



**Summary Report of Local Authorities’
Activity and Key Findings from the Imported
Food Sampling and Surveillance Grants
2006-07**

Introduction

The Food Standards Agency's Imported Food Sampling programme remains a successful mechanism by which financial support is passed to local authorities to undertake additional food sampling as part of the cross government initiative to achieve a step change improvement in imported food. The 2006/07 project was the fourth year that the Food Standards Agency (FSA) has run this programme.

In 2006-07, £900, 000 was allocated for this work, bringing the total investment made by the FSA over the past four years to approximately £3.5million.

The joint LACORS (the Local Authorities Coordinators of Regulatory Services) and FSA Sampling Co-ordination Working Group met on 9th June 2006 to evaluate the preliminary results of the 2005/2006 project. The group recognised the value that this continuing programme offers both in the financial support given to local authorities, and for policy officers within the FSA. Colleagues in the Agency use the generated data when formulating policy and contributing to international discussions. It was agreed at this meeting that subject to appropriate funding being available, the programme should continue in 2006/07.

As with previous years, priority areas were identified by FSA policy officials, LACORS, local authority enforcement officers and Public Analysts. The Sampling Co-ordination Working Group agreed the following 6 priorities at a meeting on 9th June 2006. Once again, it was agreed that local authorities should submit bids that reflect local risk and that bids should be submitted in terms of products and quantities of imported food available in their region.

Priority areas for 2006/07 Imported Food Sampling and Surveillance Programme.

- a) **Mycotoxins**¹, particularly:
- Aflatoxin in nuts and nut products, spices and edible seeds
 - Ochratoxin A in spices, coffee
 - Fuminosin in maize and maize products

Sampling a range of foodstuffs for contamination by the most common Mycotoxins has featured as a priority each year of the imported food programme. The level of Mycotoxin contamination remains relatively high, especially in nut and seed products imported from Asia. Therefore, it remains important for the FSA to continue to monitor imports arriving into the UK. Local authorities were asked to sample various foods to identify the presence of these food toxins, some of which were submitted for analysis for more than one type of Mycotoxin. Agency policy officials were keen to see an increase in "formal" sampling (i.e. those samples taken in accordance with the Food local authorities

¹ Mycotoxins are toxic substances produced by certain fungal species. European legislation exists for maximum permitted levels of the most common Mycotoxins of concern in a range of foodstuffs.

Code of Practice²), since it will enable officers to take action against non-compliant Food Business Operators.

b) **Lead and cadmium** in nuts and seeds

In the EU, maximum permitted levels have been established for lead and cadmium in a range of foods. The Agency was keen to assess the levels of these heavy metals in nuts and seeds imported in to the UK

c) **Dioxins and Polychlorinated biphenols (PCBs)** in fish, meat and oils

Dioxins and PCBs are by-products of various industrial processes, residues of which can in some instance be detected in the food chain, for example salmon fished from affected waters. Both can be toxic if found at sufficiently high levels. Legislation is in place to eradicate the use of compounds or equipment that generates these contaminants within the UK. A recent survey by the Agency³ assessing the levels of dioxins and dioxin like PCBs in the UK population diet indicated that the estimated total dietary intakes of dioxins and dioxin-like PCBs by all age groups fell by around 50% between 1997 and 2001. However, it is essential that the FSA continues to monitor the levels of the contaminant in foods that is imported from other parts of the world.

d) **Colours** in:

- Spices, particularly analysing for the colours Bixin/Norbixin⁴ as well as illegal dyes and non-permitted use.
- Illegal dyes in unrefined Palm oil intended for direct human consumption and sold particularly for use in West African cooking.

The 2005/6 Imported Food Programme contained a large focus on illegal colours due to the discovery of the illegal use of Sudan I – IV dyes in food products in 2005. This additional focus proved to be extremely useful in establishing how effective the enforcement action that was taken at the time had been⁵. In the 2005/06 programme, a single laboratory was responsible for developing the technique and conducting the analyses for some of the colours that were of interest. It was agreed for the 2006/07 programme that training and materials should be made available to all Public Analysts to enable them to carry out the analyses for this years programme.

e) **Microbiological examination** of dried / smoked fish and fresh herbs

² The Code of Practice sets out instructions and criteria to which the local and port health authorities (food authorities) should have regard to when engaged in the enforcement of food law. Food authorities must follow and implement the provisions of the code that apply to them.

³ Dioxins and dioxin-like PCBs in the UK diet: 2001 Total Diet Study samples (Survey Number 38/03, 18th July 2003) (<http://www.food.gov.uk/science/surveillance/fsis2003/fsis382003>)

⁴ Although these colours are approved for food use in the EU, their use is restricted to certain food product types.

⁵ More information on this can be found at <http://www.food.gov.uk/news/newsarchive/2006/dec/illegaldyes>

Some of the local authorities that took part in the 2005/06 programme identified the issue of microbial contamination of fresh herbs and processed fish products, especially in foods originating from Asia. The FSA was interested to learn how extensive the problem was with such products entering the UK from other countries, and so local authorities were invited to sample these commodities that originate from other continents, in addition to those coming from Asia.

f) **General labelling and claims** including:

- Health claims
- Organic claims
- Meat content declaration
- Detection of genetically modified organisms (GMOs) in raw materials used in the manufacture of food and feed products in relation to the thresholds laid down in the GM Food and Feed Regulation 1829/2003

Issues surrounding labelling and claims have previously been identified in earlier Imported Food Sampling programmes. As such, general labelling and claims were included as priorities this year. Although it was accepted that some claims (for example most organic claims), can only be verified by undertaking a document check, others, such as species or in some cases, origin, could utilise some of the techniques developed as part of the Agency's authenticity programme⁶.

g) **Using local knowledge and expertise**

The Agency has asked local authorities to utilise existing local intelligence as part of the Imported Food Sampling Programme since it began 4 years ago. It provides a useful mechanism for local authorities to investigate imported food issues that may be specific to their area, or follow up issues that have been identified in previous programmes. This type of information is very useful to the Agency, often giving insight in to new areas of potential concern.

Appraisal Process

A panel made up of Agency officials reviewed all of the submitted bids at a meeting on 11th August 2006. The panel considered that funding should be provided for 43 of the submitted bids. Although 43 projects represents slightly fewer than in previous years, many of these projects were co-ordinated by a single authority on behalf of food liaison groups or other *ad hoc* groupings and so the number of local authorities that actually took part in the programme and benefited from the additional funding was greater than in previous years (approximately 250 this year). The 2006/07 programme started on 1st September, and all final reports were due to be submitted by the end of February 2007.

