

Paper 12.2 FSA Analytics Unit Update (February 2024).

Summary

This paper is for information and provides an update on key activity and outputs from the Analytics Unit

Analytics Team Update:

Over the last 12 months, the FSA has made progress against its science priorities and capability plans, however pressures on budget and headcount have required us to prioritise some activities over others. As per the [annual FSA science update](#), we are protecting resources to deliver and reform the regulated products service and maintaining our support for risk analysis and incidents. There are four strategic areas of focus for FSA Science in 2024:

1. Improving evidence to allow us to better understand and control foodborne illness, including those caused by pathogens but also food hypersensitivity, chemical contaminants, and AMR.
2. Transforming our science capabilities (and associated service provision) to support regulatory reforms being prioritised by the FSA, especially those around our future regulated products service and the risk analysis process.
3. Sustaining and building our national surveillance and science capabilities, focusing on improving our OL and NRL laboratory networks, investing in new methods, better data sharing (such as pathogen sequence data) and skills (such as regulatory toxicology).
4. Improving our understanding of consumer interests in relation to the food system.

With the Analytics Unit, given resource pressures, we have been exploring where efficiencies can be found in our Consumer Tracker and Food and You 2 surveys, slowed down our research programme on the cost of illness, and have reduced

spend on our foresight programme.

Simultaneously, we are seeking to maximise the impact and reach of our research. This is one dimension of the strategy for Analytics Unit that is currently in development, which will set out our long-term vision for the type of analytical team we wish to be.

Project updates:

Food and You 2:

Wave 6 was published in July 2023, and in December 2023 we published our first [trends report](#) which presents changes in consumers' attitudes and behaviour between 2020 (Wave 1 of the survey) and late 2022 / early 2023 (Wave 6). Key findings were that public confidence in food safety, food labels being accurate, and trust in the FSA has remained high since 2020. However, the percentage of respondents who were highly concerned about the affordability of food almost doubled from 26% at the end of 2020 to 51% the end of 2022 and reported levels of household food insecurity increased from 15% in mid-2021 to 25% at the end of 2022. There have been no notable changes in consumer food safety behaviour since 2020. This report will be produced on an annual basis going forward. Wave 7 will be published in Spring 2024 and will be the first wave where the FSA has produced the data tables in house resulting in a more accessible table format. Food Standards Scotland (FSS) have contributed funding to Wave 8 allowing us to expand the sample to include Scotland (currently fieldwork is only conducted in England, Wales and Northern Ireland) allowing us to measure issues like food insecurity at a UK level. All Food and You 2 publications are available [here](#) and the findings from Wave 8 will be available in Summer 2024, and the project continues to provide evidence to measure the FSA's progress towards its strategic objectives, to inform FSA policy making, and to identify where further action or research may be required.

Kitchen Life 2:

KL2 was published in October 2023. The findings from the study are detailed across seven separate reports, each focusing on a behaviour of interest to the FSA. We have also published raw data (soon to be published by UKDS) and a detailed technical report. All KL2 publications are available [here](#). The project team is currently planning workshops for Social Science, Risk Assessment, and Policy teams to help them embed the findings from KL2.

We have developed an extensive communications plan to ensure that data from this award-winning research project is utilised by teams within the FSA and promoted across and outside of Government. Recent activities include presenting at FSA and Government Social Research (GSR) events.

Further, the PhD studentship with Leeds University Business school continues, with the team regularly updated on progress. The student is currently confirming her research questions with FSA support, looking predominantly at the 'say-do' gap by exploring the differences between observed data from Kitchen Life 2 and self-reported data from Food & You 2.

Enterprise Level Regulation evaluation:

This is a proof of concept looking at whether large enterprises which pass certain criteria can be regulated at an enterprise level rather than through normal Local Authority (LA) inspections on individual premises. Social Science are working with an external contractor (ICF) on the qualitative/process evaluation through a series of stakeholder interviews while Operational Research are looking at the quantitative data, in particular what the information is being collected and how it compares to LA inspections.

