

**National coordinated risk-
based food sampling
programme 2012-13
–
Summary of findings**

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1. Introduction

The FSA has continued to work with enforcement authorities to improve the effectiveness of controls on imported feed and food entering the United Kingdom. This National Co-ordinated sampling programme provides financial support in the form of grant funding to support and coordinate enforcement authorities' sampling and surveillance across the UK. It addresses the main outcomes from the FSA's 2010-15 Strategic Plan that imported food is safe to eat and also that food produced or sold in the UK is safe to eat. The FSA helps by supporting additional risk-based targeted checks at ports and monitoring of imports throughout the food chain. This period covered in the report was more important than ever as we had the eyes of the world were on the UK in the run up to the 2012 games. As a result the sampling programme priorities were extended to cover the same domestic UK productions.

In 2012/13 the FSA made £1.3 million funding available for food sampling by enforcement¹ authorities. This brings the total investment over the past eight years to £10.5 million.

Sampling and surveillance of food and feed is an essential approach to protecting public health and the priorities for this year's programme were based on information and intelligence gathered by the Agency, including emerging risks.

Intelligence is gathered from various sources such as; Incidents database; Enforcement authorities; Surveillance programmes (including 2010/11 imported food and feed sampling programme); Food Fraud database; UK Food Surveillance System (UKFSS); EU reported rapid alert system form food and feed (RASFF) and Other Governmental establishments (inc, Health Protection Agency, Department for Environment, Food and Rural Affairs and Department of Health). The objectives for this programme are:

- to improve overall Enforcement Authority sampling, surveillance and controls for food and feed;
- to determine compliance around areas of concern within the UK food and feed chain;
- to help increase controls in areas of higher risk;
- to enhance our understanding of the level of chemicals present in food and feed, which will be used to develop our policies and to inform UK negotiating positions in Brussels;
- to protect the food chain in the run up to the Olympics;

¹ Wherever enforcement authorities are mentioned in this report they include PHAs, LAs and groups of LAs.

2. Overall data trends

During this programme a total of 5560 samples were submitted for either microbiological or chemical testing, of which 30% were taken formally. Of these 5560 samples 1233 were submitted for microbiological testing, of which 3% were found to be unsatisfactory, that is not complying with legislative requirements, for microbiological contamination. 8% of the 4327 samples submitted for chemical analysis were found to be non-compliant for chemical contamination or composition reasons. 17% were found to be non-compliant for labelling requirements.

Table 1: Overall sample results

	No. of samples	No. of overall satisfactory results	% compliance
Microbiological	1233	1196	97%
Chemical	4327	4170	96%
Total	5560	5027*	91%

*This figure gives the overall sample results as some samples were submitted for both microbiological and chemical analysis

In comparison with previous years it can be seen from the table below that the overall % non-compliance rate has persisted.

Visual checks on product labels are routinely carried out by public analysts on samples submitted for chemical examination. Whilst the focus in this report is on the results for microbiological and chemical analysis you can see from the table below the labelling non-compliance rate however, the food labelling data is discussed in Section 5.

Table 2: Labelling compliance

	No. of samples	No. of overall satisfactory results	% compliance
labelling	4447	3691	83%

Table 3: Breakdown of sampling statistics from 2007/08 – 2012/13

	2007/08		2008/09		2009/10		2010/11		2011/12		2012/13	
	No. of samples taken	No. of failures (% non-compliance rate)	No. of samples taken	No. of failures (% non-compliance rate)	No. of samples taken	No. of failures (% non-compliance rate)	No. of samples taken	No. of failures (% non-compliance rate)	No. of samples taken	No. of failures (% non-compliance rate)	No. of samples taken	No. of failures (% non-compliance rate)
Microbiological	280	20 (7%)	719	32 (4%)	501	16 (3%)	302	10 (3%)	882	25 (3%)	1233	37 (3%)
Chemical	3876	346 (9%)	5078	292 (6%)	5345	245 (5%)	4534	214 (5%)	5514	264 (5%)	4327	157 (4%)

The most commonly sampled food groups were meat and meet products, fruit and vegetables, bakery products and cereals, herbs and spices.