⁶ More information on this programme can be found at <http://www.food.gov.uk/science/research/researchinfo/choiceandstandardsresearch/authenticityresearch/>

Following a recommendation made in the 2005/06 report, it was agreed to improve the reporting mechanism by which local authorities submit results. Bespoke templates were prepared for each authority, with accompanying guidance notes. This proved to be extremely beneficial as it made the returns more straightforward for the local authorities as well as improving the quality and completeness of data submitted. Nearly all authorities or groups that received funding submitted their results on time and were able to supply significant, more complete detail on the adverse samples that were found.

The revised reporting mechanism together with increased awareness and communication between local authorities and the Agency accounted for this considerable improvement. However, the change in reporting mechanism, which enabled increased statistical analysis of the results, makes it difficult to directly compare results with previous years. None the less, trends from the data may be drawn that can be compared to previous results that give a good indication on the quality of foods being imported in to the UK.

Categories of Food Sampled

Local authority officers took 3289 food samples as part of this year's programme. 518 of these were found to be adverse either failing on microbiological examination (27 samples) or chemical analysis (180) or had unsatisfactory labelling. 26% of these foods were sampled formally. The following table shows the total number of samples taken by officers as part of this programme by food commodity type. Local authority were asked to indicate the total number of samples that failed to meet legal standards – either on chemical or microbiological analysis or on labelling. Where a sample failed on multiple checks, officers were asked to report this just once, as a single adverse sample. Details of how each sample failed are discussed later. This table represents the food samples taken as reported by local authority officers.

Feed / Food stuffs	Total No of Samples	Formal samples	Informal samples	Adverse samples
Nuts & nut products	672	161	511	124
Spices	671	122	549	89
Fish and shellfish	332	94	238	37
Seeds	331	65	266	79
Raw materials ⁷	176	46	130	15
Wine	160	11	149	8
Coffee	131	21	110	11
Fruit and vegetables	128	73	55	10
Meat/ poultry ⁸	117	33	84	22
Herbs	109	34	75	14
Food – General ⁹	87	41	46	20
Fats and oils	86	24	62	27
Pickled products / sauces	68	28	40	23
Animal feed material	50	7	43	2
Chinese Foodstuffs ⁹	34	7	27	12
Food – Honey	28	28	0	0
Soft drinks	24	15	9	7
African foodstuffs ⁹	20	20	0	11
Organic produce	20	0	20	0
Asian confectionary	10	10	0	0
Bottled water	9	9	0	0
Food – Syrups	8	8	0	0
Food – Confectionary	5	0	5	4
Food - Yoghurt products	5	5	0	0
Food - Dried milk powder	3	0	3	0
Food – Noodles	3	0	3	1
Food – Berries	2	2	0	2

⁷ No additional information was given regarding the “Raw material” samples, although many were likely to have been for an animal feeds.

⁸ Legislation limiting the maximum permitted levels of extraneous water exists for poultry, but not for red meat. The figure in the adverse column appears high for this foodstuff, as LAs have submitted all analytical results for red meat, although not a true legally unsatisfactory sample.

⁹ No further information given regarding food type.

Total	3289	864	2425	518
-------	------	-----	------	-----

Table 1 Frequency of formal, informal and adverse food sampled by product type.

A large range of commodity types was sampled as part of this programme. By far the main foodstuffs sampled were nuts, nut products and spices. Between them, these categories make up 40% of all the samples taken, which recognises the increased focus on sampling of foods to investigate Mycotoxin and heavy metal contamination.

Most of the shellfish and fish samples were examined for microbial contamination or for the presence of Dioxins and PCBs. No additional information was given by the sampling officer for the raw material category. Looking at the detail given by officers when an unsatisfactory sample was found, many of these were likely to be animal feed samples taken to detect for the presence of undeclared GM contents. In addition this category included rice intended for human consumption.

Wine and coffee were both essentially sampled to detect for Mycotoxins, mostly Ochratoxin A.

Many samples were categorised as “Food – General”. This category contained various types of food, of which only a few samples were taken. Unfortunately, additional information was only given where the sample was found to be adverse. Detail on adverse results is given later in the report.

The food products at the bottom of the table, for which only a few samples were taken, were sampled as a result of local intelligence.

Types of Analysis.

5777 different analyses were carried out on the 3289 samples that were taken by local authority officers. This figure includes those samples undergoing microbiological examination (844) and chemical analysis (4933), including authenticity and claims. It has been assumed that all appropriate food samples submitted to a public analyst for analysis will have had any accompanying labelling assessed against relevant legislation.

The following table shows the number of samples that were tested for each type of analysis. Most of the samples that have been recorded in the “Number of Adverse” column were found to be unsatisfactory when considered in terms of current legislation. However, in a few cases such as labelling claims or heavy metals where there is no legislation covering some of the specific foods sampled, officers reported all findings. An example of this is extraneous water content of red meat. EU legislation is in place that requires the declaration of extraneous water in poultry when present at greater than 5%, but no specific legislation exists for red meat. The water content of a number of New Zealand lamb samples was recorded as part of this year’s programme. Although this does not actually represent a legally unsatisfactory sample, detail such as this provides useful evidence that can be used by Agency policy officials when working with non-UK authorities to improve imported food standards.

The Agency wrote to the New Zealand Food Safety Authority drawing this issue to their attention in October and requested that they re-issue their advice to relevant suppliers and trade associations in New Zealand about providing appropriate information on product supplied to UK companies. A copy of this letter was also circulated to local authorities for their information.

Analysis type	Number of Samples	Number of adverse	% adverse
Mycotoxins	2202	90	4.09
Heavy Metals	1204	46	3.82
Microbiological examination	844	26	3.08
Additives	714	6	0.84
Natural Contaminants	331	5	1.51
Labelling and claims	327	42	12.96
Other	90	5	5.56
Irradiation	65	7	10.77
Total	5777	232	4.01%

Table 2 Frequency of samples analysed by type of analysis.