Food Standards Pilot Wales evaluation:

Following successful pilots in England and Northern Ireland the new food standards model is being piloted in two LAs in Wales with two control LAs also collecting data. AU are working with an external contractor (ICF) on the evaluation through a series of stakeholder interviews and analysing the impact of the new model in terms of its effectiveness to identify non-compliant premises and making best use of LA resource.

Small and Micro FBO Tracker

This is a biennial survey to track small (<50 employees) and micro (<10 employees) Food Business Operator (FBO) attitudes towards food-related topics, and their trust in the FSA and food system. It aims to unpack attitudes towards regulation and deepen insights and knowledge of small and micro enterprises, and to measure FBOs trust in the FSA and extent to which the FSA is considered a modern, accountable regulator. Fieldwork for wave 4 of the tracker took place between Oct-Dec 2023, with a total of 556 small and micro FBOs surveyed. A final presentation and report will be delivered in March 2024.

FHRS audit and survey:

This is an annual piece of research that has been conducted since 2011. This research consists of (1) an annual audit of display of food hygiene ratings at premises and online by mystery shoppers and (2) a telephone survey with business premises to explore their use of the scheme, awareness of the scheme, understanding and use of the scheme's safeguards, impacts of the scheme and their attitudes towards it, and attitudes to online display. All fieldwork for the 2023 wave completed on 15th December. Our contractor (IFF) is now drafting the report, with the first draft due on 23rd February 2024. A final report will be produced by the end of March, and we are in the process of agreeing a publication date. Data from this research will feed into the evidence base for mandation in England, help demonstrate the impact of the statutory schemes in Wales and Northern Ireland, and continue to build the evidence base to support proposals for mandatory online display in all three nations.

The Wider Consumer Interests Programme:

Update on the ongoing projects within this programme of work include:

- School Food Standards (SFS): FSA and Department for Education (DfE) commissioned the School Food Standards (SFS) pilot to test if Food Safety Officers (FSOs) could carry out a SFS check to identify potential non-compliance with the SFS alongside food hygiene inspections. The pilot launched in September 2022 across 18 Local Authorities (LAs). The SFS are designed to help children and young people in schools in England have access to a nutritious diet and develop healthy eating habits. They are mandatory for all maintained schools, with school governing boards responsible for ensuring the standards are met. The purpose of this pilot is to test a new approach for local authorities in assuring and supporting compliance with the SFS through investigating if FSOs carrying out food hygiene inspections can ask questions and make observations related to the SFS to identify potential instances of non-compliance with the standards. All 3 phases of this work and research on these phases have now completed, to understand the experiences of FSOs, LAs and schools during the pilot, as well as the feasibility of different aspects of the SFS being tested. The [Discovery and Feasibility Phase 1](#) reports were published in November 2023, and the final report from Feasibility Phase 2 will be delivered by end of March 2024, with the intention to publish in Spring 2024.

Consumer Insights Tracker:

The Tracker was recommissioned in Summer 2023 and YouGov were appointed as the new supplier. A reinvigorated survey went into field in July 2023. When recommissioning the survey, we made improvements to the content, methodology and outputs, including moving from an omnibus panel approach to a bespoke panel survey. Whilst we put several steps in place to try and minimise the impact of these updates, we found it was not possible to make direct comparisons between the new survey and earlier surveys. We therefore began a new time series in July 2023.

- In October 2023 we resumed monthly publication of findings in a [more visual slide deck](#) and [accompanying webpage](#) (replacing the bulletin-style reporting).
- The [ACSS review](#) of the Tracker led by Professor Spencer Henson was published in August 2023. Recommissioning the survey allowed us to address some of the review's recommendations, and we are aiming to publish our response to the recommendations in the next few months.
- We have established a Tracker working group that meets approx. every two months. There is cross-FSA and ACSS representation on the working group.
- Work has begun on the Tracker end of year report, with the aim to publish this at the end of April/ start of May. We are also working closely with the Food and You 2 team to reduce duplication between the two surveys.