Chart 1: Breakdown of product types sampled

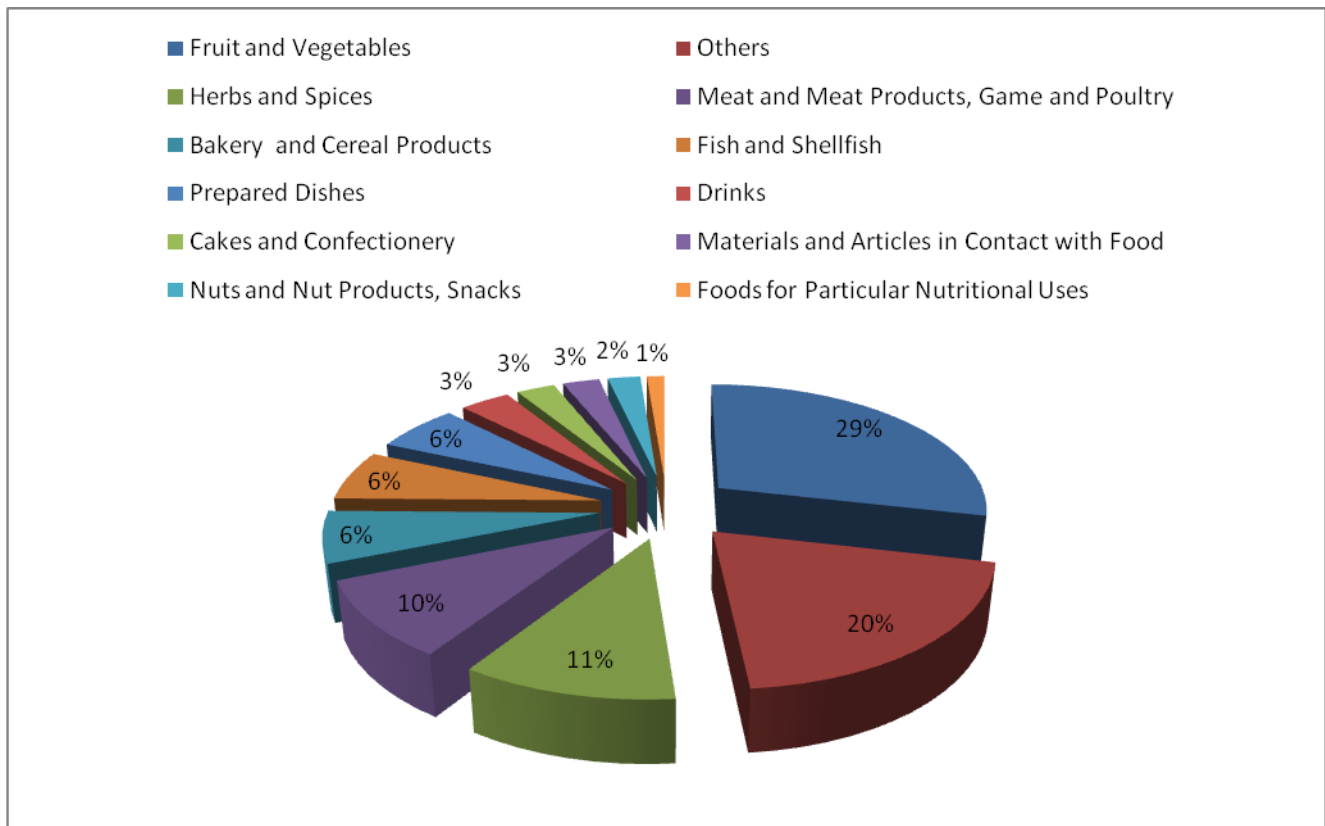


Table 4: Breakdown of overall sample results according to continent*

	UK (%)	Rest of EU (%)	Non – EU (%)
Satisfactory	9	30	40
Unsatisfactory	2	5	10

*4% are unknown

Half the samples taken originated from outside the EU and compliance rates were highest for EU and UK products. As seen in past years, Asia was the source of the highest number of non-compliances, which indicates that further work targeting these countries is merited. The majority of samples were from China, India and Thailand. The proportions of samples from the main exporting Asian countries are given below.