Over a third of the analyses carried out were to detect for Mycotoxin contamination (Aflatoxins, Ochratoxin, Fuminosins and Zearalenone). Compared with previous years, the level of contamination is lower (In earlier imported food sampling programmes, approximately 12% of samples tested have been found to be adverse). This most likely represents the increased focus that relevant policy division has made in this area in recent years, for example issuing relevant guidance for food producers.

1204 analyses were carried out on a range of foods to look for the level of heavy or toxic metals, including lead, cadmium, arsenic and mercury. Nearly 4% of these samples were found to contain higher than permitted levels. For those foodstuffs where no legislation is in place, local authorities declared them as “adverse” where they contained higher detectable levels when compared with similar types of foods for which a legal framework exists.

Approximately 13% of samples submitted under the category of “labelling and claims” were found to be unsatisfactory. This category includes samples that were analysed for undeclared GMOs, food allergens and in some foods, artificial additives, where use in that food is permitted but has not been correctly declared on the label.

Country of Origin

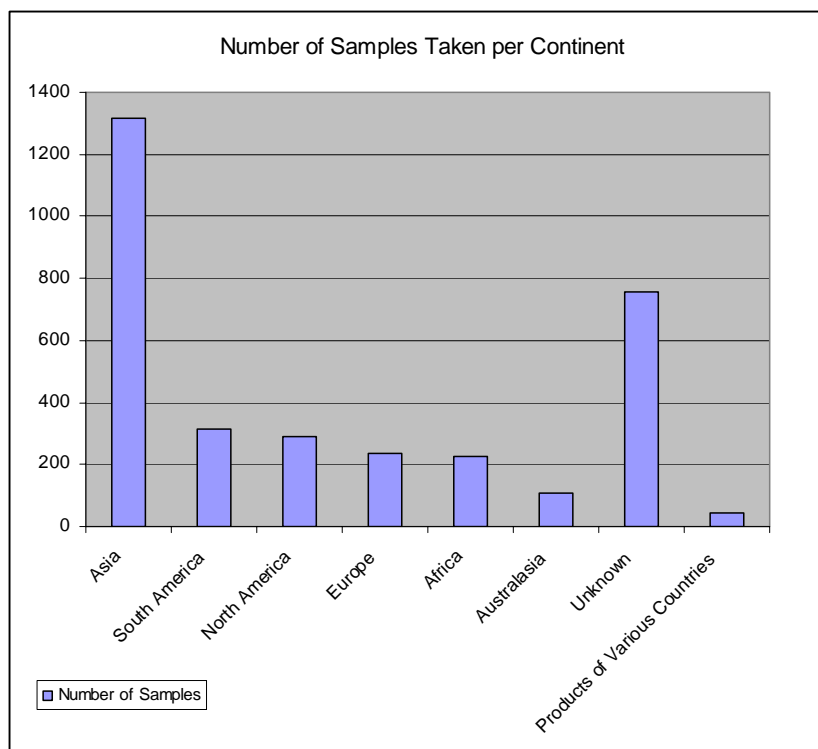
Origin of Samples

The food samples taken during this programme originated from 111 countries, with nearly 1.5% of samples being identified as coming from multiple regions. local authority officers gave the source for nearly all of the samples that were found to be unsatisfactory. However, full detail was not given for those that were satisfactory; therefore, it was not possible to identify the country of origin for approximately 23% of the samples taken. Annex 2 shows a breakdown of countries by continent.

The table below shows the number of samples taken per continent.

Continent	Number of Samples	Percentage of total samples
Asia	1315	39.98
South America	315	9.58
North America	288	8.76
Europe	235	7.15
Africa	226	6.87
Australasia	110	3.34
Unknown	755	22.99
Products of Various Countries	45	1.37
Total	3289	

Table 3 Number and percentage of samples by originating continents.



Graph 1 Number of Samples taken per continent.

As with previous years, the greatest number of samples was sourced from Asia (approximately 40%). From within this continent, most of the samples came from India (371 samples) and china (270 samples) with the remainder coming from 27 other countries.

With the exception of Australasia, from which 110 food samples were taken for analysis, the distribution of samples taken from the remaining continents was approximately even.

Of the 800 samples for which no single country source could be identified, 45 were appropriately labelled as being a “product of several or various countries”. The remaining 755 samples were classified as “unknown”. This may have been due to the product not displaying a country of origin, or because the enforcement officer did not record it. In the former case, where failure to display a country of origin represents a labelling error, the enforcement officer should have recorded this as an adverse sample and would appear as unsatisfactory.

Origin of Adverse Samples

Of the 3289 samples taken as part of this programme, 518 were found to have failed analysis either on microbiological, chemical or labelling examination. This data does not take account of those food samples that failed on more than one analysis.

The following table breaks down the source of the various samples, the number and percentage from each continent that were found to be adverse and the total of adverse samples from each continent as a percentage of the total adverse samples.

