Surveillance Sampling Programme - Executive Summary

Results available: Results available
Area of research interest: Research projects
DOI: https://doi.org/10.46756/sci.fsa.svi390
Study duration: 2021-10-01
Project status: Completed

Executive Summary

This project aimed to carry out targeted surveillance sampling of retail food products for the Food Standards Agency (FSA) in order to help identify emerging food safety risks and increase the FSA’s intelligence and insight of the UK food system. The outcomes inform FSA policy and science, and gather useful intelligence to inform official sampling undertaken by local and port health authorities.

This survey builds upon the success of a similar surveillance sampling programme was carried out in 2021-2022, during the pandemic.

The programme was delivered in partnership by the 3 Public Analyst Local Authority Official Food and Feed Laboratories (OLs) and the 2 private Public Analyst OLs in England and Wales.

Food samples were purchased across England and Wales from large Food Business Operators (FBOs) such as national supermarkets, smaller FBOs such as independent retailers and internet sites.

In total 32 different food commodities were sampled. Foods sampled were grouped into two sub-categories, those sampled as part of targeted surveillance and foods sampled as part of a basket of food approach. While both sub-categories contributed to the objectives outlined above, results from the targeted basket of food have additionally contributed to the FSA and Food Standards Scotland (FSS) report Our Food: An annual review of food standards across the UK. (footnote)

Products can be deemed non-compliant for a variety of reasons, many of which do not pose concern for human health. Samples were recorded as non-compliant in the following circumstances:

- detection of undeclared allergens
- presence of contaminants, such as mycotoxins and heavy metals, above permitted levels
- adulteration or substitution of products such as basmati rice, meat, fish, cheese and herbs
- composition of food tested not accurately presented in the food label
- food labels not complying with The Food Information Regulations 2014 or industry guidance

The FSA were informed immediately of any significant safety hazards, such as the presence of undeclared allergens and reports for all unsatisfactory samples were provided to the FSA in order for follow up action to be taken.

In total 998 samples were analysed by OLs for authenticity, presence of undeclared allergens, composition or contamination. There were 630 surveillance commodities of which 563 (89%)
were reported as compliant by the public analysts with regards to the analysis undertaken and 368 basket of food samples of which 325 (88%) were compliant. The overall compliance rate was 89%. It should be noted sampling was targeted, with a focus on Food Business Operators (FBOs), deemed to be of higher risk and products more likely to be non-compliant. As such this overall compliance rate should not be viewed as being reflective of actual non-compliance in the UK market and samples taken from larger FBOs has a higher compliance rate.

In total, 107 samples reported as non-compliant were categorised. Within this survey sample failed for the following reasons:

- allergens
- contaminants
- unauthorised ingredient
- authenticity
- composition
- labelling

Within this survey, the highest number of failures were related to composition. Compositional analysis was carried out on 184 samples and 36 were reported as unsatisfactory in this respect by the Public Analysts. A total of 93 gin and vodka samples were analysed for alcohol content and 33% of premium/artisan gins and 17% of vodkas were outside the tolerances for declared alcohol strength, both above and below limits. Similarly, the fat content of 19% of the 31 milks tested were outside the permitted limits.

Allergen tests were carried out on 208 products (69 Surveillance Commodities and 139 Basket of Foods) and a significant proportion of samples (13%) had the presence of undeclared allergens detected. In particular, almost half of the soya lattes were found to have milk protein present, and around a quarter of bread products tested had allergens not declared on the label (in the majority of cases undeclared soya). All cases of undeclared allergens were reported without delay to the FSA.

Tests for contaminants included heavy metals and mycotoxins as well as the release of formaldehyde from food contact materials. None of the 240 samples tested for metals had levels above regulatory limits. Of the 250 spices and cereal products checked for the presence of mycotoxins, aflatoxins were reported above limits for a chilli and 2 ginger samples and Ochratoxin A in 2 turmeric and 3 chilli samples. A total of 2 products were reported with formaldehyde migration results above the limit.

In the UK some substances are not authorised for use in specific food products. Foods imported from another country must meet the same food standards as food produced in the UK. Of the 30 coloured cereal products sampled, 16% had colours that are not authorised within the food category and are thus non-compliant.

Authenticity testing was carried out on 278 samples including meats, spices, basmati rice, pasta, cheese and olive oil and 98% were reported as authentic. The main commodity with authenticity issues identified was basmati rice, with 17% of the basmati rice samples reported as having been adulterated with either non-basmati rice varieties or with a basmati rice different to the marked variety.

Food labels are a legal requirement and are crucial in delivering key information to consumers including ingredients, nutrition and allergy information so that they can make informed choices based on diet, allergies, personal / religious beliefs or cost. The Public Analysts identified 21 labelling irregularities which were mainly related to technical aspects of labelling and did not represent a specific public health issue. For example, issues with the readability of the font type used to provide allergen information and precautionary cross-contamination statements for consumers.
Collaborative working on this project has increased the flow of information between the OLs and the FSA and has bolstered the enforcement network, making stronger connections between national and local knowledge of the food supply chain. This project has clearly demonstrated that FSA and the OLs are fully capable of fostering the partnership working envisaged by Professor Elliott in his review into the integrity and assurance of food supply networks. (footnote) Outputs from the project will also support the FSA in acquiring and using data from food sampling as a source of intelligence and to test hypotheses, which was a benefit recognised in the National Audit Office report into ensuring food safety and standards. (footnote) This style of working is demonstrably aligned to the FSA future approach to sampling as endorsed by the FSA Board in November 2020.