UK Local Authorities Imported Food and Feed Sampling Report 2010/11

Contents

1.0 Executive Summary

The Food Standards FSA provided grant funding during 2010/11 to Port Health Authorities (PHAs) and inland local authorities (LAs) to support their sampling and surveillance of imported food and feed. Enforcement authorities took a wide range of samples as part of this targeted sampling programme. The products chosen for sampling and the analyses were set by the FSA, in consultation with LA representatives, on a risk-basis. Therefore, rates of non-compliance from the sampling results would be expected to be higher than for randomly-selected foods.

Despite all the resources issues that local authorities are currently facing, over 227 enforcement authorities took part in this programme; this figure represents the majority of authorities carrying out food standards work. To see this level of engagement with risk based sampling and surveillance, combined with the rollout of the UK Food Surveillance System[1] (UKFSS) to local authorities, means that the FSA is better placed to have real time information about feed and food so that trends and emerging risks can be identified and dealt with; it doesn't represent sampling for sampling's sake.

All samples taken are handled according to the local authorities' sampling policies and procedures. Non-compliance is followed up with enforcement action, and the samples taken resulted in: RASFFs being issued (14); referrals to home authority[2] (220); further investigation carried out by the authority (34); products destroyed or detained (6); products removed from sale or withdrawn (5).

A total of 4836 food samples were taken; and several analytical tests were often carried out on each. Of this total, 3% were found to be unsatisfactory for microbiological contamination (that is, they did not comply with legislative requirements) and 5% were non-compliant for chemical contamination or composition reasons. Sixteen percent were found to be non-compliant for labelling requirements. Four samples failed on both chemical and labelling grounds. As seen in past years, Asia was the source continent of the highest number of non-compliances, with the majority of these samples originating from China, India and Thailand. This high number may reflect the high volume of imports from thse countries.

Of the results for chemical contaminant analysis, mycotoxin testing generally indicated low levels of contamination and a good level of compliance. The dioxin results did not raise any concerns for consumer safety. 12% of kitchenware or melamine ware samples that were tested for primary aromatic amines or formaldehyde were found to be non-compliant. Although still high, this represents an improvement to the previous year, and the FSA has provided advice to stakeholders and liaised with LAs to improve compliance. Of the non-compliant samples for microbiological contamination, 4 samples (1.3% of the total) were considered to be potentially injurious to health because of the presence of *Salmonella*. The remaining

[1] http://www.food.gov.uk/enforcement/monitoring/fss/

[2] The Enforcement Authority is the authority where the relevant decision making body of an food business is based. This scheme is supported by most local authorities.

unsatisfactory samples were classed as such due to the presence of indicator organisms.

These results indicate that the majority of the foods sampled and analysed for microbiological contamination were safe and fit for human consumption. Local authorities took appropriate follow-up action on the non-compliant results and, in cases where a risk assessment found this necessary to protect consumer safety, products were withdrawn from the market.

From the sampling for food composition, the analysis of chicken products showed that the correct labelling of meat content and added water is a continuing problem. However, the dairy product samples analysed showed no evidence of substitution of dairy with non-dairy ingredients. The majority of products sampled under this programme were compliant with labelling legislation. The most common reasons for non-compliance were caused by imprecise product naming, nutrition labelling format, date marking and quantitiative ingredients listing (QUID). Appropriate follow-up action was taken in all cases.

A total of 277 feed samples were analysed. 3.2% did not meet at least one requirement of EU legislation, because of either mycotoxin or heavy metals levels, or the presence of undeclared genetically-modified varieties. Local Authorities took appropriate follow-up action. All samples tested for dioxins, dioxin-like PCBs and melamine were found to be compliant.

Twenty percent of the samples collected this year for the programme were submitted using UKFSS. The use of the system allows for rapid transfer of information between enforcement authorities, analytical laboratories and the FSA.

The FSA offers training for local authorities on feed and food sampling as part of the training programme for enforcement officers[3]. This training will be refined where issues arise from this programme.

The quality of results data from the programme is assured, as samples are tested by designated Official Control Laboratories and are official control samples.

The outcomes of the 2010/11 programme are used to inform the 2011/12 programme and future programmes will focus more on regional co-ordination of sampling across the UK rather than individual local authorities; the use of UKFSS will be further encouraged as a robust reporting mechanism of validated data from the local authorities.

[3] http://www.food.gov.uk/enforcement/enforcetrainfund/

2.0 Introduction

The FSA has been working with enforcement authorities to improve the effectiveness of controls on imported feed and food entering the United Kingdom. This programme provides financial support in the form of grant funding to support and co-ordinate enforcement authorities' sampling and surveillance across the UK. It addresses one of the main outcomes from the FSA's 2010-15 Strategic Plan - that imported food is safe to eat - by helping ensure risk-based targeted checks at ports and monitoring of imports throughout the food chain.

In 2010/11 the FSA made £900,000 funding available for food sampling by local authorities and £120,000 for feed sampling. This brings the total investment over the past seven years to £7.2 million. Wherever enforcement authorities are mentioned in this report they include PHAs, LAs and groups of LAs.

The Sampling Coordination Working Group[4], with the FSA's policy branches, reviewed the broad outcomes from the 2009/10 programme and suggested priorities for 2010/11. The criteria used to determine priorities under the programme were:

- **there is evidence of a concern about a food or food (or feed) hazard**
- **the issue is of concern to public health or consumer protection**
- **the issue is subject to LA enforcement**
- **analytical methods are readily available**
- **the products originate from third countries**
- **safeguarding measures are not already in place for the products**
- **sampling is not covered by existing surveillance programmes**
- a need exists to raise LA awareness to an area of concern
- evidence shows sampling is overlooked by LAs due to high sample or analysis cost
- the EU has requested sampling for set areas of concern
- where there is a legislative requirement.

(Bold indicates those criteria which must apply to all samples taken under the programme).

Details of these priorities were sent out to UK enforcement authorities along with the survey requirements in January[5].

[4] The Sampling Coordination Working Group (SCWG) was a group of enforcement officers, jointly chaired by the FSA and Local Government Regulation.

The following priority areas for sampling food and animal feed were identified.

Food

1) Microbiological

    a. *Listeria monocytogenes* in non- EU packaged ready-to-eat meat products (sliced meats, sausages, pates and meat spreads etc)

2) Mycotoxins

    a. Aflatoxins in corn/maize meal/polenta (not corn flour) and products from India (same samples to be tested for fumonisins if possible)

    b. Aflatoxins in pistachios (not from Iran), almonds (not from US), hazelnuts (not from Turkey) and Brazil nuts (in-shell from Bolivia or Peru)

    c. Aflatoxins in oilseeds and derived products (not including melon/ egusi seeds and derived products from Nigeria)

    d. Aflatoxins and ochratoxin A in spices

    e. Ochratoxin A in coffee and cocoa.