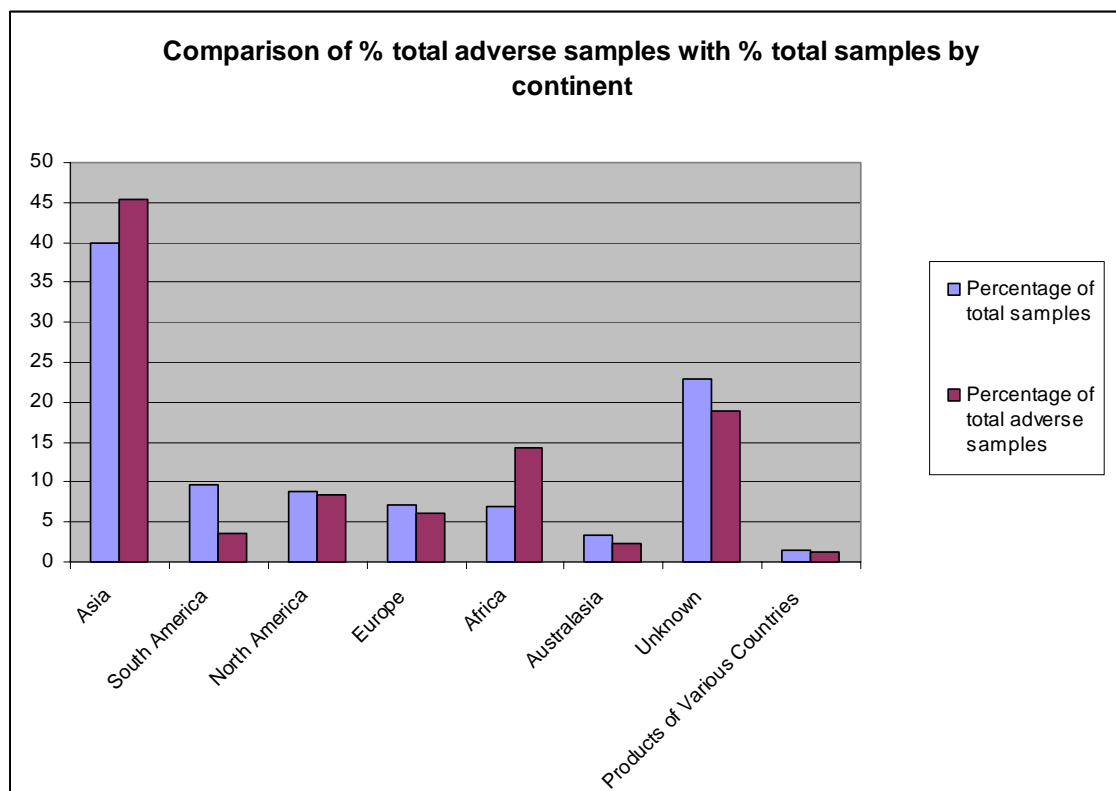
Continent	Number of Samples	Total Number of adverse Samples	% of Samples adverse	% of total adverse Samples
Asia	1315	235	17.87	45.37
South America	315	18	5.71	3.47
North America	288	43	14.93	8.30
Europe	235	32	13.62	6.18
Africa	226	74	32.74	14.29
Australasia	110	12	10.91	2.32
Unknown	755	98	12.98	18.92
Products of Various Countries	45	6	13.33	1.16
Total	3289	518	15.74	

Table 4 Originating continent of adverse samples.

Approximately 16% of samples failed analysis either upon chemical or microbiological examination or had inappropriate labelling. Asia was the source for the highest number of adverse samples, with 235 of the 1315 samples taken failing upon analyses.

However, the variation in the number of samples taken from each continent makes it difficult to directly compare the number of adverse samples taken from the various geographical areas. It is more appropriate to compare the “percentage of total adverse samples” to the “percentage of total samples” for each continent to give a relative view for which was the source of most adverse results. For example, 40% of all foods sampled originated from Asia, but 45% of all the samples that were found to be adverse were from Asia. Therefore, relatively speaking, the food sourced from Asia had a relatively higher failure rate. However, a third of the 226 food samples imported from Africa that were taken failed analysis. Of these, 27 were failed on chemical analysis, 5 were found to have unsatisfactorily high microbial counts and 38 had unacceptable labelling. 5 samples failed on both labelling and chemical analysis. Detail on the labelling errors is discussed later in this report.

The following table shows a comparison of total adverse samples against the percentage of total samples.



Graph 2 Comparison of the percentage of total adverse samples with percentage total samples by continent

This table shows that South America had far fewer than average adverse samples than the other continents. Local authority officers were required to provide more complete details, including country of origin, for unsatisfactory samples. This may explain why there appears to be fewer adverse samples from unknown origin.

Annex 3 shows a breakdown of the number of adverse samples, by product type form each continent.

Adverse Analyses.

A number of foodstuffs were analysed for a range of chemical and microbial analyses. Most samples were additionally submitted for labelling examination; detail on the unsatisfactory labelling is discussed later in the report.

When considering the frequency of the food types that were found to be adverse, it must be remembered that the foods sampled and the types of analysis undertaken as part of this programme were directed by the Sampling Co-ordination Working Group and as such were biased towards certain commodities. It is therefore inappropriate to directly compare the total number of adverse samples found per commodity type, and should be considered in relation to the total number of samples taken per food (table 1, page 6) and the frequency of samples that failed by analysis type (table 2, page 8).

Product Type	Tested for	Total Adverse
Animal feed material	GMO	5
Fats and Oils	Illegal and non permitted food additives	1
	Erucic Acid	1
Fish and shellfish	Heavy metals	2
	Histamine	4
	Microbiology	12
	Nutrition	1
	Species	2
Herbs	Irradiation	1
	Microbiology	11
Meat and meat products	Excess Water	17
Nuts	Heavy metals	19
	Mycotoxins	44
Raw Materials	GMO	3
	Mycotoxins	1
Seeds	Heavy metals	24
	Mycotoxins	14
Soft Drinks	Illegal and non permitted food additives	1
Spices and pickles	Illegal and non permitted food additives	4
	GMO	1
	Heavy metals	2
	Irradiation	3
	Microbiology	4
	Mycotoxins	30
Vegetables	Mycotoxins	1
Total		207

Table 5 Frequency of adverse samples by analysis and product type

Annex 3 shows the frequency of adverse samples found, by analysis type and continent.

Mycotoxin

With the exception of labelling, Table 2 (page 8) shows that analysis for Mycotoxins found the greatest number of unsatisfactory samples (approximately 4% samples failed). Table 5 shows that these adverse samples were found among the nuts, seeds, spices and 1 vegetable sample (1 sample of dried beans was found to have higher than permitted level of Aflatoxins).

The majority of the samples that failed for Mycotoxin analysis were found to have unsatisfactorily high levels of Aflatoxin (84%), 13 spice samples were found to contain higher than permitted levels of Ochratoxin A, and 1 “raw material” sample (animal feed) had unsatisfactorily high levels of Fuminosin. Of the 45 samples submitted for Zealerone analysis, none were found to be adverse.

Nuts, seeds and spices make up the majority of commodity types that failed Mycotoxin analysis, although these also make up the most frequently sampled food type (see Table 1, page 6). All of the adverse nut and seed samples in this analysis category had unsatisfactorily high levels of Aflatoxin, whereas just over a third of the spice samples found to have unsatisfactorily high Mycotoxin levels failed for Ochratoxin A, with the remainder being found to have higher than permitted levels of Aflatoxin.

Heavy metal contamination

Commission Regulation (EC) No. 1881/2006 sets maximum levels for certain contaminants including lead and cadmium in foodstuffs and is enforced by The Contaminants in Food (England) Regulations 2006. Not all of the foods sampled as part of this programme are included in this legislation, so LA officers and their respective public analyst reported all findings.

