.46% | -1.41% | 0.50% |
| | Don't Know | 0.08% | 0.06% | 0.02% | -0.02% | -0.09% | 0.05% |
| > Which of these is the best indicator of whether food is safe to eat? | Use by date | 64.11% | 64.61% | 0.50% | 0.50% | -0.48% | 1.48% |
| | Best before date | 25.91% | 25.34% | 0.57% | -0.57% | -1.49% | 0.35% |
| | Sell by date | 5.58% | 5.40% | 0.18% | -0.18% | -0.65% | 0.30% |
| | Display until date | 2.69% | 2.99% | 0.30% | 0.30% | 0.10% | 0.49% |
| | Don't Know | 1.71% | 1.66% | 0.05% | -0.05% | -0.33% | 0.23% |
| > Do you check use-by dates when you are about to cook or prepare food? | Yes, always | 66.83% | 67.12% | 0.29% | 0.29% | -0.65% | 1.23% |
| | Yes, depending on the food type | 13.46% | 13.57% | 0.11% | 0.11% | -0.57% | 0.78% |
| | Sometimes | 11.68% | 11.83% | 0.15% | 0.15% | -0.45% | 0.75% |
| | Never | 7.71% | 7.21% | 0.50% | -0.50% | -1.14% | 0.13% |
| | Don't Know | 0.32% | 0.27% | 0.04% | -0.04% | -0.21% | 0.12% |

Table 7 Key variables: estimates, differences between fully calibrated final data and fully calibrated data from interviews achieved from a maximum of 5 visits and their confidence intervals (cont'd)

| Variable | | Estimate from complete sample | Estimate at up to 5 visits | Absolute Difference | Signed Difference | 95% CI - Lower Bound | 95% CI - Upper Bound |
|---|--|-------------------------------|----------------------------|---------------------|-------------------|----------------------|----------------------|
| > If you made a meal on Sunday, what is the last day that you would consider eating the leftovers? (Spontaneous response) | Never have leftovers - always finish or throw away immediately | 7.24% | 7.38% | 0.14% | 0.14% | -0.38% | 0.66% |
| | The same day | 3.82% | 3.62% | 0.20% | -0.20% | -0.59% | 0.19% |
| | Monday | 38.08% | 38.50% | 0.42% | 0.42% | -0.50% | 1.34% |
| | Tuesday | 32.37% | 31.87% | 0.50% | -0.50% | -1.46% | 0.47% |
| | Wednesday | 12.35% | 12.31% | 0.04% | -0.04% | -0.76% | 0.68% |
| | Thursday | 2.83% | 2.88% | 0.05% | 0.05% | -0.21% | 0.31% |
| | Friday | 1.50% | 1.55% | 0.04% | 0.04% | -0.21% | 0.29% |
| | Saturday | 0.64% | 0.67% | 0.03% | 0.03% | -0.15% | 0.21% |
| | The following Sunday | 0.58% | 0.61% | 0.03% | 0.03% | 0.03% | 0.03% |
| | More than a week | 0.20% | 0.27% | 0.08% | 0.08% | 0.08% | 0.08% |
| Don't Know | 0.40% | 0.34% | 0.06% | -0.06% | -0.28% | 0.16% | |
| > How many times would you consider re-heating food after it was cooked for the first time? (Spontaneous response) | Not at all | 10.64% | 10.29% | 0.35% | -0.35% | -1.08% | 0.38% |
| | Once | 80.20% | 80.51% | 0.31% | 0.31% | -0.59% | 1.21% |
| | Twice | 7.26% | 7.13% | 0.13% | -0.13% | -0.76% | 0.50% |
| | Three times | 1.06% | 1.23% | 0.17% | 0.17% | 0.17% | 0.17% |
| | More than three times | 0.35% | 0.27% | 0.08% | -0.08% | -0.23% | 0.06% |
| | Don't Know | 0.50% | 0.58% | 0.09% | 0.09% | -0.03% | 0.20% |

4. Appendix 1 – Variables included in the Level of Effort analysis

Q3_3/Q3_4 Where do you/ does your household mainly shop for food? (derived)

Q4_1B/ Q4_1C Which method do you generally use to defrost frozen meat or fish? (derived)

Q11_3 To what extent are you concerned or unconcerned by food poisoning such as Salmonella and E. Coli

