

SOCIAL SCIENCE

Selected current projects 2019-20

Food and you

Food and You was first developed in 2009, in response to the FSA's Social Science Research Committee's (SSRC) recommendation that a new rigorous survey was developed to replace the Agency's Consumer Attitudes Survey. Since then, Food and You has been the Agency's principal source of robust data on consumers' self-reported attitudes, behaviour and knowledge relating to a broad range of food issues, with five waves of data published to date. Specially, the survey is designed to:

- Monitor changes in attitudes and behaviour over time
- Provide evidence for tracking the FSA's strategic plans
- Measure knowledge of FSA messages/ interventions aimed at raising awareness and changing behaviour
- Monitor public understanding and behaviours relating to food safety
- Identify target groups for future interventions

In 2013, the survey became recognised as a government Official Statistic, reflecting its robust methodology. A random sample of approximately 3,000 adults (over 16) living in England, Wales and Northern Ireland have taken part in each wave. The Wave 5 results were published on 25 April 2019, and were able to tell us that...

- Food safety practices have improved slightly since 2010
- Recognition of the Food Hygiene Rating Scheme is high, and has increased since 2012
- 2% of respondents have a clinically diagnosed food allergy or intolerance
- Common triggers of adverse reactions to food include cow's milk/cow's milk products, fruit and cereal containing gluten
- 80% of respondents live in high food secure households, 10% in marginal food secure households, and 10% in food insecure households

The Advisory Committee for Social Science has recommended that for future waves, we move from face to face interviewing to Web-push mixed-mode surveying (WPM), making sure that we test first to investigate any differences in response profiles between the current and new methodology. They also recommended that we review the frequency of surveying, and increase our sample sizes in Wales and Northern Ireland,

as well as looking for innovative ways to use and promote our data. We are now putting these recommendations into action.



Tracking consumer attitudes

The FSA Public Attitudes Tracker has run biannually since 2010, qualifying as an Official Statistic in 2014. The tracker is used to monitor a variety of issues of interest to the FSA, including:

- Concern about food safety issues
- Awareness of food hygiene standards
- Awareness of the FSA and its responsibilities
- Trust in the FSA and the food industry
- Confidence in food labelling.

The tracker employs a face-to-face interviewing methodology, through Kantar's Omnibus survey. A random sample of c.2,000 adults in England, Wales and Northern Ireland take part each wave. Wave 18 results published August 2019 showed that:

- The top food safety issues of concern for respondents was food hygiene when eating out (31%).
- 78% of respondents reported being aware of the FSA, similar to previous waves.
- Of those aware of the FSA, 66% trusted the FSA to do its job, and 72% reported that they trust the FSA to tell the truth in the information it arouidan

- The majority reported that they trust that food is what it says it is and is accurately labelled (76%) and 76% trusted the authenticity of ingredients / origin / quality of food.
- Measures of trust in the FSA and in the food system were developed based on responses to multiple questions. The average score of the composite measure of trust in the FSA was 6.9 out of 10 and the average score for the composite measure of trust in the food system was 3.8 out of 5.

In order to continuously improve the impact of the tracker, we have been working to refresh the style of reporting, make the key findings more concise and reduce the length of time between receiving the data and publishing the report.

We also track consumer views and awareness of the Food Hygiene Rating Scheme through an annual tracking survey with approximately 2,000 adults in England, Wales and Northern Ireland, commissioned by the FHRS team to monitor consumer awareness, attitudes towards and use of the scheme, and have also been tracking attitudes to food and regulation in the context of leaving the EU since October 2016.

information it provides



Provision of allergen information for nonprepacked foods

The FSA is responsible for policies on safetyrelated food labelling in England, Wales and Northern Ireland. This includes food labelling on allergens for non-prepacked food, which comprises of:

- Food not packed, such as loose items;
- Food packed on the sales premises at the consumer's request; and
- Food prepacked for direct sale (also known as PPDS, any food that is prepacked on the premises in anticipation of an order, or purchase, before being offered for sale).

In advance of the introduction of the current legislation on food labelling for non-prepacked food (which came into effect in 2014), we commissioned work to establish baseline measures of the provision of allergen information by food businesses. This research enabled us to understand the prevalence and type of information being provided on allergenic ingredients for these foods, as well as barriers to providing this information, and the support needs of businesses at the time to comply with the incoming regulations.