Analysis for heavy metal (lead and cadmium) contamination made up the second greatest proportion of adverse samples. A range of commodities were sampled for the presence of heavy metals, and as with Mycotoxin analysis, nuts, seeds and spices make up nearly all the samples that were found to be unsatisfactory. 2 fish and shellfish samples (1 for lead and 1 for cadmium) were found to contain unacceptably high levels of heavy metals.

Microbiological Contamination

3% of samples failed microbiological examination. The types of foods that failed covered a range of commodities including fish and shellfish, fresh herbs and spices.

A range of different types of fresh herbs were sampled, and with the exception of two, all that were found to be adverse had unsatisfactorily high levels of

E.coli. A sample of fresh parsley and 1 of holy basil were found to have high levels of *Salmonella lanka*. A rapid alert was sent to the FSA regarding the basil sample identified by a port health authority. Additionally, the home authority for the importer was notified, and it was planned to detain and sample future consignments of holy basil from the same exporter.

All of the samples of fish that failed microbiological examination were either smoked or dried. Apart from one sample, upon which presumptive salmonella was found, all fish samples found to be adverse showed an unsatisfactory aerobic colony count at 30°C, in accordance with the Public Health Laboratory Service's Guidelines for Ready to Eat Food(s) (September 2000).

Of the 4 spice samples that failed microbiological examination, 2 rubbed mint samples were found to have elevated faecal streptococci levels, a coriander sample was shown to have elevated Enterobacteriaceae and yeast levels. Salmonella was found in a ground black pepper sample. The former 3 samples were identified by a port health authority, who referred the sample to the relevant inland authority for the importer and then agreed to monitor future consignments. Regarding the black pepper sample, re-sampling was carried out and a Food Incident Report Form sent to and actioned by the FSA.

Extraneous water in meat and poultry

EU legislation is in place to ensure that the level of extraneous water in poultry meat does not exceed 5%. However, no such legislation currently exists for red meat. Previous surveys carried out on lamb imported from New Zealand showed excessively high levels of water. This led to an arrangement between the UK and NZ authorities to encourage New Zealand lamb exporters to use best practice in order to keep the amount of extraneous water to an absolute minimum¹⁰.

48 lamb and 12 chicken samples were taken as part of this year's imported food sampling programme for water content analysis. All of the chicken samples were found to be satisfactory and within statutory limits. Local authority officers reported the water content of all of the lamb samples taken, and it ranged from 3.84 – 13.80 %. Results from last year's programme found samples with even higher levels, which has prompted the Agency to write again to the relevant NZ authorities, urging the lamb producers to review their production methods to reduce the level of extraneous water.

Histamine

4 of the 53 fish samples that were taken to analyse for histamine were found to have unsatisfactorily high levels, ranging from 250mg/kg to 1157mg/kg. In each case, the sample was tuna fish, and the local authorities re-sampled formally with the intention of taking enforcement action.

¹⁰ More information on the situation regarding the NZ authorities and exporters can be found at <http://www.nzfsa.govt.nz/animalproducts/publications/for-your-info/f13-03.htm>

Fish Species

The Fish Labelling regulations (EC 104/2000) requires fish to be appropriately marked or labelled at the point of sale with (a) the commercial designation of the species; b) the production method (caught at sea or inland waters or farmed); and, (c) the catch area.

A sample of sea bass and one of mackerel were both found to be incorrectly labelled with the wrong species. Upon analysis, it was found that the sea bass was actually “Barramundi”, and the mackerel (sold in oil) was *Scomberomorus cavalla* and should have been more correctly labelled as the King Mackerel. In the first case, the local authority referred the matter to the relevant Home Authority and in the case of the mislabelled mackerel, officers carried out further investigation and took action.

Erucic Acid

56 samples (including fats and oils, pickled products, sauces and fruit and vegetables) were sampled to look for the presence of erucic acid. This substance is found naturally in some plant-derived oils, primarily in some varieties of mustard seed oil and rapeseed oil. Although there have been no confirmed cases of erucic acid toxicity in humans, high levels of erucic acid have been linked to the formation of fatty deposits in heart muscle in animals. 1 sample – the oil in a chilli black bean sauce - was found to exceed the maximum permitted level of Erucic acid. The local authority officer reported this finding to the FSA and referred the issue to the Home Authority for the importer for further action.

Irradiation

4 samples (3 spices and 1 dried herb) were found to have an intermediate reading for irradiation. All 4 samples were put forward for confirmation testing, the results of which were not available at the time of writing this report.

Non-permitted and/ or illegal colours and other artificial additives

6 samples were found to contain non-permitted or illegal artificial food additives. 1 soft carbonated drink imported from the Dominican Republic was found to contain Amaranth, declared as Tartrazine.

4 spice and pickle samples were found to be adverse, including a Tom Yum Paste for soup from Thailand that contained Orange II. The retailer was notified and in addition the relevant Home Authority for the importer was notified of the results and the product was withdrawn from sale.

A lime pickle sample from Pakistan showed the presence of Sudan I and IV. The local authority notified the Agency who was able to confirm that the levels were below agreed limits. No further action was taken, but the relevant home authority was informed.

68 samples of a range of different foods were submitted for analysis for artificial additives other than colours. All of these were found to be satisfactory.

Adverse labelling

Previous Imported Food Sampling Programmes have identified poor or inappropriate labelling to be the most significant factor in a sample being considered “unsatisfactory”. The principle provisions of the 1996 UK Food Labelling Regulation¹¹ requires most foods (with a few notable exceptions) that is ready to be delivered to the ultimate consumer should be marked with:-

- (a) the name of the food;
- (b) a list of ingredients;
- (c) the appropriate durability indication; Most food either displays a “Best Before” for foods to indicate the period for which it can be reasonably expected to retain its optimum conditions or a “Use By” date, which is required only for those foods that are highly perishable and will have a relatively short shelf life, after which their consumption would present a risk of food poisoning.
- (d) any special storage conditions or conditions of use;
- (e) the name or business name and an address or registered office of either or both of—
 - (i) the manufacturer or packer, or
 - (ii) a seller established within the European Community;
- (f) particulars of the place of origin or provenance of the food if failure to give such particulars might mislead a purchaser to a material degree as to the true origin or provenance of the food; and
- (g) instructions for use if it would be difficult to make appropriate use of the food in the absence of such instructions.