Q11_3 To what extent are you concerned or unconcerned by genetically Modified (GM) foods

Q11_3 To what extent are you concerned or unconcerned by the use of pesticides to grow food

Q11_3 To what extent are you concerned or unconcerned by the use of additives (such as preservatives and colouring) in food products

Q11_3 To what extent are you concerned or unconcerned by food hygiene when eating out

Q11_3 To what extent are you concerned or unconcerned by food hygiene at home

Q11_6 What is the maximum time after the use by date that you would use raw meat (i.e. cook then eat)?(Spontaneous)

Q11_6 What is the maximum time after the use by date that you would eat cooked meat?(Spontaneous)

Q11_6 What is the maximum time after the use by date that you would eat dairy foods like cheese and yoghurt?(Spontaneous)

Q11_6 What is the maximum time after the best before end date that you would eat eggs?(Spontaneous)

Q11_6 What is the maximum time after the best before end date that you would eat bread ?(Spontaneous)

Q11_8B Do you get information about how to prepare and cook food safely at home from any of these sources? - Family and friends

Q11_8B Do you get information about how to prepare and cook food safely at home from any of these sources? - School / college / a course

Q11_8B Do you get information about how to prepare and cook food safely at home from any of these sources? - Work

Q11_8B Do you get information about how to prepare and cook food safely at home from any of these sources? - Retailers (e.g. supermarkets)

Q11_8B Do you get information about how to prepare and cook food safely at home from any of these sources? - Newspapers

Q11_8B Do you get information about how to prepare and cook food safely at home from any of these sources? - News websites

Q11_8B Do you get information about how to prepare and cook food safely at home from any of these sources? - Food TV shows / cooking programmes

Q11_8B Do you get information about how to prepare and cook food safely at home from any of these sources? - Food magazines

Q11_8B Do you get information about how to prepare and cook food safely at home from any of these sources? - Food websites

Q11_8B Do you get information about how to prepare and cook food safely at home from any of these sources? - TV / radio campaigns

Q11_8B Do you get information about how to prepare and cook food safely at home from any of these sources? - Books

Q11_8B Do you get information about how to prepare and cook food safely at home from any of these sources? - Internet search engine

Q11_8B Do you get information about how to prepare and cook food safely at home from any of these sources? - Product packaging

Q11_8B Do you get information about how to prepare and cook food safely at home from any of these sources? - Doctor / GP

Q11_8B Do you get information about how to prepare and cook food safely at home from any of these sources? - Common sense / personal experience

Q11_8B Do you get information about how to prepare and cook food safely at home from any of these sources? - Other

Q11_8B Do you get information about how to prepare and cook food safely at home from any of these sources? - I don't look for information on food safety

Q11_8C In the future if you decided to look for more information about how to prepare and cook food safely at home, where would you look for this information? - Family and friends

Q11_8C In the future if you decided to look for more information about how to prepare and cook food safely at home, where would you look for this information? - School/ college/ a course

Q11_8C In the future if you decided to look for more information about how to prepare and cook food safely at home, where would you look for this information? - Work

Q11_8C In the future if you decided to look for more information about how to prepare and cook food safely at home, where would you look for this information? - Retailers (e.g. supermarkets)

Q11_8C In the future if you decided to look for more information about how to prepare and cook food safely at home, where would you look for this information? - Newspapers

Q11_8C In the future if you decided to look for more information about how to prepare and cook food safely at home, where would you look for this information? - News websites

Q11_8C In the future if you decided to look for more information about how to prepare and cook food safely at home, where would you look for this information? - Food TV shows/ cooking programmes

Q11_8C In the future if you decided to look for more information about how to prepare and cook food safely at home, where would you look for this information? - Food magazines

Q11_8C In the future if you decided to look for more information about how to prepare and cook food safely at home, where would you look for this information? - Food websites

Q11_8C In the future if you decided to look for more information about how to prepare and cook food safely at home, where would you look for this information? - TV/ radio campaigns

Q11_8C In the future if you decided to look for more information about how to prepare and cook food safely at home, where would you look for this information? - Books

Q11_8C In the future if you decided to look for more information about how to prepare and cook food safely at home, where would you look for this information? - Internet search engine

Q11_8C In the future if you decided to look for more information about how to prepare and cook food safely at home, where would you look for this information? - Product packaging