3) Food Contact Materials

    a. Migration of primary aromatic amines in kitchen utensils

    b. Migration of formaldehyde in melamine ware.

4) Process Contaminants

    a. 3-MCPD – in soy sauce

    b. Ethyl Carbamate in non-EU stone fruit spirits and stone fruit 'marc' (from pears) spirits.

5) Organic Contaminants

    a. Dioxins and PCBs in non-EU meat, fish, eggs and dairy products

    b. PAHs in traditionally smoked foods, processed cereal products, dried herbs, herbal food supplements and dried vegetables

    c. Mineral oil in vegetable & nut oils (excluding Ukrainian products).

6) Inorganic contaminants

    a. Cadmium levels in various foodstuffs

    b. Cadmium levels in crab.

[5] http://www.food.gov.uk/multimedia/pdfs/samplegrant201011annexb.pdf

7) Irradiated products

   a. Dried herbs and spices
   b. Food supplements
   c. Dehydrated Asian meals (e.g. noodle meals)
   d. Dehydrated soups and sauces
   e. Garlic (fresh, dried or preserved).

8) Post-Chernobyl Controls

   a. Radioactive caesium (^{134}Cs + ^{137}Cs) in wild (uncultivated) mushrooms
   b. Radioactive caesium (^{134}Cs + ^{137}Cs) in cranberries, bilberries and other fruits of the genus *Vaccinium.*

9) Specified unauthorised GMOs in certain categories of food products

   a. LLRice601 in long grain rice from the US
   b. Bt63 in rice products from China
   c. GM Linseed variety CDC Triffid FP967 in linseed from Canada.

10) Chicken products/preparations

   a. Meat content declaration in chicken preparations
   b. Added ingredients, e.g. added water, hydrolysed proteins , salt etc
   c. Labelling declarations.

11) Replacement of milk fat with other fats in dairy products

12) General labelling checks

   a. Country of origin

Animal feed

1) Minerals / additives

	Material	Substance/Hazard
a.	Copper Chelate	Dioxin-like polychlorobifenyls
b.	Copper Sulphate	Dioxins
c.	Tagetes (Red colouring for feed)	Dioxins
d.	Sepiolite	Lead

e.	Monocalcium phosphate	For the presence of fluorine and heavy metals
f.	Dicalcium phosphate	For the presence of heavy metals including cadmium
g.	Dicalcium phosphate	For the presence of heavy metals including arsenic
h.	Choline Chloride	Melamine
i.	Zinc oxide	For the presence of heavy metals including cadmium
j.	Manganese (manganous oxide/manganic oxide)	For the presence of heavy metals
k.	Trace elements belonging to the functional group of compounds of trace elements referred to in Annex I, 3 b) of Regulation (EC) No 1831/2003 but not originating from China	For the presence of undesirable substances (heavy metals)
2) Other feedstuffs		
a.	Soya and soya products	Unauthorised GM and mycotoxins
b.	Groundnuts	Aflatoxin B1
c.	Feed premixes	Dioxins and level of ingredients
d.	Maize and maize products	Unauthorised GM, and mycotoxins
e.	High protein products originating from China, intended for use as animal feed, other than milk, milk products, soy, soya products and ammonium bicarbonate	For the presence of melamine.

A total for 56 food grants and 14 feed grants were made available. These comprised bids from both individual enforcement authorities and groups of LAs. A total of 346 authorities benefited from the grant programme, 86 LAs received funding for both feed and food, (Appendix 1).

3.0 Overall data trend

3.1 Food

During this programme a total of 4836 samples were submitted for either microbiological or chemical testing, of which 23% were formally taken[6]. 6406 different analyses were carried out on these samples, of which 791 were for microbiological testing.

Of the total number of samples, 3% were found to be unsatisfactory, that is not complying with legislative requirements, for microbiological contamination and 5% for chemical contamination or composition reasons. 16% were found to be non-compliant for labelling requirements. Four samples failed on both chemical and labelling grounds. Visual checks on product labels are routinely carried out by public analysts on samples submitted for chemical examination. The focus in this report is on the results for microbiological and chemical analysis. The food labelling data are discussed in Section 12.

Table 1: Breakdown of sampling statistics from 2007/08 – 2010/11

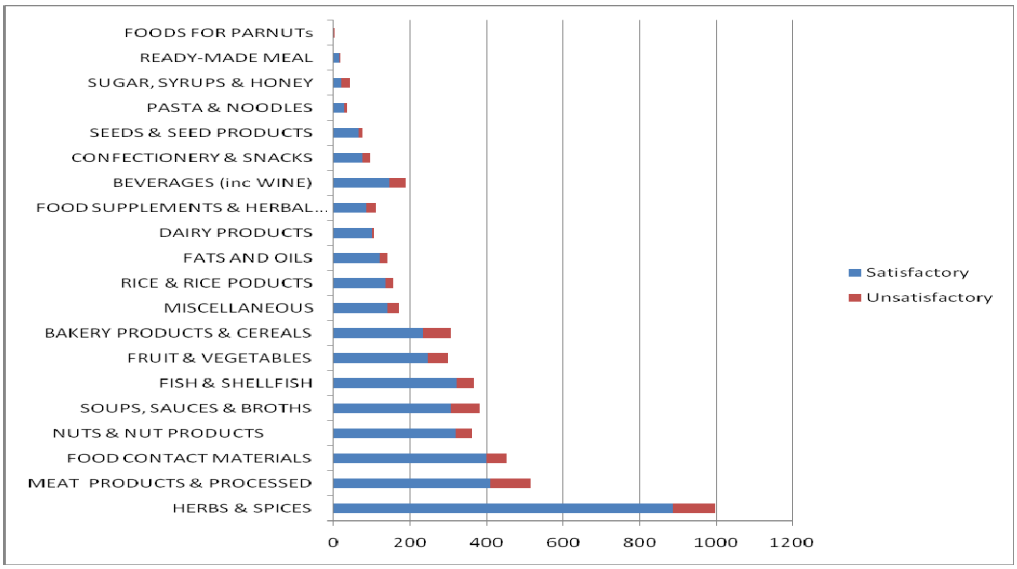
	2007/08		2008/09		2009/10		2010/11	
	No. of samples taken	No. of failures	No. of samples taken	No. of failures	No. of samples taken	No. of failures	No. of samples taken	No. of failures
Microbiological	280	20 (7%)	719	32 (4%)	501	16 (3%)	302	10 (3%)
Chemical	3876	346 (9%)	5078	292 (6%)	5345	245 (5%)	4534	214 (5%)

Table 1 provides a breakdown of sampling statistics and whilst it is difficult to compare previous programmes due to the different priorities for sampling set it has been noted that the percentage of samples that failed for microbiological or chemical tests has remained the same as 2009/10.