Now, five years on from the legislation coming into

to the previous research findings, as well as improve our understanding of the industry's current support needs in this area.

We are also using the research opportunity to gather wider information from food businesses on certain additional, but related, topic areas. One additional area of research interest we will be exploring through this work, is what awareness and understanding do food businesses have of the incoming legislative changes on information provision for foods that fall under the PPDS definition (ahead of the new rules coming into effect in 2021).

The methods of data collection to be used are in the process of being confirmed but will likely include a telephone survey of food businesses operating in the relevant sectors, alongside in-depth interviews to capture more detailed information on food business practices and experiences. The baseline survey had a sample size of over 1,600, and a similar sample size is expected for the survey in this follow-up study. The project is expected to report by Autumn 2020.

This project therefore aims to update our evidence base regarding the food industry's awareness and understanding of the current and incoming allergen information rules for non-prepacked foods. By doing so, the work will generate further insight for FSA research and policy and will help inform the trajectory of the FSA on this important issue going forward.

effect, we are in the process of collecting new data to understand the industry's current uptake and understanding of the rules regarding the provision of allergen information for these food types. This work will enable us to broadly compare the processes that food businesses currently have in place to manage consumer allergen requirements



Precautionary allergen labelling (PAL) evidence review

Allergen labelling is a risk management tool intended to provide consumers with the information they need to enable safe food choices. Precautionary Allergen Labelling (PAL) is a specific form of this labelling, which communicates if there is a risk of a food product having been affected by allergen cross-contamination. It can take many forms, one example being 'may contain X'.

The effectiveness of PAL is, however, partially dependent on consumers' understanding and acting upon the information conveyed. As a member of the International Social Science Liaison Group (ISSLG), we are leading a review of the evidence base on consumer responses to PAL.

The review will collate and draw out key themes from the existing research literature, which will

complement a parallel review of general allergy declarations being undertaken by other members of the ISSLG. This work, once published, will form a robust evidence base for member countries and others to draw on for this policy area, and it is particularly timely, as many member countries are examining aspects related to their domestic allergen labelling. The project will also inform the work of the Codex Alimentarius Commission, who oversee the development of the Codex standards (standards that aim to provide a high level of consumer protection and fair practice in the international trade of food products), who are considering new guidance on PAL.



Consumer perceptions of emerging food technologies

A brief assessment of the evidence indicates new and emerging technologies in food such as personalised data tracking, predictive shopping, smart kitchen appliances and virtual tutorials improving cooking skills have connected people with a wider choice of foods tailored to their personal needs. However, it also shows consumers can be apprehensive of new food technologies.

An FSA literature review in 2009 found that the overall tone of public attitudes towards novel food technologies at this time was one of wariness, unease, uncertainty, and sometimes outright negativity. However, much has changed in this area in the last decade, and to keep abreast of available evidence and understand current consumer options on emerging technologies and their perception of risk we are conducting the following research in 2019.

- Updating the 2009 literature review on consumer perceptions of risk technology.
- Public Dialogues to understand more about consumer views of emerging food technologies.

Specific food technologies we are interested in include: lab grown meat, food where nanotechnology has been used, food that has been genetically modified, food from a cloned animal, and more generally novel food processes, functional food and synthetic biology.

The key questions the research will cover are

- what the public's views are on emerging food technologies;
- what views differ depending on the type of technology;
- what shapes the public's views;
- whether different types of people hold different views;
- how views affect behaviour such as food choices;
- how views have changed over time;
- what relevant research is in progress; and what the gaps in research are and
- A nationally representative survey looking at the rules of thumb that consumers apply to determine their perceptions of risk
- risk perception of emerging technologies;

This project aims to address the gap in the current evidence on consumer risk perceptions and will help inform future policy making and risk analysis after we leave the EU.



Evaluating the regulating our future programme

FSA is a founding partner of The Centre for the Evaluation of Complexity Across the Nexus (CECAN), a national research centre established in 2016 and hosted by the University of Surrey, bringing together experts to address complex issues in policy making and evaluation across the food-energy-water-environment "nexus".

The FSA's Regulating Our Future (ROF) Programme was identified as a suitable case study for complex evaluation due to its dynamic characteristics of multiple scales and stakeholders.