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. But both in Codex and WTO Rules, the country of origin is deemed to be the place of last substantial change, and this is consistent with section 36 of the Trade Descriptions Act 1968 where the approach is that for the purposes of the Act:

- “goods are deemed to have been manufactured or produced in the country in which they last underwent a treatment or process resulting in a substantial change”

Additional labelling requirements and controls are in place for foods that contain certain ingredients, packaged in specific manners or make certain types of claims.

The following table shows the frequency of samples that were examined as part of this project that failed labelling examination. The labelling of many samples failed on more than one aspect, but each incidence has been recorded here individually. More detail on the labelling requirements is given in annex 4 .The more serious labelling infringements, as detailed in the principle provisions, are highlighted in bold in the table.

¹¹ see <http://www.food.gov.uk/foodindustry/guidancenotes/labelregsguidance/foodlabelregsguid>

Labelling error ¹²	Total	%
Nutritional information format	101	19.13
Durability marking	97	18.37
Name insufficiently precise	77	14.58
Errors in ingredients list, QUID declaration	72	13.64
Name of business operator	44	8.33
No declaration – GMO, Food Allergens	30	5.68
General position of required elements	20	3.79
Misleading labelling claims	15	2.84
No English version of name or ingredients	14	2.65
Traceability	12	2.27
Illegibility of label	10	1.89
No ingredients list	6	1.14
No weight	5	0.95
No storage conditions	5	0.95
No production method given,	4	0.77
Category of additives not declared	3	0.57
Inappropriate labelling for specific foods	2	0.38
No intended use	1	0.19
Total	518	

Table 5 Frequency and type of labelling error

Annex 5 shows a breakdown of this information by continent and the annex 6 shows the number and type of labelling error by commodity type.

Overall, 320 foods sampled were found to be inappropriately labelled. Many failed on more than one aspect therefore the total individual unsatisfactory labelling errors found totalled 518. Nearly 60% (301) of these were on foods originating from Asia, just over 10% came from Africa, just under 10% from North America, and the remainder were from among the remaining continents. The origin of 12.31% of the samples (65) was not given or were described as being a product of various countries.

Nearly a 5th (101) of the food labels that were examined were found to contain “nutritional information format” errors. This included, for example, where insufficient detail is given, or is not provided in the format as required by the Food Labelling Regulations 1996 as amended. 60 of these samples originated from Asia, 15 from Africa, 12 from North America and the remainder were spread evenly over the other continents.

The types of food that failed on this aspect of labelling were from the full range of commodities sampled. Nuts made up approximately a third of these samples, but again this most probably represents the increased frequency of sampling for this commodity type. The two next food types that failed most on this labelling error were seeds and palm oils. In the majority of cases, the local authority

¹² Further description of these errors can be found at annex 4

wrote to the retailer and informed the relevant home authority. Some authorities simply referred the issue to the Home Authority for follow up action.

Inappropriate durability marking was the next reason for the greatest number of labelling errors with 97 samples found to be adverse. In most instances this was recorded as the marking not being in the appropriate format, or where the terms “Best Before” and “Use by dates” were used incorrectly. Over half of the unsatisfactory samples originated from Asia.

The Food labelling Regulations 1996 as amended requires that the name of the food should be sufficiently precise to indicate the true nature of the product and to distinguish it from other foods with which it could be confused. This year’s programme identified that the names of 17% of foods sampled were not given in English or were in some other way, insufficiently precise to be considered acceptable in terms of this Regulation. This occurred frequently in nuts, seed and spice products.

Errors in the ingredients list of imported foods were also a common reason for food samples to be recorded as fails. 44 of the 72 examples of those found were on foods originating from Asia. Examples included foods where there was no ingredients list, or the ingredients list was not in the prescribed format, or where no QUID declaration was given,

The Food Labelling Regulation 1996 as amended indicates specific labelling requirements for certain foods. For example, the Regulations themselves contain a number of “preserved names” in schedule 1 of the Regulations. These must be used, for example, for certain fish species and fats and oils.

Fats and oils were the 12th most sampled category of food (see table 1 on page 6), yet this was the 4th highest commodity type that was found to express adverse labelling. This food had a high failure rate for adverse nutritional format presentation, and making unsubstantiated claims. Commission Regulation (EC) No 1019/2002 on marketing standards for olive oil gives specific provisions for olive oil marketing standards, including labeling requirements which are in addition to the general labelling provisions in the Food Labelling Regulations.

In summary, the different classification of labelling errors occurs with similar frequency across the various commodity types sampled, indicating that there is not one particular food type or food producer that needs to be focussed upon. Nearly 60% of all labelling errors were found on foods that originated in Asia. In particular poor nutritional information formatting, minimum durability dates, incorrect ingredients lists and incorrect description in the name of products were particularly prevalent with products from Asia.

Summary

The 2006/07 Imported Food Sampling Project has proven to be a very successful programme of work. The changes to the reporting mechanism have meant that better and more detailed analysis can be made of the results reported by local authority officers. This will enable better year-on-year comparison of data in the future, where similar commodity types are submitted for the same analyses.

The increased focus this year on food labelling has highlighted some interesting results. The very high levels of errors appearing on the labels of foods originating from Asia needs to be considered further and should form a priority in the 2007/08 programme. In addition the FSA will remind importers about their responsibility for ensuring that such products comply with UK legislation.

The follow up action taken by local authority officers upon finding an adverse sample has improved on previous years, with officers taking more direct action, rather than simply forwarding the finding to the relevant home authority.