As in previous years, the samples taken as part of this programme were targeted towards areas of known or suspected risk. As a result, it was expected that rates of non-compliance would be higher than those taken as part of randomly-selected foods. The samples were collected from a wide range of food types, but focussed on the priority sampling areas. A breakdown of the samples taken according to each food category can be seen in Chart 1. The most commonly sampled food groups were herbs & spices, meat products & processed meat, and food contact materials.

[6] The Food Law Code of Practice sets out instructions and criteria to food enforcement authorities should have regard to when engaged in the enforcement of food law.

Chart 1: Number of samples taken according to food category



(PoVC = Product of Various Countries)

The samples taken orginated from a range of continents. As seen in previous years, the greatest percentage of samples originated from Asia (60%).

All but 1% of the food products sampled did not specifiy their country of origin, which is more than in previous years.

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 proportion of samples from the main exporting Asian countries are given below.

China	31%
India	20%
Thailand	12%
Vietnam	4%
Pakistan	3%
Hong Kong	3%
Malaysia	2%
Japan	2%
Other	23%
TOTAL	**100%**

3.2 Feed

A Total of 277 samples of animal feed imported from outside the EU were analysed for various undesirable substances, including unauthorised genetically modified (GM) material. Nine (3.2%) did not meet at least one requirement of EU legislation. See Section 14 for details.

4.0 Microbiological results

4.1 Background

Listeria monocytogenes is one of the key pathogens the FSA considers as part of its aim to reduce food borne disease. In the UK, illness from *Listeria monocytogenes* (listeriosis) has increased in recent years, particularly among those people over 60 who have weakened immune systems. Although listeriosis isn't common, it can be life-threatening in people with reduced immunity and can have serious implications for pregnant women. Listeriosis has been linked to eating chilled ready-to-eat foods such as sliced meats and pâté which have been inadequately chilled.

Recent FSA surveys on these types of foods have been based on market share data and as a result have focused on products from major retailers with relatively few samples from small retailers, convenience stores etc. For this reason sampling of non-EU ready-to-eat meat products such as cooked sliced meats, pâté and meat spreads, and speciality meats (e.g. cured sausages), with a focus on products sold by smaller retailers were undertaken to ascertain the extent of these problems.

4.2 Results and discussion

A total of 88 samples of meat (products & processed) were sampled for microbiological contamination. All were satisfactory for *Listeria monocytogenes.* Two were deemed to be unsatisfactory (for high levels of Enterobacteriaceae and/or a high Total Viable Count (TVC)). Enterobacteriaceae/TVC can be used as an indication of quality – high levels can indicate poor production hygiene or issues with temperature control.

Salmonella was detected at unsatisfactory levels in the following samples:

1 out of 16 samples of herbs (dried and fresh)

2 out of 4 spices

1 out of 8 edible seeds.

Since these foods may be eaten in uncooked dishes or added after or near the end of cooking, this presence of Salmonella was considered to be unacceptable and potentially injurious to health. All results were reported to the FSA at the time and investigated further. Action was taken to remove the affected spices and seeds from the market.

Of the 27 samples of fish products, only 2 were classed as unsatisfactory. This was due to a high Aerobic Colony Count (ACC) or a high level of *E. coli*. ACC and *E. coli* are indicator organisms and are not in themselves a food safety risk, and there are no relevant food safety criteria for these micro-organisms in the Microbiological Criteria (EC) 2073/2005 (as amended). However, they can be used as an indicator of quality – high levels can indicate poor production hygiene or issues with temperature control. Also, *E. coli* can be indicative of faecal contamination at some stage.

Unsatisfactory levels of ACC and/or Enterobacteriaceae were also found in 1 out of 14 shellfish products sampled and 1 of 8 samples of vegetable products (fresh & processed).

4.3 Conclusion

The majority of the samples analysed for microbiological contamination were found to be satisfactory, with just 3.3% of 302 deemed unsatisfactory. Of these, only 4 samples (1.3% of the total) were potentially injurious to health, because of the presence of *Salmonella*). The FSA was notified of these results, and action was taken to withdraw and recall the affected products as appropriate.

The remaining unsatisfactory samples were classed as such due to the presence of indicator organisms. While these are considered not a risk to health in themselves, they can be used as an indication of the quality of the food, and high levels may be indicative of poor hygiene or temperature abuse. Action was taken to notify the LAs for the importers so that the issues could be investigated at the manufacturer's premises.

In conclusion, these results from the 2010/2011 survey indicate that a high percentage of the foods sampled and analysed for microbiological contamination were safe and fit for human consumption.

5.0 Chemical Contaminants

5.1 Mycotoxins

5.1.1 Background

Mycotoxins are a group of naturally-occurring chemicals produced by certain moulds. They can occur on a variety of different crops and foodstuffs including cereals, nuts, spices, dried fruits, apple juice and coffee, often under warm and humid conditions. Mycotoxins can cause a variety of adverse health effects in humans. For most mycotoxins, a tolerable daily intake (TDI) has been established, which estimates the quantity of mycotoxin which someone can be exposed to daily over a lifetime without it posing a significant risk to health.

The limits for mycotoxins in food are set out in Section 2 of the Annex to Commission Regulation (EC) No. 1881/2006[7], as amended by Commission Regulation (EC) No. 1126/2007[8] on Fusarium toxins, Commission Regulation (EU) No 105/2010[9] on ochratoxin A and Commission Regulation (EU) No 165/2010[10] on aflatoxins. In the case of composite products, the provisions of Article 2 (Dried, Diluted, Compound and Processed Foodstuffs) will apply. As part of the 2010/11 sampling programme, LAs were encouraged to obtain samples where possible from the manufacturer, main warehouse or distribution points of the given food commodity. Where possible, samples were chosen from outlets where larger sample sizes would be present, e.g. wholesale retailer or 'cash and carry' type outlets, in preference to retail level.

The mycotoxins of most concern from a food safety perspective include the aflatoxins (B1, B2, G1, G2 and M1), ochratoxin A, patulin and other toxins produced by Fusarium moulds such as fumonisins (B1, B2 and B3), trichothecenes (principally nivalenol, deoxynivalenol, T-2 and HT-2 toxin) and zearalenone.

In order to protect consumer safety, rules and legislative limits in certain foodstuffs are set for aflatoxins, ochratoxin A, patulin and Fusarium toxins in European Commission Regulation (EC) No. 1881/2006[11] (as amended). The legislation applies to the specified foods whether they are imported into the UK or produced in the UK. In addition, there are a number of special import conditions currently in place for some foods from certain third countries where the risk from mycotoxin contamination is increased, which further improves consumer protection. A significant proportion of commodities that may be more susceptible to mycotoxin contamination are those that are imported into the UK.

[7] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:364:0005:0024:EN:PDF

[8] http://**eur**-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:255:0014:0017:EN:PDF

[9] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:035:0007:0008:EN:PDF

[10] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:050:0008:0012:EN:PDF

[11] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:364:0005:0024:EN:PDF

5.1.2 Results

In general the results from this programme indicated a good level of compliance with the legislation, given that sampling was targeted at higher risk products.