Table 5: Breakdown by country of samples imported from Asia

Country	No. of samples	No. unsatisfactory	% of samples taken from Asia
China	265	42	26%
India	685	73	18%
Thailand	394	74	18%

3. Microbiological sampling data

Overall microbiological samples results

1233 samples of various food products were taken for microbiological testing, on which 4159 microbiological analyses took place. The breakdown on the level of compliance is given of seen in the table below:

Table 6: Microbiological samples level of compliance

	No of samples (% compliance)
Satisfactory	1112 (90%)
Borderline/Acceptable	80 (7%)
No. of unsatisfactory	39 (3%)
TOTAL	1233

A more detailed breakdown of the borderline and unsatisfactory samples according to the products tested can be seen below.

Table 7: Breakdown of analyses by pathogens

Pathogen	Product Type	Borderline	Unsatisfactory
Aerobic Colony Counts	Bakery and Cereal Products	2	1
	Dairy Products	9	
	Fish and Shellfish	4	
	Fruit and Vegetables	4	1
	Meat and Meat Products, Game and Poultry	132	30
	Others	17	6
	Prepared Dishes	13	1
Total for Aerobic Colony Counts		181	39
Campylobacter	Meat and Meat Products, Game and Poultry		3
E.coli	Fruit and Vegetables	10	
	Herbs and Spices	3	2
	Meat and Meat Products, Game and Poultry		3
	Others		24
Total for E.coli		13	29
Enterobacteriaceae	Dairy Products		6
	Fruit and Vegetables	9	
	Ice Cream and Desserts	38	2
	Meat and Meat Products, Game and Poultry	16	2
	Others		2
	Prepared Dishes		1
Enterobacteriaceae Total		63	13
Enterobacteriaceae and Aerobic Colony Count	Bakery and Cereal Products		2
	Fish and Shellfish		1
	Herbs and Spices		1
	Meat and Meat Products, Game and Poultry	1	7
	Others		1
Total of Enterobacteriaceae and Aerobic Colony Count		1	12
Listeria species	Bakery and Cereal Products		1
	Meat and Meat Products, Game and Poultry	1	1
	Others		1
Total of Listeria species		1	3
RTE Guidelines - Acceptable/Borderline	Fruit and Vegetables	9	
	Others	3	
	Soups, Broths and Sauces	2	
Total of RTE Guidelines - Acceptable/Borderline		14	
salmonella	Fruit and Vegetables		41
Yeast	Fruit and Vegetables	11	
GRAND TOTAL		284	140

4. Chemical sampling data

4170 out of 4327 of the samples submitted for chemical analysis were reported as satisfactory. Fruit and vegetables (26%), fats & oils (14%) meat and meat products (12%), fish and shellfish (6%), and herbs and spices (11%) were the most frequently sampled categories. Various analyses were carried out on these samples as specified in this programme's survey requirements. The failure rate of 3% is a reduction from 2% compared to previous years tests carried out and general level of non-compliance can be seen below;

Table 8: A breakdown summary of samples by analyte

	No. of tests	No. of unsatisfactory	% non-compliance
Additives	1915	8	0.4
Contaminants	2293	58	2.5
Food Contact Materials	866	40	4.6
Food Irradiation	339	9	2.6
Inorganic contaminants	841	21	2.5
Mycotoxin	4102	33	0.8
Organic contaminant	4949	174	3
Pesticide	2122	11	0.5
Process contaminants	66	0	0
Radioactivity	6	0	0
Undesirable substances	2332	341	15
	19831	695	3.5

The sampling programme is targeted and the types of analyses and the specific areas covered by this programme and their level of compliance are presented in Table 9.