Behavioural Insight:

We have published four trials in Journals (Appetite, Behavioural Public Policy- two articles- and Clinical and Experimental Allergy). Our final trial is under review by the International Journal of Market Research. The Evaluation Accelerator Fund (EAF) Food System Trials is progressing with some of the first tranche of trials starting and continuing development of the second tranche of trials. We are continuing to engage with large supermarkets to try and get them involved. We are continuing to identify work across the organisation to identify work which may benefit from behavioural advice and support, and to offer this to stakeholders.

Estimates for less common pathogens:

The FSA estimates foodborne cases for 13 main pathogens by undertaking large studies of Infectious Intestinal Disease (IID). However, these studies are not

appropriate for all pathogens, for instance if numbers are too small to be picked up in such a study, testing used in the study is not effective for such pathogens or the pathogens are non IID. As the UK has left the EU, estimating these pathogens has become increasingly important for assessing risks from trade particularly whether these pathogens may have an overseas source. The OR team are modelling these pathogens using a variety of methods based on both UK and overseas data to provide estimates.

LA clustering:

The FSA is reviewing the way it measures performance of LAs. To help make comparisons between LAs fairer the OR team are producing a set of clustering models so that LAs which are similar can be compared. The team has run a series of workshops to agree the data sources to be included in such models and is standardising and cleaning the data. We hope to produce a proof of concept model in the next quarter for food standards. A final version is some time off as it will depend on data from the LAEMS replacement (this is system that provides data from LAs to the FSA. LAEMS was suspended during COVID-19 due to LA resource pressures. A date for the replacement has yet to be set). A similar model for food hygiene will be developed later assuming the food standards model proves successful.

Official Veterinarian Resource:

The supply of vets in the UK is diminishing and salaries offered in private practices mean that FSA and OGDs struggle to recruit. To support FSA activity in this area, we have delivered a behavioural perspective on the barriers to recruitment and retention of vets for the Veterinary Advice Service. Additionally, we are working on developing estimates of the magnitude of the impact of the removal of temporary registered vets from working in abattoirs on the meat sector and economy. The team is also providing economic analysis for the tender of the contractor to recruit vets over the next 5 years.

Economic Research to Support Spending Review

Spending reviews set multi-year budgets for UK government departments. This provides planning certainty for departments and allows the government to prioritise spending that most effectively delivers its priorities. However, the current economic climate (e.g. inflationary pressures) has put considerable pressure on Government resources. This puts the Food Standards Agency (FSA) in

a challenging position when it comes to negotiating its funding settlement for the next 3/ 5 years.

Research has been commissioned with the aid of the ACSS Economic Working Group (EWG) to support upcoming Spending Review negotiations. The aim of the research is to address significant data and evidence gaps where the FSA is unable to quantify and demonstrate the impact of its policy interventions and activities. Outputs from the research will be used to develop a business case, underpinned by robust economic evidence and analysis - demonstrating to HM Treasury both value for money and the rationale for investing public money in the FSA.

The research will yield two interdependent deliverables:

Rapid Evidence Review

Review of published/ unpublished international literature including case studies, working papers, appraisal/ evaluation studies, discussion papers, academic literature etc. pertaining to public health interventions and activities in the area of food safety and standards.

Policy Impact Matrix

A tool to assess and quantify the efficacy and impact of FSA policy interventions and activities.

- We contributed to a Food & Agriculture Organization (FAO) technical meeting looking at the potential impacts of 3D printing, alternative proteins, and shifts away from plastic materials. A report from this is due to be published, and we are currently exploring with the FAO and other international partners the possibility of an international food system horizon scanning network.
- Strategic insights produced a first 6 monthly horizon scan for the BDG executive group (answering to the executive management team) in November 2023. This is an internal document drawing together input from across the agency and advisory partners to inform strategic decision making and policy development.
- We have also commissioned research into how to evaluate non-safety food standards in domestic and imported food, and the current and potential uses of AI in the food system. We expect these to be published in the autumn.