In total, 1138 food samples were tested for mycotoxins and only 27 of these (just over 2%) were found to contain mycotoxins above the maximum levels set in Commission Regulation (EC) No. 1881/2006, as amended. Of these 27, the majority (20) were samples of spices contaminated with aflatoxins and ochratoxin A. Seven samples of corn meal, maize flour and maize dough were found to contain levels of aflatoxins and fumonisins above the maximum level. One sample of groundnuts was found to contain aflatoxin above the maximum level.

Samples were also taken of fresh vegetables, baby foods, rice and rice products, snack products, processed fruit products, soups and broths, beans and pulses, fats and oils, fresh herbs, meat products and processed vegetable products. These were all reported to comply with regulatory levels.

Of the samples that failed, half were referred to the Home Authority for follow up action, and in a further quarter of cases the LA provided further advice to the business and/or importer.

5.1.3 Conclusion

The results for mycotoxin testing generally indicate low levels of contamination and a good level of compliance with the maximum levels set out in the legislation, particularly since the sampling is targeted at higher risk products. Although high levels of mycotoxins were found in some spices, the incidence was relatively low (~3% of products tested). The low levels of mycotoxins found in nuts, and in particular seeds and seed products, are especially reassuring since high levels have previously been found in these products.

This sampling supplements existing controls on imported food and indicates effective controls at ports.

5.2 Organic contaminants

5.2.1 Background

Dioxins and Polychlorinated Biphenyls (PCBs)

The limits for dioxins and dioxins plus dioxin-like PCBs expressed as total toxic equivalent (TEQ) in food are set out in Commission Regulation (EC) No. 1881/2006[12], Section 5 of the Annex[i], whilst Commission Regulation (EC) No. 1883/2006[13] specifies methods of sampling and analysis for the Official Control of levels of dioxins and dioxin-like PCBs in certain foodstuffs.

[12] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:364:0005:0024:EN:PDF

[13] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:364:0032:0043:EN:PDF

New limits were approved in July 2011 for non dioxin-like PCBs in meat, fish, eggs and dairy products. These come into force on 1st January 2012, along with revised limits for dioxins and TEQ. A Directive relating to PCB disposal **(***Council Directive 96/59/EEC on the disposal of polychlorinated biphenyls and polychlorinated terphenyls (PCB/PCT)*) stated that all PCB-contaminated equipment had to be decontaminated or disposed of by the end of 2010. As a consequence, it was thought there might be an increased risk of illegal disposal activities throughout Europe (including illegal transfers to third countries). Such activities have previously led to major dioxin and PCB contamination incidents in Belgium, Italy and the Irish Republic.

Sampling and testing of meat, fish, eggs and dairy products for dioxins and PCBs were therefore considered a priority to support discussions on future regulatory limits.

Polycyclic Aromatic Hydrocarbons (PAHs)

Changes to the limits for PAHs were approved in April 2011. The Contaminants Regulation extended from benzo(a)pyrene (BaP) to include chrysene (CHR), benz(a)anthracene (BaA) and benzo(b)fluoranthene (BbFl), with limits for BaP and for the sum of the four PAHs. The new limits come into force at various points from 1st September 2012 onwards. There was discussion of extending the range of food groups covered by regulatory limits to cereals, dried herbs and herbal food supplements and possibly vegetables. However, the European Commission agreed that more data should be collected before any decision was made.

Additional sampling and testing for PAHs was encouraged in a range of products to support discussions on future regulatory limits. These included: smoked products, especially those which are also partially dried during the process (which may be vulnerable to any tightening of the limits); processed cereal products; dried herbs; herbal food supplements; and dried vegetables.

Mineral oil in vegetable oil

Following the discovery of mineral oil contamination of a large consignment of Ukrainian sunflower oil in 2008, special measures were introduced for sunflower oil from Ukraine alone. These measures were made into a regulation (Commission Regulation 1151/2009[14]) in November 2009. Certain Member States, possibly in mind of their own vegetable oil industries, had requested the Commission to widen the regulation to cover other oils. In the absence of a clear need, the UK opposed such a move, but it was important to have data to support this position.

5.2.2 Results

Dioxins and Polychlorinated Biphenyls (PCBs)

For dioxins and PCBs, 111 samples were tested, of which the majority (93) were fish and fisheries products, the remainder were 14 meat products and 4 dairy.
No non-compliances were reported and no results were above the relevant action levels.

Polycyclic Aromatic Hydrocarbons (PAHs)

In the case of PAHs, smoked fish continued to be among the higher risk products. 64 samples of smoked and dried fish were tested, of which 4 were reported to be non-compliant with the limit for benzo(a)pyrene. The latter were referred back to the relevant Home Authority for action. All were from small-scale production.

Following their identification as significant contributors to dietary exposure to PAHs, 29 samples of cereals and cereal products and 16 samples of vegetables and vegetable products were also tested. Results were generally low and no concerns were identified. The results were shared with the European Commission.

[14] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:313:0036:0039:EN:PDF

In response to previous reports of high PAH contamination of supplements, especially plant-based dried herbs and spices, 109 samples were tested. Some were found to contain significant levels of PAHs. However, due to low dosage and/or portion size, health concerns were expected to be low. There are currently no legislative limits for these categories, but they have been under review for some time. The data generated from this exercise contributed to further discussions about the limits.

5.2.3 Conclusion

The dioxin results did not raise any concerns for consumer safety, indicating that random testing for dioxins and dioxin-like PCBs should not be a high priority, unless there is a known or suspected problem. However, in the case of non dioxin-like PCBs, new limits have only recently been approved and further testing should be encouraged so that the UK Regulators can build on the results data and establish a baseline.

Future PAH testing should be directed towards food groups for which further data is required notably: cereals; dried vegetables; herbs; and supplements. There was evidence of continuing occasional non-compliance in the case of imported smoked/dried fish, although these were generally small consignments. Any further testing of smoked fish should be limited to hot, direct, small-scale or 'traditional' processes.

5.3 Inorganic Contaminants

5.3.1 Background

The levels of a number of metals and other elements in food, and their possible effect on human health, are of interest to the FSA. Environmental sources are the main contributors to contamination of food by most metals and other elements. Some elements (e.g. arsenic) are present naturally, but the major sources of other elements (e.g. lead) in the environment are pollution from industrial and other human activities. The presence of metals and other elements in food can also be the result of contamination by: certain agricultural practices (e.g. cadmium from phosphate fertilisers); manufacturing; and packaging processes (e.g. aluminium and tin in canned foods).

In the 2010/11 sampling programme, sampling was carried out to determine the levels of cadmium in various foodstuffs for which regulatory limits are laid out in EC Regulation 1881/2006 as amended by 629/2008. Commission Regulation (EC) No. 333/2007 lays down methods of sampling and analysis for the Official Control of levels of lead, cadmium, mercury, inorganic tin, 3-MCPD and benzo(a)pyrene in foodstuffs.