Q11_8C In the future if you decided to look for more information about how to prepare and cook food safely at home, where would you look for this information? - Doctor/ GP

Q11_8C In the future if you decided to look for more information about how to prepare and cook food safely at home, where would you look for this information? - Library

Q11_8C In the future if you decided to look for more information about how to prepare and cook food safely at home, where would you look for this information? - Other

Q11_8C In the future if you decided to look for more information about how to prepare and cook food safely at home, where would you look for this information? - Don't know

Q11_8C In the future if you decided to look for more information about how to prepare and cook food safely at home, where would you look for this information? - None/wouldn't

Q12_1 Have You ever seen this before? - Food Hygiene Information Scheme

Q12_1 Have You ever seen this before? - Food Hygiene Rating Scheme

Q12_1 Have You ever seen this before? - Scores on the Doors

Q12_3 In the last 12 months, have you used a food hygiene rating scheme to check an establishment's hygiene standards before deciding to visit?

Q2_14 How often do you eat beef, lamb or pork?

Q2_14 How often do you eat cooked vegetables?

Q2_14 How often do you eat pre-packed sandwiches?

Q2_14 How often do you eat poultry?

Q2_14 How often do you eat pre-cooked meats, like ham or meat pâté?

Q2_14 How often do you eat milk and dairy foods like cheese and yoghurt?

Q2_14 How often do you eat eggs?

Q2_14 How often do you eat fish, excluding shellfish?

Q2_14 How often do you eat shellfish (includes crab, prawns and lobster)?

Q2_14 How often do you eat raw fruit?

Q2_14 How often do you eat raw vegetables, including salad?

Q2_16 Please tell me how much you agree or disagree with statement - Good health is just a matter of good luck

Q2_16 Please tell me how much you agree or disagree with statement - When preparing food for myself I could be more careful about hygiene

Q2_16 Please tell me how much you agree or disagree with statement - I don't really think about what I eat

Q2_16 Please tell me how much you agree or disagree with statement - The experts contradict each other over what foods are good or bad for you

Q2_16 Please tell me how much you agree or disagree with statement - What you eat makes a big difference to how healthy you are

Q2_16 Please tell me how much you agree or disagree with statement - The price of food doesn't really matter as long as I know that the quality is good

Q2_16 Please tell me how much you agree or disagree with statement - I enjoy cooking and preparing food

Q2_16 Please tell me how much you agree or disagree with statement - I don't have time to spend preparing and cooking food

Q2_3 How often do you cook or prepare food for yourself?

Q2_33 Have you done any of the following things in the last 7 days? - Eaten in a restaurant

Q2_33 Have you done any of the following things in the last 7 days? - Eaten in a pub

Q2_33 Have you done any of the following things in the last 7 days? - Eaten in a café or coffee shop

Q2_33 Have you done any of the following things in the last 7 days? - Bought food or drink from a café, coffee shop or sandwich bar to take away

Q2_33 Have you done any of the following things in the last 7 days? - Eaten fast food e.g. McDonalds, KFC, kebab shops

Q2_33 Have you done any of the following things in the last 7 days? - Eaten food from a work canteen

Q2_33 Have you done any of the following things in the last 7 days? - Eaten food from a cinema, bowling alley, theme park or other leisure facility

Q2_33 Have you done any of the following things in the last 7 days? - Eaten takeaway food (e.g. Indian/Chinese/Pizza/Fish and chips)

Q2_33 Have you done any of the following things in the last 7 days? - None of these

Q2_35 Generally, when you're deciding where to eat out, which of the following are important to you? - I never eat out at all

Q2_35 Generally, when you're deciding where to eat out, which of the following are important to you? - Price

Q2_35 Generally, when you're deciding where to eat out, which of the following are important to you? - Recommendations or invitation from someone you know/good reviews

Q2_35 Generally, when you're deciding where to eat out, which of the following are important to you? - Nutritional information of the food is provided

Q2_35 Generally, when you're deciding where to eat out, which of the following are important to you? - Healthy foods/choices

Q2_35 Generally, when you're deciding where to eat out, which of the following are important to you? - Cleanliness and hygiene

Q2_35 Generally, when you're deciding where to eat out, which of the following are important to you? - Good service

Q2_35 Generally, when you're deciding where to eat out, which of the following are important to you? - A good hygiene rating/score

