Food and You - Secondary Analysis - Waves 1-3

Area of research interest: Food and You
Study duration: 2014-11-01
Project code: FS409014
Conducted by: NatCen Social Research
Back to top

Background

This paper involves an exercise to segment the population according to possible underlying patterns of food-safety-related behaviour.

Food and You is our flagship consumer survey. It is a biennial, random probability survey providing information on reported behaviours, attitudes and knowledge relating to food safety and other food-related topics. Food and You wave one was conducted in 2010, Food and You wave two in 2012 and Food and You wave three in 2014.

We commissioned NatCen Social Research to undertake five secondary analysis papers from the first three waves. NatCen used the Index of Recommended Practice (IRP), a composite measure of food safety practice that we had developed in previous waves.

The topics of this series of secondary analysis papers were developed in consultation with leading academics in the fields of food and social science research - whilst also referencing our priorities in policy, science and consumer-engagement. This paper involves an exercise to segment the population according to possible underlying patterns of food-safety-related behaviour.

Back to top

Research approach

The specific objectives of the overall Food and You Waves 1-3 secondary analysis project were to:

- identify a number of key areas of interest form Food and You for further exploration
- devise research questions which relate to the identified areas of interest, and are informed by the relevant literatures
- conduct analyses of the Food and You data to address those research questions
- consider the implications of the findings for a number of literatures related to the contents of Food and You
- report findings in a series of working papers, to be published by our organisation and in peer reviewed journals
- suggest any relevant additional research questions for future analysis

To identify potential topics and research questions for working papers, NatCen Social Research held a series of three workshops in January 2015 with a wide range of leading academics in the fields of food and social science research, engaging them in structured discussions on particular themes, with reference to our own policy-, science- and consumer-engagement-related priorities.

From these workshops, a shortlist of potential topics and research questions was developed, from which we decided to commission five working papers.

The approach for this particular paper was to use latent class analysis (LCA) to find out if the population could be divided into distinct clusters of people with similar profiles of food safety activities, based on responses to our Food and You survey. If clusters could be identified, the second stage was to use observed frequencies of demographic and socio-economic characteristics, and other reported food-related activities, in order to produce a descriptive profile for each cluster. Additional CHAID and multiple logistic regression analysis would then to be undertaken to determine which characteristics were the most important in determining which cluster respondents would be assigned to.

Please note that this research was commissioned prior to April 2015, when the Food Standards Agency's responsibilities in Scotland were transferred to the new independent Scottish food safety body, Food Standards Scotland (FSS). As such, this analysis is based on data from Waves 1-3 of our Food and You survey, which was undertaken across the UK. For the purposes of this research, analysis and findings therefore relate to aggregate UK-level data.

Results

Using latent class analysis, five distinct groups were identified in the population, although there was relatively little differentiation between the clusters in terms of patterns of food safety activities. People in the largest cluster (54% of the sample) generally tended to report food safety activities that were in line with our recommendations, except for washing raw meat and poultry, and storing raw meat and poultry, for which a majority of people in the cluster reported activities that were not in line with our recommendations. This cluster had a very similar demographic profile (e.g. gender, age, ethnicity) to that of the population as a whole.

People in the second largest cluster (29% of the sample) were the most likely to report a majority of food safety activities in line with recommendations. However, people in this cluster were also the most likely to report washing raw meat and poultry, which is not in line with recommendations. More than half of this cluster was female and a higher proportion than average lived in households which had children aged under 16.

Those in the third cluster (10% of the sample) generally reported a similar pattern of food safety activities to those in the largest group (Cluster 1), but the cluster was distinct in that all members reported that they never re-heated food. This cluster included a higher than average proportion of people aged 75 years and over, and of white ethnicity.

People in the fourth cluster (7% of the sample) tended to respond 'not applicable' to questions relating to the handling and cooking of raw meat, poultry and fish, suggesting they were rarely involved in these activities. In other aspects, this cluster was relatively similar to Cluster 1. Around two-thirds of the cluster were male, with a higher than average proportion of people aged 16 to 24 years and of black, Asian or other ethnicity. Over a third (38%) reported being vegan/vegetarian.

Those in Cluster 5, the smallest cluster (1% of the sample), also tended to be more likely to respond 'not applicable' to questions relating to the handling and cooking of raw meat, poultry and fish. They also reported that they never reheated food, and they were also more likely to respond

'not applicable' to cooking food to steaming hot, suggesting that they were much less likely to be involved in cooking and preparing food in general. Around three-quarters of this cluster were male, with a higher than average proportion of people aged 75 years and over.

Further analysis was undertaken to investigate the relationship between demographic, socio-economic and other food-related variables, and classification to the different clusters. The first cluster (containing the majority of respondents) and the second cluster (where respondents were most likely to report food safety activities in line with our recommendations) were then selected as two contrasting clusters, and regression analysis was undertaken to explore whether any particular factors were significant in classification to either cluster.

The findings suggest that there is some clustering of food-safety-related activities, but some of the differences between the clusters may primarily reflect different levels of engagement with preparing and cooking food and consumption of different types of food, rather than different patterns in the food safety activities themselves. Further analysis is needed to explore this, as well as whether other food-safety-related activities included in Food and You follow a similar pattern.

[Back to top](#)

Research reports

England, Northern Ireland and Wales

PDF
[View A typology of food safety activities paper 1 as PDF(Open in a new window)](#) (869.39 KB)

England, Northern Ireland and Wales

PDF
[View Wellbeing and food safety Paper 2 Food and You Waves 1-3 secondary analysis as PDF(Open in a new window)](#) (1.3 MB)

England, Northern Ireland and Wales

PDF
[View 'Vulnerable' consumers and food safety Paper 3 Food and You Waves 1-3 secondary analysis as PDF(Open in a new window)](#) (619.4 KB)

England, Northern Ireland and Wales

PDF
[View Food affordability and safety Paper 4 Food and You Waves 1-3 secondary analysis as PDF(Open in a new window)](#) (1.39 MB)

England, Northern Ireland and Wales

PDF
[View The use of food hygiene rating schemes Paper 5 Food and You Waves 1-3 secondary analysis as PDF(Open in a new window)](#) (1.48 MB)

Team Contacts

Food and You team

foodandyou@food.gov.uk