Annex 1

List of local authorities that took part

2. Bolton Metropolitan Borough Council	
3. Cardiff CC and Swansea CC	Cardiff CC and Swansea CC
4. CEnTSA	Birmingham, Coventry, Dudley, Sandwell, Solihull, Walsall, Staffordshire, Stoke-on-Trent, Telford & Wrekin, Shropshire, Warwickshire
5. County Durham Food Liaison Group	Chester-le-Street; Derwentside; Durham City; Easington; Sedgefield; Teesdale; Wear Valley; Durham CC
6. Crawley Borough Council	
7. Cumbria County Council Trading Standards	
8. Dacorum Borough Council	
9. East Riding of Yorkshire Council	
10. Glamorgan Food Standard Group	Rhondda Cynon Taf, Bridgend, Vale, of Glamorgan, Merthyr, Swansea
11. Glasgow City Council	
12. Gloucestershire County Council	
13. Hereford and Worcester Food Liaison Group	Bromsgrove DC ; Malvern Hill DC; Redditch BC; Wychavon DC; Wyre Forest DC; Worcester CC; Herefordshire Council ; Worcestershire CC
14. London Borough of Brent	
15. London Borough of Camden	
16. London Borough of Hackney	
17. London Borough Hammersmith and Fulham	
18. London Borough of Hillingdon – Heathrow Airport	
19. Lincolnshire Food Group	Boston BC; East Lindsey DC; Lincoln City; North Kesteven DC; South Holland DC; South Kesteven DC; West Lindsay DC; East Lindsay DC Lincolnshire CC;
20. London Food Co-ordinating Group	All 33 borough were invited
21. City of London Port Health Authority	
22. Lothian and Scottish Borders Food Liaison Group	City of Edinburgh Council; East Lothian Council; Midlothian Council; West Lothian Council; Scottish Borders council
23. Association of Greater Manchester	Blackburn with Darwen BC; Blackpool Council; Bury MBC; Oldham MBC; Rochdale MBC; Salford CC; Stockport MBC; Tameside MBC; Trafford MBC
24. Mersey Port Health Authority	
25. Middlesbrough/ Tees Valley	Middlesbrough, Hartlepool, Stockton
26. North East London FLG	Barking & Dagenham; ; Enfield; Hackney; Havering; Islington; Newham; Redbridge; Tower Hamlets; Waltham Forest; Aylesbury vale DC; Milton Keynes council
27. North West London FLG	Barnet; Brent; Ealing; Haringey; Harrow; Hillingdon; Hounslow; Kensington & Chelsea
28. Northern Ireland Food Liaison Group	26 District Councils in Ireland included
29. Portsmouth City Council	

30. Renfrewshire Council	
31. Rhondda Cynon Taf CBC	
32. Rotherham MBC	
33. South Ayrshire Council	
34. South West London Food Co-coordinating Group	Croydon; Kingston; Lambeth; Merton; Sutton; Wandsworth
35. South Yorkshire Food Liaison Group	Doncaster and Rotherham MBC
36. Southampton Port Health Authority	
37. Southend on Sea BC	
38. Suffolk Coastal District Council	
39. SWERCOTS	Bournemouth (UA), Bristol(UA), Cornwall CC, Devon CC, Dorset CC, Gloucestershire CC, Plymouth (UA) , Poole (US), S. Gloucestershire (ua), Somerset CC, S Gloucestershire (UA); S Somerset DC and W Wiltshire DC
40. Telford and Wrekin (Shropshire Food Liaison Group)	Bridgenorth; North Shropshire; Oswestry; Shrewsbury and Atcham; South Shropshire; Telford & Wrekin (U); Shropshire CC
41. TSSE	Bracknell Forest; Brighton & Hove, Portsmouth, Southampton, Surrey, W Sussex, Medway, E Sussex, Hampshire, Isle of Wight and Kent, Buckinghamshire, Oxfordshire, Milton Keynes, Windsor & Maidenhead, Slough, , Reading,
42. Uttlesford DC	
43. West Wales Food and Agriculture Standard Group	Powys, Bridgend, Carmarthenshire, Pembrokeshire, Ceredigion, Swansea
44. Wigan Council	
45. Yorkshire and Humberside	York City, W Yorkshire, Kingston on Hull, E Riding, N Lincs, NE Lincs, Barnsley, Rotherham, Doncaster, Sheffield, N Yorkshire

Annex 2 Country breakdown by Continent

Africa	Botswana	Asia	Bangladesh
	Burkino Faso		China
	Cameroon		Hong Kong
	Dubai		India
	Ecuador		Indonesia
	Egypt		Iran
	Ethiopia		Israel
	Ghana		Japan
	Guinea Conkay		Korea
	Kenya		Kuwait
	Madagascar		Lebanon
	Malawi		Malaysia
	Morocco		Maldives
	Nigeria		Mauritius
	S. Africa		Myanmar
	Seychelles		Nepal
	Sierra Leone		Pacific/Indian Ocean
	Sudan		Pakistan
	Tanzania		Philippines
	Tunisia		Saudi Arabia
	Uganda		Singapore
	Yemen		Sri Lanka
	Zambia		Syria
	Zimbabwe		Taiwan
			Thailand
Europe	Austria		
	Belgium	South America	Argentina
	Bulgaria		Bolivia
	Croatia		Brazil
	Cyprus		Chile
	Denmark		Colombia
	France		Costa Rica
	Germany		Cuba
	Greece		El Salavador
	Netherlands		Mexico
	Hungary		Paraguay
	Iceland		Peru
	Italy		South America
	Lithuania		Suriname
	Norway		Uruguay
	Poland		Ecuador
	Portugal		
	Romania		
	Russia		
	Spain		
	Switzerland		
	UK		

Australasia	Australia
	New Zealand
	Papa New Guinea

North America	Atlantic Ocean
	Barbados
	Belize
	Canada
	Caribbean
	Dominican Republic
	Grenada
	Guatemala
	Honduras
	Jamaica
	Nicaragua
	Panama
	St. Lucia
	Trinidad
USA	

Annex 3 Frequency of product type reasons for failure and source continent.

Product Type	Tested for	Total	Af	As	Au	Eu	NA	SA	Unk
Animal feed material	GMO	5							5
Fish and shellfish	Heavy metals	2		2					
	Histamine	4		3		1			
	Microbiology	12	3	2		2			5
	Nutrition	1		1					
	Species	2		2					
Herbs	Irradiation	1					1		
	Microbiology	11		5		2			4
Meat and meat products	Excess Water	17			17				
Nuts	Heavy metals	19		8			1	3	7
	Mycotoxins	44	12	23		1	1		7
Raw Materials	GMO	3						2	1
Seeds	Heavy metals	24	1	2		3	6	1	11
	Mycotoxins	14	12	2					
Soft Drinks	Colours and illegal colours	1					1		
Spices	Colours and illegal colours	5		2					3
	Erucic Acid	1		1					
	GMO	1							1
	Heavy metals	2		1			1		
	Irradiation	3		2				1	
	Microbiology	4	2				1	1	
	Mycotoxins	30	4	16		1	1	1	7
Vegetables	Mycotoxins	1	1						
Total		207	35	72	17	9	14	9	51

Annex 4 Description of Labelling Errors

With a few notable exceptions, the following gives the labelling requirements for most food sold in the UK. Full guidance notes for Food Labelling Regulations 1996 (SI 1996/1499), can be downloaded at the following web page.