Q2_35 Generally, when you're deciding where to eat out, which of the following are important to you? - Food for restricted diets such as Vegetarian, Halal, Kosher

Q2_35 Generally, when you're deciding where to eat out, which of the following are important to you? - None of these

Q2_35 Generally, when you're deciding where to eat out, which of the following are important to you? - Something else

Q2_35 Generally, when you're deciding where to eat out, which of the following are important to you? - Suitable for children

Q2_35 Generally, when you're deciding where to eat out, which of the following are important to you? - Good/ quality food (include homemade)

Q2_35 Generally, when you're deciding where to eat out, which of the following are important to you? - Choice/menu

Q2_35 Generally, when you're deciding where to eat out, which of the following are important to you? - Location/convenience

Q2_37 When you eat out, how aware would you say you generally are about standards of hygiene?

Q2_38 How do you know about the hygiene standards of the places you eat out at or buy food from? - Word of mouth

Q2_38 How do you know about the hygiene standards of the places you eat out at or buy food from? - Reputation

Q2_38 How do you know about the hygiene standards of the places you eat out at or buy food from? - Appearance of staff

Q2_38 How do you know about the hygiene standards of the places you eat out at or buy food from? - General appearance of premises

Q2_38 How do you know about the hygiene standards of the places you eat out at or buy food from? - Hygiene sticker

Q2_38 How do you know about the hygiene standards of the places you eat out at or buy food from? - Hygiene certificate

Q2_38 How do you know about the hygiene standards of the places you eat out at or buy food from? - Websites

Q2_38 How do you know about the hygiene standards of the places you eat out at or buy food from? - Looking at the cleanliness of the washrooms/ toilets

Q2_38 How do you know about the hygiene standards of the places you eat out at or buy food from? - Kitchen/Prep areas clean

Q2_38 How do you know about the hygiene standards of the places you eat out at or buy food from? - Personal knowledge

Q2_38 How do you know about the hygiene standards of the places you eat out at or buy food from? - Other (specify)

Q2_38 How do you know about the hygiene standards of the places you eat out at or buy food from? - (Don't know)

Q2_4 How often do you cook or prepare food for others?

Q2_7A Number of times eaten breakfast at home in the last seven days

Q2_7B Number of times eaten lunch at home in the last seven days

Q2_7C Number of times eaten main evening meal at home in the last seven days

Q3_1 Thinking about food/ grocery shopping, which of these best describes the level of responsibility you have for the shopping in your household?

Q3_12 Thinking about food prices generally over the last 12 months, would you say they have stayed the same, increased or decreased?

Q3_13 Have you made any of these changes in the last 6 months for financial reasons? - Eaten at home more

Q3_13 Have you made any of these changes in the last 6 months for financial reasons? - Cooked at home more

Q3_13 Have you made any of these changes in the last 6 months for financial reasons? - Eaten fewer takeaways

Q3_13 Have you made any of these changes in the last 6 months for financial reasons? - Eaten out less

Q3_13 Have you made any of these changes in the last 6 months for financial reasons? - Made packed lunches more

Q3_13 Have you made any of these changes in the last 6 months for financial reasons? - Bought items that were on special offer more

Q3_13 Have you made any of these changes in the last 6 months for financial reasons? - Prepared food that could be kept as leftovers more

Q3_13 Have you made any of these changes in the last 6 months for financial reasons? - Kept leftovers for longer before eating

Q3_13 Have you made any of these changes in the last 6 months for financial reasons? - Eaten food past its use-by-date more

Q3_13 Have you made any of these changes in the last 6 months for financial reasons? - None of these

Q3_4 Which of these is used for your 'main' shopping trip?

Q3_7 How often do you (or someone else) do a main shop for your household food shopping?

Q4_1 Thinking about when you are storing, preparing and cooking food in the kitchen do you wear an apron when cooking?

Q4_1 Thinking about when you are storing, preparing and cooking food in the kitchen do you wash vegetables which are going to be cooked?

Q4_1 Thinking about when you are storing, preparing and cooking food in the kitchen do you wash hands before starting to prepare or cook food?

Q4_1 Thinking about when you are storing, preparing and cooking food in the kitchen do you wash hands immediately after handling raw meat, poultry or fish?

Q4_1 Thinking about when you are storing, preparing and cooking food in the kitchen do you cook food until it is steaming hot throughout?