5.3.2 Results and conclusion

Heavy metals in fish

The levels of lead, cadmium and mercury were measured in 64 seafood samples and all except one was within the regulatory limits. The mercury content of this sample was not less than 2.51 mg/kg which exceeded the maximum limit of 1.0 mg/kg permitted in the muscle meat of swordfish by The Contaminants in Food (England) Regulations 2009, and Commission Regulation (EC) No 1881/2006. This sample was referred to the Home Authority and follow-up action was carried out by the LA.

Heavy metals in various foodstuffs

The levels of lead, cadmium, mercury and arsenic were measured in 335 foodstuffs (including 93 bakery and cereal products, 95 nuts and nut products and 40 vegetable products. Three were not within the regulatory limits - all were bakery products. These cases were referred to the Home Authority and follow-up action was carried out by the LA.

5.4 Process Contaminants

5.4.1 Background

3-MCPD – in soy sauce.

3-Monochloropropane-1,2-diol (3-MCPD) is a chemical contaminant formed during the processing of certain foods, i.e. acid hydrolysis of hydrolysed vegetable protein. Higher levels of 3-MCPD have been observed in soy sauce and it is classed as a probable carcinogen by the Scientific Committee on Food (SCF). Due to the concerns around 3-MCPD, the European Commission has set regulatory limits under Commission Regulation (EC) No 1881/2006 for 3-MCPD in soy sauce and hydrolysed vegetable protein. The FSA has monitored levels of 3-MCPD in various foodstuffs and, as part of the ongoing programme, 3-MCPD levels could be analysed in soy sauce from outside the EU. These results helped the UK ensure that 3-MCPD levels were within safe limits, and were also used to help provide evidence to support policy decisions at EU level.

Ethyl Carbamate in non-EU stone fruit spirits and stone fruit 'marc' (from pears) spirits.

Sampling of ethyl carbamate was undertaken in non-EU stone fruit spirits and stone fruit marc spirits. Stone fruits include plums, peaches, cherries. Fruit marc spirits (also termed grappa spirits) are those made from grapes, apples and – commonly - pears

In 2007, EFSA adopted a scientific opinion on ethyl carbamate in beverages. In this opinion, margins of exposure were derived and it concluded that ethyl carbamate in alcoholic beverages indicate a health concern, particularly with respect to stone fruit brandies. It was recommended that mitigation measures should be taken to reduce the levels of ethyl carbamate in these beverages. A Code of Practice (COP) for the prevention and reduction of ethyl carbamate levels in stone fruit spirits and stone fruit marc spirits could be a suitable tool to address the recommendations. An ethyl carbamate target level of 1 mg/l in ready-to-drink spirit was proposed in the COP as realistic and achievable. Member States were recommended to monitor levels of ethyl carbamate in stone fruit spirits and stone fruit marc spirits, for example, apricot, cherry or plum brandy liqueurs or pear spirits.

5.4.2 Results

227 samples of soy sauce and similar type products were analysed for 3-MCPD. Three did not comply with regulatory limits set by the European Commission,

although the levels found would not have posed a significant risk for consumers. All samples were referred to the Home Authority and follow-up investigations did not indicate a problem.

5.4.3 Conclusion

98% of samples analysed for 3-MCPD were within the regulatory limits set by the European Commission or were below detectable levels. Testing of similar types of products in 2009/10 recorded 94% compliance. The results therefore suggest a high level of compliance with the European Commission regulatory limits.

5.0 Food contact materials

5.1 Background

The migration of primary aromatic amines from kitchen utensils

Plastics Regulation 10/2011, as amended, Annex II (2) states that: "Plastic materials and articles shall not release primary aromatic amines, excluding those appearing in Table 1 of Annex I, in a detectable quantity into food or food simulant. The detection limit is 0.01 mg of substance per kg of food or food simulant. The detection limit applies to the sum of primary aromatic amines released."

The migration of formaldehyde from melamine ware

In previous FSA-funded sampling programmes, melamine ware food contact articles were found with up to 76 times the legal limit. There is a Total Specific Migration Limit (SML (T)) for formaldehyde and hexamethylenetetramine (HMTA) of 15 mg/kg (equivalent to 2.5 milligrams per square decimetre) given in European Regulation 10/2011 as amended.

The migration of phthalates from jar lids

Plastics Regulation 10/2011 as amended, Annex I (1) sets restrictions on the use of phthalates, a group of chemicals used as plasticisers. They can be used in: repeated use materials and articles; for single use articles such as lids for jars containing non-fatty foods (but not foods for infants); or in small quantities as technical support agents. There are Specific Migration Limits and restrictions for individual phthalates, and a group SML(T) of 60 mg/kg for the sum of 20 chemicals associated with the phthalate group.

5.2 Results

233 samples of kitchen utensils were analysed for primary aromatic amines, 33 (14%) were reported to be non-compliant.

165 samples of melamine ware were analysed of which 15 (9%) were reported to be non-compliant for formaldehyde.

13 samples of jar lids were analysed for phthalates. All were found to be compliant.

5.3 Conclusion

Of the samples tested, only 48 were found to be non-compliant for primary aromatic amines or melamine, representing an overall failure rate of 12%. This represents an improvement to the 21% reported in the previous year. Further sampling to look at the migration of primary aromatic amines from kitchen utensils and the migration of formaldehyde from melamine ware has been funded as part of the 2010/11 survey, to continue to monitor the situation.

The FSA has provided advice to consumers and industry stakeholders on the food contact material legislation via our website, letters and direct enquiries. We have

also been in regular contact with a number of LAs to assist with advice on compliance issues in light of the adverse results.

6.0 Irradiated Products

6.1 Background

Certain irradiated foodstuffs have been allowed in the United Kingdom for 20 years and may be imported as long as they comply with specific rules and are correctly labelled. There are seven categories of foods which may be irradiated for sale in the UK: fruit; vegetables; cereals; bulbs and tubers; dried aromatic herbs, spices and vegetable seasonings; fish and shellfish; and poultry. When assessing the legality of imported irradiated food, it is necessary to consider where the food or food ingredient was irradiated. Prior to 31 July 2009, the only types of food irradiated in non-EU countries permitted under UK legislation were herbs and spices. Since then, any of the seven categories may be permitted providing certain conditions are met and they originate from a European Commission approved food irradiation facility.

6.2 Results

Out of 364 products analysed for presence of irradiated ingredients, 26 were initially unsatisfactory through initial screening tests although only 4% were shown to be non-compliant in confirmatory tests.

6.3 Conclusion

The non-compliant products were food supplements, Asian noodle, soup & sauce products and spice mixes and these products should continue to be targeted in future sampling.