FSA worked with CECAN to help develop a robust evaluation of ROF in two ways. Firstly, through workshops with FSA, CECAN Research Fellows built a high-level evaluation approach based on a Theory of Change in a complex setting. Theories of Change enable the assumptions, processes, impacts and outcomes (both intended and unintended) of a policy programme to be identified and articulated, which in turn helps to identify the evidence required to answer evaluation questions. Secondly, through interviews and discussion with FSA staff, CECAN Research Fellows considered what the evaluation programme might entail at the individual ROF workstream level. This work suggested that the complexity of the ROF programme means that FSA needs to adopt an agile, adaptive approach in response to variation in geographical and temporal policy development and deployment and the inter-dependencies between workstreams.

In addition to the co-design approach taken throughout our collaboration with CECAN, the output has been presented to internal stakeholders. Next, the report will be used to inform the evaluation specification for the ROF programme.

In addition to its practical application, the FSA ROF case study - alongside those of other CECAN government departments – is informing collective expertise on how to evaluate complex change.



Product recalls

In 2016 the FSA and Food Standards Scotland commenced a review to assess the effectiveness of food withdrawal and recall processes in the UK food retail sector. The purpose of the review was to better understand how industry and enforcement authorities complied with their legal obligations to ensure unsafe food was withdrawn from the market and recalled from consumers. The research established that consumers' level of engagement with recall notices was low, in part because recall notices were not effectively placed and designed for reaching them.

There is no industry standard across food businesses as to what food recall notifications look like or what information they include, and consumers see a need for a more consistent and efficient communication approach.

We commissioned further multi-method research to build on the existing evidence base and provide further insight work with consumers to better understand the exact nature of their requirements for a standardised food recall/allergy notice template, which food businesses can use to alert people to a food recall. Further to this, FSA/FSS wanted to test their own digital assets used to communicate about food recalls (social media and website) to test how well these are performing for consumers, and how they could be improved.

Methodology: The FSA conducted research amongst a number of Industry stakeholders prior to this research to understand what is feasible and currently practised in industry and hence what would be feasible going forward. This piece of work used a staged, iterative approach (taking on board the views of FSA/FSS's industry stakeholders at critical stages of the research) to gather public views on how to co-create and develop designs that would meet consumer needs; a UK wide digital task testing existing recall notifications; 4 x days of fast paced iteration and development of potential new designs and content. A nationally representative online survey was also employed to test final content and design.

We found that consumers currently have little awareness of food recalls/allergy alerts – they expect information to be pushed to them and very few proactively put measures in place to be notified of recalls when they occur. There are key content and design needs that need to be met for consumers to engage with, understand and take action off the back of food recall notifications/allergy alerts. This research confirmed the need for a clear information hierarchy and accompanying design guidelines to form the basis of an 'industry wide' template that can be used to better inform the public of food recalls/allergy alerts.

The final phase of the project will evaluate the project deliverables, the reach gained across the UK and any reported behaviour change that may be attributed to the project, during 2020/21.



Food supplements

We commissioned research into consumer attitudes and behaviours in relation to food supplements to understand both mainstream and 'niche' food supplement consumption, to inform development of policy in this area, including identifying any emerging risks. The growth in consumption of food supplements in recent years, coupled with changes in purchasing options (e.g. gyms and online retailers) and consumption patterns, called for fresh consumer insight.

The research consisted of two phases - desk research, an omnibus survey (demographics and usage habits), and social discourse analysis of how consumers are using and talking about supplements online, then extensive qualitative insight with consumers, most of whom were currently taking supplements. Participants completed an online app-based activity prior to the discussion group or depth interview which involved uploading videos, pictures and text in response to questions about their supplement usage, purchase and storage habits. This provided a fuller picture of individual usage than would have been possible in the discussion groups alone, as well as helping to bring to life consumer behaviour.

We found that:

 Consumers differentiate between food supplements for day-to-day health, and those

- Many consumers acknowledge that they take supplements as a force of habit and that they do not know if they are actually making any difference.
- Most consumers are buying food supplements from mainstream retailers and would avoid buying from unknown online retailers due to fears about provenance and adulteration.
- Recommendations (from healthcare or fitness professionals and / or friends and family) and reviews are the key decisionmaking drivers.
- Younger consumers in particular point to social media as having an influence on their choices.
- Consumers assume that the market is regulated and have few concerns about the safety of food supplements as long as they buy from reputable retailers and take supplements responsibly.
- Among the more 'niche' supplement consumers, as the determination to achieve results (e.g. lose weight, relieve pain) increases, consumers' willingness to experiment can also go up, and for some, the benefits outweigh the risks. However, most

for specific purposes (e.g. sports nutrition, weight loss) in terms of how they use them and how efficient they perceive them to be.