Q4_1 Thinking about when you are storing, preparing and cooking food in the kitchen do you eat chicken or turkey if the meat is pink or has pink or red juices?

Q4_1 Thinking about when you are storing, preparing and cooking food in the kitchen do you eat red meat (e.g. beef or lamb, steak or roast meat, but not mince) if it is pink or has pink or red juices?

Q4_1 Thinking about when you are storing, preparing and cooking food in the kitchen do you eat burgers or sausages if the meat is pink or has pink or red juices?

Q4_1 Thinking about when you are storing, preparing and cooking food in the kitchen do you follow a recipe when making something new?

Q4_1 Thinking about when you are storing, preparing and cooking food in the kitchen do you store open tins in the fridge?

Q4_1 Thinking about when you are storing, preparing and cooking food in the kitchen do you use different chopping boards for different foods?

Q4_1 Thinking about when you are storing, preparing and cooking food in the kitchen do you wash raw meat or poultry?

Q4_1 Thinking about when you are storing, preparing and cooking food in the kitchen do you wash raw fish or seafood?

Q4_1 Thinking about when you are storing, preparing and cooking food in the kitchen do you wash fruit which is going to be eaten raw?

Q4_1 Thinking about when you are storing, preparing and cooking food in the kitchen do you wash vegetables (including salad) which are going to be eaten raw?

Q4_1 Thinking about when you are storing, preparing and cooking food in the kitchen do you wash fruit which is going to be cooked?

Q4_18 How can you tell whether raw meat like beef, lamb, pork or poultry is safe to eat or use in cooking? - How it looks

Q4_18 How can you tell whether raw meat like beef, lamb, pork or poultry is safe to eat or use in cooking? - The colour of it

Q4_18 How can you tell whether raw meat like beef, lamb, pork or poultry is safe to eat or use in cooking? - How it smells

Q4_18 How can you tell whether raw meat like beef, lamb, pork or poultry is safe to eat or use in cooking? - How it tastes

Q4_18 How can you tell whether raw meat like beef, lamb, pork or poultry is safe to eat or use in cooking? - What it feels like/ the texture

Q4_18 How can you tell whether raw meat like beef, lamb, pork or poultry is safe to eat or use in cooking? - Whether it has been stored correctly

Q4_18 How can you tell whether raw meat like beef, lamb, pork or poultry is safe to eat or use in cooking? - Best before date

Q4_18 How can you tell whether raw meat like beef, lamb, pork or poultry is safe to eat or use in cooking? - Use by date

Q4_18 How can you tell whether raw meat like beef, lamb, pork or poultry is safe to eat or use in cooking? - Sell by or display until date

Q4_18 How can you tell whether raw meat like beef, lamb, pork or poultry is safe to eat or use in cooking? - Date unspecified

Q4_18 How can you tell whether raw meat like beef, lamb, pork or poultry is safe to eat or use in cooking? - Use on the day it's bought/ buy fresh

Q4_18 How can you tell whether raw meat like beef, lamb, pork or poultry is safe to eat or use in cooking? - Expanding packaging/ damaged packaging

Q4_18 How can you tell whether raw meat like beef, lamb, pork or poultry is safe to eat or use in cooking? - don't eat/ buy

Q4_18 How can you tell whether raw meat like beef, lamb, pork or poultry is safe to eat or use in cooking? – Other

Q4_18 How can you tell whether raw meat like beef, lamb, pork or poultry is safe to eat or use in cooking? - Not applicable

Q4_18 How can you tell whether raw meat like beef, lamb, pork or poultry is safe to eat or use in cooking? - don't know

Q4_18 How can you tell whether milk and yoghurt is safe to eat or use in cooking?
- How it looks

Q4_18 How can you tell whether milk and yoghurt is safe to eat or use in cooking?
- The colour of it

Q4_18 How can you tell whether milk and yoghurt is safe to eat or use in cooking?
- How it smells

Q4_18 How can you tell whether milk and yoghurt is safe to eat or use in cooking?
- How it tastes

Q4_18 How can you tell whether milk and yoghurt is safe to eat or use in cooking?
- What it feels like/ the texture

Q4_18 How can you tell whether milk and yoghurt is safe to eat or use in cooking?
- Whether it has been stored correctly

Q4_18 How can you tell whether milk and yoghurt is safe to eat or use in cooking?
- Best before date