7.0 Post – Chernobyl controls

7.1 Background

European Regulations 733/2008 and 1635/2006 govern imports of agricultural products originating in third countries following the accident at the Chernobyl nuclear power station. Certain specified products must have less than 600 Becquerels (Bq)/kg of Caesium-134 and Caesiium-137 (or 370 Bq/kg if clearly labelled for infants).

These European Regulations were due to expire in March 2010, but have been extended for a further 10 years. Regulation 733/2008 requires that Member States check compliance with the maximum levels for radioactive caesium in wild mushrooms and fruits of the genus Vaccinium (cranberries etc.) and certain products of animal origin. Regulation 1635/2006 lays down specific requirements to analyse all consignments exceeding 10 kg of wild mushrooms (from specific countries) on entry into the EU.

The information gathered in this programme aimed to help assess how effective the measures in place were to inform future policy decisions, which were of particular relevance given the recent extension of the Regulations.

7.2 Results

All 28 products tested for radiocaesium were compliant. However, only one product came from a country mentioned in the Regulations as a third country affected by the Chernobyl nuclear accident (Serbia and Montenegro), and one came from an unrecorded Asian country. These two samples both showed levels just over 1/6th of the legislative limit of 600 Bq/kg. All the remaining 26 samples showed very low levels - as would be expected.

7.3 Conclusion

These results demonstrate that levels in Eastern Europe and Asia, while compliant, may continue to show significantly higher levels of radiocaesium than elsewhere, and products from these countries should be targeted in future sampling.

8.0 Specified unauthorised GMOs in certain food products

8.1 Background

Over the past few years certain GMOs that are not authorised for food and feed use in the EU have been the subject of emergency measures. The unauthorised GM rice Bt63 from China is currently subject to such measures while those for long grain LLRice601 from the US were revoked in 2010. Voluntary controls on the GM Linseed FP967 from Canada were also relaxed in 2010. In order to provide the FSA with up to date information on the status of these incidents in the UK, sampling for the presence of these GMOs was carried out specifically for LLRice601 in long grain rice from the US, Bt63 in rice products from China.

9.2 Results

70 rice and rice products were analysed for specified unauthorised GMOs, of which three samples (4%) were found to be positive for Bt63.

No samples of linseed from Canada were submitted for analysis.

9.3 Conclusion

Each of the three samples positive for Bt63 were referred to the Home Authority by the sampling LA, and follow up action was carried out. The emergency measures for Bt63 require that RASFFS are issued for all samples found to contain this unauthorised GMO and this has been taken up by the FSA.

10 Chicken products/preparations

10.3 Background

This sampling area has previously formed part of this programme. Market intelligence suggests continuing problems of mislabelling of frozen chicken breast product imports, including over-declaration of meat content, inaccurate added water declarations and incorrect name of food (e.g. using descriptions reserved for poultry parts under Poultry meat Marketing Regulations and not for chicken products).

Previous FSA authenticity surveys on this issue can be found at the following links:
www.food.gov.uk/science/surveillance/fsis2000/8chick

www.food.gov.uk/science/surveillance/fsis2001/20chick

www.food.gov.uk/science/news/newsarchive/2003/mar/waterchicken0303

The objective of this sampling was to check for correct labelling declarations in chicken products and preparations. This included: meat content declaration in chicken products; general labelling provisions such name of food; correct declaration of added water, salt etc. The products were selected particularly from wholesalers supplying primarily to the catering trade, as well as retailers and butchers selling products directly to the public.

10.4 Results

Labelling declarations of chicken products/preparations

A total of 300 chicken (raw, cooked and processed) samples were analysed for added water and declared meat content. 75 samples (25%) were found to be unsatisfactory, where either the chicken content was absent from the label or incorrectly declared, and/or water was not declared either in the name of the food or in the ingredients list.

DNA testing was carried out on 28 samples, and all were found negative for bovine and porcine species.

Country of Origin for Meat, Meat Products and Meat Preparations

In total, 755 food samples were taken for labelling checks. In 63 (8%) of the samples, the country of origin was not labelled, and 17 (2%) of these samples had no origin information, either because there was more than one origin for the ingredients or that it was simply unknown

10.5 Conclusions

The analysis of chicken products and preparations has shown that the correct labelling of meat content and added water is a continuing problem. The number of samples considered to be labelled unsatisfactorily was 24% (71 out of 300 samples) and whilst some of the adverse results could be attributed to minor labelling irregularities, a significant number of samples were named incorrectly and/or were labelled incorrectly in terms of meat and added water contents. Where samples were judged to be unsatisfactory the importer was contacted or the results were passed on to the Home Authority to help resolve the mislabelling issues found and to increase awareness of the labelling requirements for chicken products and preparations.

11 Replacement of milk fat with other fats in dairy products

11.1 Background

Dairy product labelling is strictly governed by national and European legislation, and the increased demand for dairy products from third countries such as China mean that prices are generally increasing. As milk and milk products are increasingly being exported from the EU, it is possible that the dairy component of certain foods being imported into the EU to satisfy the home needs may be subject to replacement with non-dairy components such as vegetable fat. This is an area that is regulated under European law to ensure, where dairy components have been replaced with non-dairy, that they are not sold fraudulently as dairy.

Dairy terms such as “Butter”, “Cheese” and “Milk” are reserved solely for dairy produce, in accordance with European legislation, on the protection of dairy designations (EC Regulation 1234/2007). The adulteration of dairy produce by substitution or replacement of the dairy component by vegetable fats or oils for financial gains provides the incentive for adulteration.

The objective of this priority was to check for correct labelling declarations in dairy products which bear certain dairy designations such as milk, butter, yogurt, cheese (including processed cheese) and cream (not ice-cream), and any subsequent adulteration by replacing milk fat with other non-dairy fats.

11.2 Results

A total of 115 dairy products, including cheese, milk, butter and other processed dairy products, were analysed for accuracy of labelling. Other tests included moisture and milk fat analysis. Only 5 samples were found to be unsatisfactory due to insufficient nutrition information or market descriptions on the label.

On the question of substitution of milk ingredients in named dairy produce with non-milk ingredients, one product tested (a cheese spread from the USA) contained modified starch, which can be used to replace casein. However, modified starch also has other uses as an ingredient in food, so it cannot be concluded that its presence indicates substitution.

11.3 Conclusions

There were relatively few problems highlighted in these milk products. Where non-compliances were found, they appeared to stem from products produced outside the UK that had been imported into the UK without sufficient adaption to the label.

The samples analysed showed no evidence of substitution of dairy with non-dairy ingredients.

12 Food Labelling

12.1 Background

Each sample was checked for labelling non-compliances, because previous sampling programmes had identified poor or inappropriate labelling in a significant number of samples. These checks were carried out by the Public Analysts and no related chemical examination was undertaken to verify the labelling.

Food labelling rules are harmonised at EU level under Directive 2000/13/EC (current at time of this programme). The principal provisions of the UK Food Labelling Regulations 1996 (as amended) state the labelling requirements for pre-packed food (with a few exceptions) that is ready to be delivered to the ultimate consumer.