Table 9: Details of non-compliance for each sampling priority

Priority	Specific priority	No of samples	No of non-compliance	Comments
Mycotoxins	Aflatoxins in maize and maize products from countries in Africa	979	27	
Contact Materials	Formaldehyde in melamine cookware / PAAs in nylon kitchen utensils	168	11 64% Formaldehyde 36% PAAs	
Biotoxins in Shellfish	Whole King Scallops and testing and the risk of Amnesic Shellfish Poisoning (ASP) toxins	78	3	
Food Adulteration	Milk products from the Indian Sub-Continent (including Infant formula and Follow-on formula)	147	30	Non-compliant with the Nutrition and Health Claims (England) Regulations 2007.
	Food Supplements - Body Building Products	118	39	The sample label did not meet the requirements of the Food Supplements Regulations 2003 and/or Food Labelling Regulations 1996 in that the nutrition information was not presented in the prescribed format and/or a number of health claims, some of which are approved claims some of which are not approved under the requirements of the Nutrition and Health Claims Regulations

				2007.
Inorganic Contaminants	Heavy metals in edible clay / chalk products	227	15	9 products were Calabash chalk
Organic contaminants	Dioxins and dioxin-like PCBs	169	0	
	Poly aromatic Hydrocarbons (PAH)s	345	28	
Allergens	Foods with 'free from' claims/ Sampling of non-pre-packed foods for allergens	810	32	
Irradiated Foods	Food irradiation sampling of herbs and spices, food supplements and dried noodle meals	179	5	
Mis-description and Adulteration	Olive Oil and extra virgin olive oil testing	131	13	
	Fruit Juice - freshly squeezed Orange juice, pineapple juice , pomegranate juice	127	34	

5. Labelling

All of the samples taken were also assessed for compliance with food labelling legislation, as previous programmes have identified poor or inappropriate labelling in a significant number of samples. These checks were carried out by the Public Analysts - no related chemical examination was undertaken to verify the labelling.

Technically an offence is only committed at the point of sale so, where a food is checked on import, advice can only be given to the importer and the matter rose with the LA of destination.

17% (756) of all samples submitted for checks were found to be inappropriately labelled to some extent. This is a slight increase from 16% last year. A breakdown of the precise nature of labelling faults can be seen below. It is important to stress that a number of samples were found to be unsatisfactory for more than one labelling fault. For this reason the number of failures listed is higher than the number of samples that failed.

Table 10: Breakdown of labelling non-compliance

Nature of labelling fault	Total
Minor labelling fault (specific reason for failure not specified)	317
Durability indication Incorrect	205
Nutritional information format	192
Errors in ingredients list, QUID declaration	165
Name insufficiently precise	159
Additive declaration	109
foreign language	70
Unauthorised health claim	59
Field of vision	41
Name and/or address of manufacturer not sufficiently precise	34
allergens declaration	24
Language	21
Wholly or partly illegible	14
Net quantity Incorrect format	14
Instruction	10
Place of origin not sufficiently precise	4
Product or ingredient in product has been irradiated	2
Grand Total	1440

6. Enforcement action

A range of enforcement action took place with respect to the samples found to be unsatisfactory, summarised in Table 11. Since more than one type of enforcement action was taken on many of the samples, the incidence of follow-up action is greater than the number of non-compliant samples.

Table 10: Breakdown of follow up action

Description of follow up action taken	Incidence of follow-up action taken
Minor labelling – no follow-up considered necessary	158
Letter/Advice to business/company/importer/retailers	91
Acceptable/borderline	80
Home Authority referral	69
FSA notification: Actioned	31
Consignment destroyed: Actioned	21
Product no longer stocked/withdrawn	19
Advice to business on cross contamination and allergens	13
Further investigation - Follow up visit	19
Prosecution: Actioned	6
Product destroyed/detained	5
Formal sample proved satisfactory	4
Further investigation - resampled proved satisfactory	3
Revisit made - No further product on sale	4
Consignment re-exported: Actioned	1

7. Overall conclusions and future work

The consistency of reporting has improved which is a direct result of the increased use of UKFSS. This allowed the results to be available on a real time basis and in the required amount of detail and format, which allows rapid evaluation.

Grants were available to support the installation and use of UKFSS and it is hoped that these grants will increase the take-up of UKFSS for food and feed samples in future sampling grants programmes.

The majority of the sampling taken as part of this programme was found to be compliant and the information gathered from this programme has provided a beneficial insight into compliance. The results show that on-going surveillance is necessary in order to establish trends in non-compliance and provide assurance that the food chain is safe.

The Agency has allocated additional funding in 2013/14, to work in collaboration with enforcement authorities and support them in protecting the food chain. Local authorities were invited to bid for this work in early 2013 [ENF/E/13/015](#).