Q4_18 How can you tell whether milk and yoghurt is safe to eat or use in cooking?
- Use by date

Q4_18 How can you tell whether milk and yoghurt is safe to eat or use in cooking?
- Sell by or display until date

Q4_18 How can you tell whether milk and yoghurt is safe to eat or use in cooking?
- Date unspecified

Q4_18 How can you tell whether milk and yoghurt is safe to eat or use in cooking?
- Use on the day it's bought/ buy fresh

Q4_18 How can you tell whether milk and yoghurt is safe to eat or use in cooking?
- Expanding packaging/ damaged packaging

Q4_18 How can you tell whether milk and yoghurt is safe to eat or use in cooking?
- don't eat/ buy

Q4_18 How can you tell whether milk and yoghurt is safe to eat or use in cooking?
– Other

Q4_18 How can you tell whether milk and yoghurt is safe to eat or use in cooking?
- Not applicable

Q4_18 How can you tell whether milk and yoghurt is safe to eat or use in cooking?
- don't know

Q4_18 How can you tell whether cheese is safe to eat or use in cooking? - How it looks

Q4_18 How can you tell whether cheese is safe to eat or use in cooking? - The colour of it

Q4_18 How can you tell whether cheese is safe to eat or use in cooking? - How it smells

Q4_18 How can you tell whether cheese is safe to eat or use in cooking? - How it tastes

Q4_18 How can you tell whether cheese is safe to eat or use in cooking? - What it feels like/ the texture

Q4_18 How can you tell whether cheese is safe to eat or use in cooking? - Whether it has been stored correctly

Q4_18 How can you tell whether cheese is safe to eat or use in cooking? - Best before date

Q4_18 How can you tell whether cheese is safe to eat or use in cooking? - Use by date

Q4_18 How can you tell whether cheese is safe to eat or use in cooking? - Sell by or display until date

Q4_18 How can you tell whether cheese is safe to eat or use in cooking? - Date unspecified

Q4_18 How can you tell whether cheese is safe to eat or use in cooking? - Use on the day it's bought/ buy fresh

Q4_18 How can you tell whether cheese is safe to eat or use in cooking? - Expanding packaging/ damaged packaging

Q4_18 How can you tell whether cheese is safe to eat or use in cooking? - don't eat/ buy

Q4_18 How can you tell whether cheese is safe to eat or use in cooking? - Other

Q4_18 How can you tell whether cheese is safe to eat or use in cooking? - Not applicable

Q4_18 How can you tell whether cheese is safe to eat or use in cooking? - don't know

Q4_18 How can you tell whether an egg is safe to eat or use in cooking? - How it looks

Q4_18 How can you tell whether an egg is safe to eat or use in cooking? - The colour of it

Q4_18 How can you tell whether an egg is safe to eat or use in cooking? - How it smells

Q4_18 How can you tell whether an egg is safe to eat or use in cooking? - How it tastes

Q4_18 How can you tell whether an egg is safe to eat or use in cooking? - What it feels like/ the texture

Q4_18 How can you tell whether an egg is safe to eat or use in cooking? - Whether it has been stored correctly

Q4_18 How can you tell whether an egg is safe to eat or use in cooking? - If it doesn't float in water

Q4_18 How can you tell whether an egg is safe to eat or use in cooking? - Best before date

Q4_18 How can you tell whether an egg is safe to eat or use in cooking? - Use by date

Q4_18 How can you tell whether an egg is safe to eat or use in cooking? - Sell by or display until date

Q4_18 How can you tell whether an egg is safe to eat or use in cooking? - Date unspecified

Q4_18 How can you tell whether an egg is safe to eat or use in cooking? - Use on the day it's bought/ buy fresh

Q4_18 How can you tell whether an egg is safe to eat or use in cooking? - Expanding packaging/ damaged packaging

Q4_18 How can you tell whether an egg is safe to eat or use in cooking? - Crack them

Q4_18 How can you tell whether an egg is safe to eat or use in cooking? - don't eat/ buy

Q4_18 How can you tell whether an egg is safe to eat or use in cooking? - Other

Q4_18 How can you tell whether an egg is safe to eat or use in cooking? - Not applicable

Q4_18 How can you tell whether an egg is safe to eat or use in cooking? - don't know

Q4_18 How can you tell whether fish excluding shellfish is safe to eat or use in cooking? - How it looks