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 is raised with the LA of destination.

There is no statutory definition of "place of origin or provenance" in the Food Labelling Regulations 1996 or of "origin or provenance" in Directive 2000/13/EC. Under WTO Rules, the country of origin is deemed to be the place of last substantial change."

Additional labelling requirements and controls are in place for certain foods for example those that contain specific ingredients or that are packaged in a specific manner (e.g. in a modified atmosphere) or make a certain type of claim. Quantitative ingredient declarations (i.e. QUID) must be given for ingredients mentioned in the name of a food. For example, the meat content of meat products must be quantified as a percentage of the weight of the final food, either next to the name of the food, or in the ingredients list.

12.2 Results

16% (759) of all samples submitted for checks were found to be inappropriately labelled to some extent. This is a slight increase of 3% compared to 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 2: Frequency of labelling errors

Precise nature of labelling fault	Total
Name insufficiently precise	235
Nutritional information format	220
Durability marking	196
Errors in ingredients list, QUID declaration	165
Minor labelling fault (specific reason for failure not specified)	66

Category of additives not declared	43
Unauthorised health claim	24
Field of vision	23
No declaration – GMO, Food Allergens	15
Name of business operator	14
Inappropriate labelling for specific foods	11
Product does not comply with the requirements of the Tobacco Products (manufacture, presentation and sale)(Safety) Regs 2002 - none of the printed warnings required by the above are present.	6
No product labelling	4
Illegibility of label	3
Product or ingredient in product has been irradiated	2
No English version of name or ingredients	2
No intended use	1
Total	**1030**

12.3 Conclusion

Whilst a number of labelling irregularities were reported, the large majority of products were compliant. The most common reasons for non-compliance with labelling legislation were caused by imprecise product naming (23%), nutrition labelling format (21%), date marking (19%) and quantitiative ingredients listing (QUID).

The follow-up action of unsatisfactory samples in this surveillance exercise included checking further samples, contacting the importer (by letter, phone or personal visit) and Home Authority referral.

Labelling matters have consistently contributed to the greatest proportion of non-compliance of samples within the programme, the most frequent nature of labelling faults has remained consistent. Errors in the ingredients list, nutritional information format and durability marking being the top three.

13 Follow-up action

If a food does not satisfy legal requirements, enforcement authorities have the power to seize and detain in accordance with the Food Safety Act (1990) and then take the necessary action to protect the food chain. For any sample found to be unsatisfactory under this programme it was expected that these samples be dealt with in accordance with the FSA Code of Practice on food law enforcement.

A range of enforcement action took place with respect to the 764 samples found to be unsatisfactory, summarised in Table 6. Since more than one type of enforcement action were taken on many of the samples, the incidence of follow-up action is greater than the number of non- compliant samples.

Table 3: Breakdown of follow up action

Description of follow up action taken	Incidence of follow-up action taken
Letter/Advice to business/company/importer/retailer	334
Home Authority Referral/Informed	220
Minor labelling – no follow-up considered necessary	136
Formal sample proved satisfactory	35
Further investigation by LA	34

RASFF or Incidents form sent to FSA	14
Further imports targeted	8
FSA informed	6
Further consideration of sample by PA proved sample would be considered acceptable but borderline.	5
Product removed from shelves/withdrawn from sale	5
Follow-up visit	4
Product destroyed/detained	6
Company ceased trading/importing	3
FSA risk assessment - advised no food safety concern	2
Label amended	2
Product no longer stocked	1
Re-sampled	1
Total	**817**

14 Animal Feed

14.1 Introduction

The Food Standards FSA works with enforcement authorities across the UK to monitor and improve the control of imported feed entering the UK. As part of the 2010/11 sampling programme, the FSA distributed additional funding to 87 local authorities in England, Wales, Scotland and the Department of Agriculture and Rural Development in Northern Ireland (DARD NI). £110k in local authority grant money resulted in 277 samples being analysed for the presence of undesirable substances and undeclared GM material.

A list of the local authorities that took part in the programme can be found in Annex I.

Enforcement authorities sampled a wide range of imported feedingstuffs which included cereal and soya products. Groundnuts, marine sourced feed materials, feed additives, other feed materials and compound feeds.

14.2 Results

Of the 277 samples analysed, 9 (3.2%) did not meet at least one requirement of EU legislation. This year, four of the 81 samples (4.9%) tested for GM materials were found to contain undeclared GM varieties. Non-compliance was found in samples analysed for the presence of mycotoxins; three of the 137 samples (2.2%) did not meet EU statutory requirements. Additionally, two of the 33 samples (6.1%) taken for heavy (hazardous) metal analysis failed to meet the EU requirements. All 23 samples tested for dioxins and dioxin-like PCBs were found to be compliant. Thirteen samples were analysed for melamine and all were found to be satisfactory.

These results show some improvement from the survey results on 2009/10, where 5.2% of samples were non-compliant, see Table 4. More samples were analysed for mycotoxins and GM feed, but in each case the percentage of non-compliance has decreased. The level of non-compliance for hazardous metals has roughly stayed the same; again two samples were found to be non-compliant in 2009/10 (although less samples were taken that year).

Table 4: Breakdown of animal feed sampling results in 2009/10 and 2010/11.

	2009/2010			**2010/2011**		
	No. of samples analysed	**No. of non-compliant samples**	**% non-compliant**	**No. of samples analysed**	**No. of non-compliant samples**	**% non compliant**
GM feed	51	5	11.9	81	4	**4.9**
Mycotoxins	71	5	6.3	137	3	**2.2**
Hazardous metals	51	2	3.6	33	2	**6.1**
Dioxins and PCBs	41	0	0	23	0	**0**
Melamine	16	0	0	13	0	**0**
Total	**230**	**12**	**5.2**	**287**	**10**	**3.2**

Table 5 summarises the feed types that failed to meet the requirements of EU legislation relevant to animal feed. In all cases of non-compliance, respective local authorities took appropriate follow-up action.

Table 5: Details of animal feed samples that were non-compliant

Substance	Imported feed materials failing to meet EU statutory levels	Country of origin	Number of samples per feed type failing to meet statutory levels
GM feed	Cereal products	USA	1
	Soya products	Brazil, China	2
	Other feed materials	UK	1
Mycotoxins	Groundnuts	Argentina, others unknown	3
Hazardous metals	Groundnuts	Mexico,	1
	Mycotoxin Binder	USA	1

15 Overall conclusion and future work

A total of 227 authorities participated in this programme. The programme covered all areas of the UK with all the regions and countries of the UK involved. Of the 20% of the samples submitted as part of the UKFSS system, 68% of samples were taken at retailers, this information is not available for those samples not submitted by UKFSS. The samples submitted by UKFSS indicate that 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 the compliance of imported food and feed. The results shows that ongoing surveillance of imported food and feed is necessary in order to establish trends in non-compliance and to indicate if existing controls need amending in order to provide reassurance for consumer safety and the protection of the feed and food chain.