• Drivers for food supplement consumption can be both rational and emotional.

feel that these are 'managed' risks – that they know what they are doing and are making informed decisions.



Risk communication

For the FSA, the primary goal of risk communication is to ensure the interactive exchange of information and opinions throughout the risk analysis process, including with consumers. To be scientifically honest and remain trustworthy a regulator must often acknowledge a degree of uncertainty; this is difficult within a political and media environment that lends itself to misinterpretation and reductionism. Added to this, given the central role that food plays in our everyday lives it is understandable that food risks may be the focus of particular concern and anxiety. How, then, should a regulator communicate food risk most effectively in modern society?

The way that risk is communicated, the way that science and statistics are presented and whether this is deemed to be proportionate and wellevidenced has a direct impact on the trustworthiness of an organisation and on its reputation.

Once the UK leaves the EU and responsibility for risk assessment devolves to the FSA/FSS, it will be more important than ever to have a robust framework for the communication of food risk. To this end the FSA's Science Council published some Principles on Risk and Uncertainty, which were then reviewed by a working group of the FSA Advisory Committee for Social Science. This has informed the current guidance on risk communication within the FSA's risk analysis framework. One of the recommendations from working group was to develop a toolkit and framework for risk communications in the FSA, testing this with consumers and practitioners.

We have commissioned a literature review focusing on (a) the academic literature on risk communication around food and (b) as current and past government frameworks relevant to communicating risk around food, including the recently published Defra and EFSA frameworks.

This will then be reviewed by a working group of the FSA's Advisory Committee for Social Science and will inform the development, testing and cocreation of a message framework with consumers, journalists and communications practitioners, resulting in a toolkit for FSA communications staff.



The future consumer

As global connectivity soars, generational shifts could come to play a more important role in setting behaviour than socioeconomic differences do. Young people have become a potent influence on people of all ages and incomes, as well as on the way those people consume and relate to institutions, industries, systems and brands. Much of the discourse indicates that Generation Z (broadly those currently between 16-25) appear to be connecting to food, to global systems, to information and to institutions in new ways.

According to recent reports, there are various implications: consumption as access rather than possession, consumption as an expression of individual identity, and consumption as a matter of ethical concern. Coupled with technological advances, this generational shift is transforming the consumer landscape in a way that cuts across all socioeconomic brackets and extends beyond Gen Z.

However, our own tracking survey indicates that those in the youngest age bracket (16-25) have tended to be less concerned about food issues than the total population. We are undertaking a project using methods of social science enquiry to understand more about

- how this rising generation views food and the food system,
- their interactions with it,
- their interests and aspirations for it,
- how they learn about it and share information and
- what is important to them.

There is little of any weight published on this topic so we are breaking new ground.

Hypotheses from a literature review will be tested through a combination of primary quantitative and deliberative qualitative research to derive evidence-based insights about this group to inform the FSA's horizon scanning and strategic planning.

The full report will be published in Spring 2020.



Antimicrobial resistance in the food chain

The UK's 5-year National Action Plan on AMR includes a long term aim to improve and promote UK food hygiene across the food chain which would lead to reduced exposure to AMR. As part of the wider FSA work on AMR strategy, the Social Science team are undertaking a programme of research with the Risk Assessment team, including:

Literature reviews

We are working on two literature reviews:

- One focusing on consumer understanding of anti-microbial resistance, particularly in relation to the food chain
- And another focusing on what influences people throughout the food supply chain to adopt good hygiene practices

Consumer research

We are commissioning quantitative research with consumers, to understand levels of knowledge and concern around AMR in the foodchain, and awareness of preventative measures that can be taken (i.e. the 4 Cs). Research will be carried out through an online omnibus survey, replicating a study undertaken in 2016, with the inclusion of some additional questions. This will allow us to identify any changes in awareness and concern between 2016 and 2019. This may, if need be, be followed up with qualitative work in 2020.

Research with food handlers

We have added two new questions in to our Small and Micro Food Business Tracker, to ascertain awareness of AMR and knowledge of factors contributing to AMR. These questions will be asked to food handlers only.

Findings from the above research strands will be incorporated into a report ready for publication in January 2020.