Q4_18 How can you tell whether fish excluding shellfish is safe to eat or use in cooking? - The colour of it

Q4_18 How can you tell whether fish excluding shellfish is safe to eat or use in cooking? - How it smells

Q4_18 How can you tell whether fish excluding shellfish is safe to eat or use in cooking? - How it tastes

Q4_18 How can you tell whether fish excluding shellfish is safe to eat or use in cooking? - What it feels like/ the texture

Q4_18 How can you tell whether fish excluding shellfish is safe to eat or use in cooking? - Whether it has been stored correctly

Q4_18 How can you tell whether fish excluding shellfish is safe to eat or use in cooking? - Best before date

Q4_18 How can you tell whether fish excluding shellfish is safe to eat or use in cooking? - Use by date

Q4_18 How can you tell whether fish excluding shellfish is safe to eat or use in cooking? - Sell by or display until date

Q4_18 How can you tell whether fish excluding shellfish is safe to eat or use in cooking? - Date unspecified

Q4_18 How can you tell whether fish excluding shellfish is safe to eat or use in cooking? - Use on the day it's bought/ buy fresh

Q4_18 How can you tell whether fish excluding shellfish is safe to eat or use in cooking? - Expanding packaging/ damaged packaging

Q4_18 How can you tell whether fish excluding shellfish is safe to eat or use in cooking? - don't eat/ buy

Q4_18 How can you tell whether fish excluding shellfish is safe to eat or use in cooking? – Other

Q4_18 How can you tell whether fish excluding shellfish is safe to eat or use in cooking? - Not applicable

Q4_18 How can you tell whether fish excluding shellfish is safe to eat or use in cooking? - don't know

Q4_19B Which of these is the best indicator of whether food is safe to eat?

Q4_1A How often do you change the dishcloths or sponges that you use for washing up?

Q4_1A How often do you change the dishcloths or sponges that you use for cleaning your kitchen?

Q4_1A How often do you change tea towels?

Q4_1A How often do you clean your sink and draining board thoroughly?

Q4_1A How often do you wipe down the surfaces in your kitchen?

Q4_1A How often do you use tea towels to dry washing up?

Q4_1C And which method do you generally use to defrost frozen meat or fish?

Q4_21 Do you check use-by dates when you are buying food?

Q4_22 Do you check use-by dates when you are about to cook or prepare food?

Q4_23A Maximum number of days you would keep a packet of sliced cooked or cured meat e.g. ham in the fridge once opened before deciding you would definitely not eat or drink it? (Spontaneous)

Q4_23A Maximum number of days you would keep a packet of meat, fish or seafood pâté in the fridge once opened before deciding you would definitely not eat or drink it? (Spontaneous)

Q4_23A Maximum number of days you would keep a packet of fresh dip e.g. sour cream and chive or hummus in the fridge once opened before deciding you would definitely not eat or drink it? (Spontaneous)

Q4_23A Maximum number of days you would keep a packet of smoked fish e.g. smoked mackerel or smoked salmon in the fridge once opened before deciding you would definitely not eat or drink it? (Spontaneous)

Q4_23A Maximum number of days you would keep a packet of soft or cream cheese in the fridge once opened before deciding you would definitely not eat or drink it? (Spontaneous)

Q4_24 If you made a meal on Sunday, what is the last day that you would consider eating the leftovers? (Spontaneous)

Q4_25 How many times would you consider re-heating food after it was cooked for the first time? (Spontaneous)

Q4_27 Agreement/ Disagreement with statement - I always avoid throwing food away

Q4_27 Agreement/ Disagreement with statement - I am unlikely to get food poisoning from food prepared in my own home

Q4_27 Agreement/ Disagreement with statement - It's just bad luck if you get food poisoning

Q4_27 Agreement/ Disagreement with statement - If you eat out a lot you are more likely to get food poisoning

Q4_27 Agreement/ Disagreement with statement - Restaurants and catering establishments should pay more attention to food safety and hygiene

Q4_27 Agreement/ Disagreement with statement - I often worry about whether the food I have is safe to eat

Q4_27 Agreement/ Disagreement with statement - People worry too much about getting food poisoning

Q4_27 Agreement/ Disagreement with statement - A little bit of dirt won't do you any harm

Q4_3 Reasons for washing chopping board after using it to prepare raw meat, poultry or fish - To stop remains of it getting onto the next food