However, as a result of the work, the FSA has allocated additional funding in 2011/12, to work in collaboration with enforcement authorities and support them in protecting the food chain, especially in the run up to the 2012 Olympic Games. Local authorities were invited to bid for this work in early 2011 (ENF/E/11/006[15]).

[15] http://www.food.gov.uk/multimedia/pdfs/enforcement/enfe11006.pdf

APPENDIX 1 - List of Local Authorities that took part

Type of council	Bid on behalf of	LAs taking part in group bids
BC	Bolton	
BC	Southend-on-Sea Borough Council	
BC	Telford & Wrekin Council	
CC	Cambridgeshire	
CC	East Riding Of Yorkshire Council	
CC	Essex County Council	
CC	Gloucestershire County Council Trading Standards	
CC	Lincolnshire County Council Trading Standards	
CC	Norfolk County Council Trading Standards Service	
CC	Northumberland	
CC	Suffolk County Trading Standards.	
DC	NW Leicestershire	
DC	Uttlesford	
Group	AGMA	Blackburn with Darwen Council Blackpool Borough Council Bury Metropolitan Borough Council Oldham Metropolitan Borough Council Stockport Metropolitan Borough Council Tameside Metropolitan Borough Council Trafford Metropolitan Borough Council

Group	East of England Trading Standards Authorities (EETSA)	Central Bedfordshire Council Essex County Council Hertfordshire County Council Luton Borough Council Suffolk County Council Thurrock County Council
Group	CENTSA	Birmingham Coventry Dudley Sandwell Solihull Staffordshire Stoke-On-Trent Shropshire Telford & Wrekin Walsall Wolverhampton Warwickshire This includes Trading Standards and Environmental Heath Groups. The Unitary Authorities includes elements of Trading Standards and Environmental Health Groups.
Group	Hampshire & Isle of Wight Sampling Group	Basingstoke and Deane Borough Council East Hampshire District Council Eastleigh Borough Council Fareham Borough Council Gosport Borough Council Havant Borough Council Isle of Wight Council New Forest District Council Portsmouth City Council Southampton City Council Test Valley Borough Council Winchester City Council
Group	Hereford & Worcestershire Food Liaison Group	Worcestershire County Council, Herefordshire Council, Bromsgrove District Council, Redditch DC, Wychavon DC, Worcester City Council, Wyre Forest DC
Group	Lancashire (on behalf of Trading Standards North west	Lancashire, Sefton,

	Food group)	Cumbria, St Helens, Cheshire West Chester
Group	London Food co-ordinating group	All London Boroughs
Group	North East and Tees Food Liaison Groups	Newcastle, Gateshead, Sunderland, North Tyneside, South Tyneside, Durham, Darlington, Stockton, Hartlepool, Middlesbrough
Group	North East London	Enfield, Havering, Islington, Newham, Tower Hamlets, Waltham Forest
Group	North West Sector Food Group [London]	London Borough of Barnet London Borough of Brent London Borough of Ealing London Borough of Hillingdon London Borough of Hammersmith & Fulham London Borough of Harrow London Borough of Hounslow London Borough of Haringey London Borough of Kensington & Chelsea
Group	SWERCOTS	Bath NES Council Bournemouth Borough Council Bristol City Council Dorset County Council Plymouth City Council Poole Borough Council Somerset County Council South Gloucestershire Council Wiltshire County Council

Group	Trading Standards South East (TSSE)	Bracknell Forest Borough Council Brighton & Hove City Council Buckinghamshire County Council East Sussex County Council Hampshire County Council Kent County Council Medway Council Milton Keynes Council Oxfordshire County Council Reading Borough Council Royal Borough of Windsor & Maidenhead Slough Borough Council Southampton City Council Surrey County Council West Berkshire County Council West Sussex County Council Wokingham Borough Council
Group	TSEM	Leicestershire, Northamptonshire, Derbyshire City of Leicester
Group	TSNW (Trading Standards North West) Agriculture Subgroup	Blackburn with Darwen, Blackpool, Bolton, Bury, Cheshire (East and West), Cumbria, Halton, Knowlsey, Lancashire, Liverpool, Manchester, Oldham, Rochdale, Salford, Sefton, St Helens, Stockport, Tameside, Trafford, Warrington, Wigan, Wirral.

Group	YAHTSG	Barnsley MBC Doncaster MBC Hull City Council North Lincolnshire Council North Yorkshire County Council Rotherham MBC Sheffield City Council Bradford, Calderdale, Kirklees, Leeds Wakefield Councils City of York Council
LB	Hackney	
LB	Hillingdon	London Heathrow Airport
LB	London Borough of Enfield	
LB	Merton Council	
LB	Southwark	
LB	Wandsworth	
MBC	Rotherham	
MBC	Walsall Council	
NI	DARD NI	
NI	Western Group Environmental Health Service (WGEHS)	Northern Ireland Chief Environmental Health Officer's Group (CEHOG – 26 District Councils)
PHA	Grangemouth Port Health, Falkirk Council	
PHA	London	London Port Health Authority (Thamesport & Tilbury)
PHA	Mersey	
PHA	Portsmouth City Council/ Portsmouth PHA	
PHA	Southampton	
PHA	Suffolk Coastal Port Health Authority	

Scotland	Lothian & Borders Food Liaison Group	City of Edinburgh Council, East Lothian Council, Midlothian Council, Scottish Borders Council, West Lothian Council
Scotland	North of Scotland Food Liaison Group	Aberdeen City, Aberdeenshire Council, Moray Council, Highland Council, Orkney Islands Council, Shetland Islands Council, Western Isles Council
Scotland	Renfrewshire Council	
Scotland	South Ayrshire	
UA	Cornwall Council	Kerrier District Council Restormel Borough Council North Cornwall District Council Penwith District Council Caradon District Council Carrick District Council
Wales	Cardiff CC	Cardiff County Council - Trading Standards and Environmental Health Joint Project
Wales	Glamorgan Group	Bridgend, Cardiff, Rhondda Cynon Taff, Vale of Glamorgan, Swansea, Neath Port Talbot, Merthyr Tydfil;
Wales	GWENT AUTHORITIES	Torfaen County Borough Council, Monmouthshire County Council, Newport County Borough Council, Blaen-y-Gwent Council, Caerphilly County Borough Council.
Wales	Neath Port Talbot	
Wales	North Wales Quality and Metrology Group	Gwynedd Council, Conwy CBC, Denbighshire Council,

		Wrexham Council, Flintshire, Anglesey
Wales	Pembrokeshire County Council	
Wales	Rhondda Cynon Taff CBC	
Wales	South & East Wales Public Analysts	
Wales	South and West Wales Public Analyst Group	
Wales	Torfaen	
Wales	Newport	