<http://www.food.gov.uk/foodindustry/guidancenotes/labelregsguidance/foodlabelregsguid>

Nutritional information format

As a minimum, labels need to give the amount of energy (expressed as kJ and kcal), protein, carbohydrate and fat (all expressed in grams) provided by 100g or 100ml of the food, plus the amount of any nutrient for which a claim has been made. Values per quantified serving may be given in addition to, but not in place of, values per 100g or 100ml. Details of certain other nutrients for which no claim has been made may be given voluntarily. The requirements for the presentation of nutrition information also apply when such information is given voluntarily.

In this year's programme, LA officers reported food not displaying the complete nutritional information, or displayed in an in appropriate format.

Durability marking

The Food Labelling Regulation stipulates that the minimum durability of foods must be declared, either as a "best before" date or for highly perishable foods a "Use by date".

Officers reported durability markings not being present, displayed in an inappropriate format or unreadable on the full range of products sampled.

Name insufficiently precise

The name of the product is not given or is insufficiently precise to indicate the true nature of the product and to distinguish it from other foods with which it could be confused. This was often seen in nut and seed products.

Errors in ingredients list, QUID declaration, ingredients declaration

Generally, for those foods required to display an ingredients list, ingredients must be listed in descending order of weight at the time of their use in the preparation of the food (often referred to as "the mixing-bowl stage"). The ingredients list must include a heading consisting of, or including, the word "ingredients".

The name used for an ingredient should be a name that could be used for it if it were being sold as a food by itself and should therefore include appropriate reference to physical condition or to any process or treatment that it has undergone in cases where omission of this information would mislead. Listed ingredients that have been irradiated must be identified as "irradiated" or as having been "treated with ionizing radiation".

Name of business operator

The name and address of food manufacturer should be displayed on the food packaging.

Misleading labelling claims

The general provisions of the Food Labelling Regulations prohibit a claim in the labelling or advertising of a food that it has tonic or medicinal properties, and imposes conditions for the making of -

- claims relating to foods for particular uses and similar foods;
- reduced or low energy value claims;
- protein claims;
- vitamin claims;
- mineral claims;
- cholesterol claims;
- nutrition claims, and
- claims which depend upon another food.

No production method given

The name of a food must include, or be accompanied by, an indication of its physical condition or treatment where a purchaser could be misled by the omission of that information. For example, milk which has been "pasteurised", "sterilised", "condensed", "UHT" etc should indicate this on the label. In addition, other descriptions may apply, eg "homogenised".

No weight declaration

The Weights and Measures Act 1985 requires most prepacked food to carry an indication of its net weight or volume on the container.

No storage conditions

Where appropriate, any storage conditions which need to be observed if the food is to retain its specific properties until the date shown must also be given.

Inappropriate labelling for specific foods

Specific labelling legislation applies to certain foods and ingredients, which must be adhered to in addition to the general provisions in the Food Labelling Regulations.

No intended use

Instructions for use must be given if it would be difficult to make appropriate use of the food without them.

Annex 5 Breakdown of labelling errors by continent

Labelling error	AFR	ASI	EUR	AUS	N AM	S AM	Unk	Total	%
Nutritional information format	15	60	3	3	12		8	101	19.50
Durability marking	9	55	3		11	1	18	97	18.73
Name insufficiently precise	5	58	1		1	1	11	77	14.86
Errors in ingredients list, QUID declaration	6	44	2	5	13		2	72	13.90
Name of business operator	2	31	2		1		8	44	8.49
No declaration – GMO, Food Allergens	1	15			7	1	6	30	5.79
General position of required elements	4	10			1	4	1	20	3.86
Misleading labelling claims	6	2		5	1		1	15	2.90
No English version of name or ingredients	1	5	5		1		2	14	2.70
Traceability	1		10			1		12	2.32
Illegibility of label		5	1				4	10	1.93
No ingredients list		3	1				2	6	1.16
No weight	1	1			1		2	5	0.97
No storage conditions	1	4						5	0.97
No production method given,	1	3						4	0.77
Category of additives not declared	1	2						3	0.58
Inappropriate labelling for specific foods		2					0	2	0.39
No intended use		1						1	0.19
Total	54	301	28	13	49	8	65	518	
%	10.42	58.11	5.41	2.51	9.46	1.54	12.55		

Annex 6 Breakdown of labelling errors by food commodity

	Animal feed	Chinese Foodstuffs	Coffee	Composite foods	Confectionary and cakes	Fats and oils	Fish and shellfish	Food - general
No English version of name or ingredients	1	3	3	2		6	5	2
General position of required elements		1	5	2			3	
Traceability							1	
No production method given							4	
Durability marking		1	4	2	3	9	15	4
No weight			2			1		
Name insufficiently precise		4		3	2	2	1	
Nutritional information format		6		4	5	14	6	4
Errors in ingredients list, QUID declaration		1		4	2		3	5
No declaration - GMO, Food Allergens	3	6				2		3
Name of business operator		2			3	1	1	1
Illegibility of label		1				1		
Misleading labelling claims		2				6		1
No storage conditions							4	
Inappropriate labelling for specific foods						2		
Total	4	27	14	17	15	44	43	20

Annex 6 Breakdown of labelling errors by food commodity continued

	Food - herbal supplements	Fruit and vegetables	Meat and meat product	Milk	Nuts	Seeds	Soft Drinks	Spices	Wine
No English version of name or ingredients		3	5		1	3		7	
General position of required elements		1			13	2		7	1
Traceability			10						1
No production method given								1	
Durability marking	2	7	1		23	13	4	14	
No weight		1						1	
Name insufficiently precise		4	1	1	21	18		16	
Nutritional information format		6	4	1	30	14	7	9	
Errors in ingredients list, QUID declaration		1	6		14	15		12	
No ingredients list								5	
Category of additives not declared					1	1		1	
No declaration - GMO, Food Allergens			1		3	3	5	1	2
Name of business operator	3	4			9	3		20	
Illegibility of label		1			5	2		3	
Misleading labelling claims			5				1		
No storage conditions					1				
Inappropriate labelling for specific foods			1						
No intended use								1	
Total	5	28	34	2	121	74	17	98	4