Q4_3 Reasons for washing chopping board after using it to prepare raw meat, poultry or fish - It can be dangerous if you don't

Q4_3 Reasons for washing chopping board after using it to prepare raw meat, poultry or fish - To stop the flavour/ taste transferring to other foods

Q4_3 Reasons for washing chopping board after using it to prepare raw meat, poultry or fish - To get rid of the mess

Q4_3 Reasons for washing chopping board after using it to prepare raw meat, poultry or fish - As it looks dirty

Q4_3 Reasons for washing chopping board after using it to prepare raw meat, poultry or fish - To wash away germs/ bacteria

Q4_3 Reasons for washing chopping board after using it to prepare raw meat, poultry or fish - To prevent food poisoning

Q4_3 Reasons for washing chopping board after using it to prepare raw meat, poultry or fish - It's a habit

Q4_3 Reasons for washing chopping board after using it to prepare raw meat, poultry or fish - It's just what people do/ are told to do

Q4_3 Reasons for washing chopping board after using it to prepare raw meat, poultry or fish - Don't know why

Q4_3 Reasons for washing chopping board after using it to prepare raw meat, poultry or fish – Other

Q4_3 Reasons for washing chopping board after using it to prepare raw meat, poultry or fish - Not applicable

Q4_3 Reasons for washing chopping board after using it to prepare raw meat, poultry or fish - To prevent cross contamination

Q4_8A Do you have the use of a kitchen, that is, a separate room in which you cook?

Q4_8C Which of the following appliances do you have in your household? - Combined fridge and freezer

Q4_8C Which of the following appliances do you have in your household? - Separate fridge

Q4_8C Which of the following appliances do you have in your household? - Separate freezer

Q4_8C Which of the following appliances do you have in your household? – Dishwasher

Q4_8C Which of the following appliances do you have in your household? - Oven

Q4_8C Which of the following appliances do you have in your household? - Hob

Q4_8C Which of the following appliances do you have in your household? - Grill

Q4_8C Which of the following appliances do you have in your household? – Microwave

Q4_8C Which of the following appliances do you have in your household? - Kettle

Q4_8C Which of the following appliances do you have in your household? - None of these

Q4_8C Which of the following appliances do you have in your household? - Don't know

Q6_1 How is your health in general?

Q6_2 Do you have any physical or mental health conditions or illnesses lasting or expected to last for 12 months or more?

Q6_4 How easy do you find it to read the labelling on food products in terms of the size of the print?

Q7.1 Which, if any, of the following applies to you? - Completely vegetarian

Q7.1 Which, if any, of the following applies to you? - Partly vegetarian

Q7.1 Which, if any, of the following applies to you? - Vegan

Q7.1 Which, if any, of the following applies to you? - Allergic to certain food

Q7.1 Which, if any, of the following applies to you? - On a diet trying to lose weight

Q7.1 Which, if any, of the following applies to you? - Avoid certain food for religious or cultural reasons

Q7.1 Which, if any, of the following applies to you? - Avoid certain food for medical reasons

Q7.1 Which, if any, of the following applies to you? - Trying to eat healthily/have healthy lifestyle

Q7.1 Which, if any, of the following applies to you? - Avoid foods that make me feel ill/don't like

Q7.1 Which, if any, of the following applies to you? - Avoid/don't eat red meat

Q8_3 Which of the following have you heard of in relation to food production? - Genetic Modification (GM)

Q8_3 Which of the following have you heard of in relation to food production? - Irradiation

Q8_3 Which of the following have you heard of in relation to food production? - Animal Cloning

Q8_3 Which of the following have you heard of in relation to food production? - Nanotechnology

Q8_3 Which of the following have you heard of in relation to food production? - None of these

Q9_2 To what extent are you concerned or unconcerned by the overall safety of food produced in the UK?

Q9_2 To what extent are you concerned or unconcerned by the overall safety of food imported from outside the UK?

Q9_2 To what extent are you concerned or unconcerned by the safety of fruit and vegetables produced in the UK?

Q9_2 To what extent are you concerned or unconcerned by the safety of fruit and vegetables imported from outside the UK?

Q9_2 To what extent are you concerned or unconcerned by the safety of meat produced in the UK?

Q9_2 To what extent are you concerned or unconcerned by the safety of meat imported from outside the UK?