Additional Published Research (September 2023 - January 2024):

- A series of outputs reporting on our work with leading research funder UK Research and Innovation exploring [Citizen Science For Food Standards Challenges](#):
- [Finding the right formula](#) (Oct 23): Citizen scientists, researchers and collaborating NHS and charity partners developed research plans and methods for parents and carers to monitor the process of preparing powdered infant formula. Findings suggest that the safe preparation of formula milk was, in some cases, hindered by the poor performance of water heating equipment.
- [Exploring the chopping board microbiome](#) (Nov 23): Student citizen scientists and their households collaborated with researchers to investigate the kinds of bacteria on their home chopping boards, by swabbing the boards and participating in laboratory testing. Findings suggest that cleaning behaviours were influenced by which foods made contact with the chopping board, and that chopping boards were often not adequately cleaned.
- [Learnings from a pilot citizen science project exploring levels of AMR on homegrown lettuce](#) (Nov 23): Citizen scientists, and organisations representing grower communities, collaborated with researchers to test home grown salad for bacteria, and to find out if these bacteria were antimicrobial resistant. Citizen scientists and researchers found target bacteria with antimicrobial resistance on homegrown salad leaves, suggesting that more research is needed to determine pathways of AMR transmission.
- [Citizen Science for Food Standards Challenges: Programme Review](#) (Nov 23): An outline of the FSA citizen science programme, assessing whether aims had been met and outlining lessons learnt (e.g. around recruitment and ethics)
- [Knowledge of AMR amongst food handlers](#) (Nov 23): Findings from a 2022 survey of 500 UK food handlers (those who handle food or touch surfaces likely to be in contact with food). Findings suggest a lack of understanding of the key practises that can limit the spread of AMR bacteria.
- [Local authority capacity and capability](#) (November 2023): This research aimed to build an understanding of the barriers and facilitators to the recruitment and retention of suitably and appropriately qualified and experienced officers across Environmental Health (EH) and Trading Standards (TS) career pathways with a focus on delivering official food and

feed controls.

- [Vulnerabilities in the Animal By-Products Food System](#) (October 2023): A rapid evidence assessment on the vulnerabilities in the Animal By-Products Food System. The aim of this rapid topic brief was to allow the Food Standards Agency (FSA) and the National Food Crime Unit (NFCU) to identify key areas of vulnerability (if any) in the animal by-products system and to enable future programmes, policies, and research products to address them. The emphasis is on identifying areas of systemic vulnerability instead of solely process and technological oriented risks.
- [Our Food 2022](#) (November 2023): This report looks at whether UK food standards improved, declined or stayed the same in 2022. It is the second year Food Standards Agency (FSA) and Food Standards Scotland (FSS) have come together to produce this annual review.
- [Impact of labour shortages: Labour shortages in UK food systems](#) (November 2023): This research used a food systems approach to examine the impact of labour supply shortages on key aspects of the food system. It provides insight into the consequences of labour shortages as reported in 2021, the complex processes that combined to create the shortages and the resultant impact on the Food Standards Agency's (FSA) ability to effectively do its job. The research also explored consumers' perceptions of food availability and food safety.
- [Evaluation of a plant-based meal campaign in workplace cafeterias. An interrupted time series analysis](#) (December 2023): A randomised controlled trial in a laboratory kitchen to test whether behavioural interventions of a timer and pre-commitment to handwashing would improve handwashing behaviour of food handlers in food businesses. Both interventions led to an increase in the duration of handwashing (time spent rubbing hands with soap before rinsing) of around a couple of seconds. However, it did not lead people to wash their hands more frequently or improve the quality of their handwashing.
- [Consumer views of potential regulatory divergence in the meat sector](#) (January 2024): This report summarises the findings from qualitative research conducted with 76 participants from England, Wales and Northern Ireland, who took part in 14 online focus groups between the 19th of July and the 9th of August 2022. The research captured public views towards the high-level proposals of regulatory divergence in the meat sector, highlighting areas of support and concern.
- [Consumer Attitudes Towards Potential Divergence of Food Safety Regulations Within the UK](#) (January 2024): This report summarises the findings from qualitative research exploring public attitudes towards

regulatory divergence related to food products. The research was conducted with 78 participants from England, Wales and Northern Ireland, who took part in four online workshops between 26 January and 7 February 2023.