

Food Safety High on Minister of State's Agenda

Mr Shane McEntee TD, Minister of State at the Department of Agriculture, Marine and Food visited the FSAI in June. The Minister of State met with senior management and he heard about the role of the Authority in protecting consumers' health and consumers' interests. Priorities for the FSAI are that food consumed and produced in the State meets the highest standards of food safety and that consumers have adequate information to make informed choices about the foods they eat. The Minister of State was briefed on the Authority's key work areas that comprise enforcing food law; using best scientific advice to underpin all food safety decisions and working in partnership with all stakeholders to improve standards.

The agri-food and fisheries sector contribute around €24 billion to the national economy and employs more than 150,000 people. The Food Harvest 2020 report sets targets to improve the value of primary outputs by 33%, to increase the value added sector by 40% and the value of exports by €12 billion or 42%. This sector is recognised as being central to the Government's plans for economic recovery and is seen as the flagship for positive growth. The sector is dependent on its international reputation for excellence in safety and quality and the FSAI, as the independent, science-based food regulator, is central to assuring consumer confidence in Irish produced foods both at home and abroad.

The Minister of State discussed proposals to extend the remit of the FSAI to include animal feed. The legal methods of putting this in place are currently being examined and it is intended that the role of the FSAI will be extended in line with recommendations from an inter-agency review. Once the process is completed, the FSAI will have overall monitoring responsibility for both feed and food, consistent with the EU hygiene legislation which also covers both areas.



Mr Shane McEntee TD, Minister of State for Food, Horticulture and Food Safety is pictured with Prof. Alan Reilly, Chief Executive, FSAI.

- 1 Food Safety High on Minister's Agenda
- 2 Food Labeling Rules Change
- 3 Campylobacter controls in the poultry food chain
- 4 New Food Additives Legislation
- 5 New Guidelines for Ready-to-eat Sprouted Seeds
- 6 Steviol Glycosides
- 6 Chinese Visitors to FSAI

- 7 Visitors from Ukrainian State Services
- 7 Food, Exotic Travel and Reptiles in the NSSRL's Annual Report, 2010
- 8 Legislation Update
- 9 EU Publications
- 10 Joint FSAI/Teagasc Seminar: Product Shelf-Life and Microbiological Criteria

- 10 New Board Member Appointed to FSAI
- 11 FAQ
- 11 Food Allergen Labelling
- 12 Enforcement Action by the Health Service Executive (January-June 2011)
- 13 National Dairy Council Annual Conference

- 13 SHOP 2011 – Come visit our information stand!
- 14 Meeting of Heads of European Food Safety Agencies
- 14 5 minutes with..... Si Chen
- 15 FSAI hosts international workshop on official control audits
- 15 Open Consultation
- 16 Bike to Work
- 16 Recent Publications

Food Labelling Rules to Change

The unique economic and political partnership that is the European Union now comprises 27 countries, with 23 official languages and a market of almost 500 million people. The countries, their populations and cultures are diverse, a feature no better illustrated than by the rich heritage of European cuisines with their countless flavours and styles, regional variations and exotic influences. In creating a single trading (common) market within the EU, standardisation of food law was seen as important. Standardisation of food was not. The aim is to allow the cultural variations in food to flourish. By providing appropriate information on labelling, consumers can more easily compare foods and determine for themselves what to buy and eat.

The main rules on food labelling in the EU were introduced in 1979. However, since market conditions, eating habits and consumer expectation have changed over the past thirty years, labelling had to change to catch up. Work on a major revision of labelling rules began some three years ago. Although subject to final ratification by the Member States, the new rules look likely to be in place by the end of this year. It is expected that there will be a generous lead-in time of around three to five years for food producers to comply, but once the law is passed, producers will be able, on a voluntary basis, to amend their labels in line with the new law. We would encourage food producers, in the spirit of offering better information to consumers, to begin to re-label their products without waiting for the law to apply or the lead-in period to expire.

The new rules will address not just the standard information to be provided on a label such as list of ingredients, net weight or best before dates, but also cover the information which must be provided on the nutritional value of foods.

A welcome change is it that it will be mandatory on pre-packaged foods to provide nutrition information about the energy content and amounts of fat, saturated fat, carbohydrates, sugars, protein and salt contained in the product. In the 2009 FSAI survey on consumers' attitudes to food labelling, 87% of Irish consumers were of the view that good nutrition information is an important part of the label. The salt content will be just that - salt – and not sodium, thus eliminating the need to make the mathematical conversion of sodium values to salt, making it easier for consumers to monitor their intake and make identifying the healthier choice simpler.

During negotiations, one element that was dropped was the mandatory provision of nutrition "front of pack" information in a standard graphical format. Instead, this has been left to countries to devise a voluntary scheme such as one based on guideline daily amounts (GDAs) or the use of "traffic light" colours to indicate the relative contents of particular components such as fat or sugar.

Food allergy sufferers will welcome the news that the presence of allergens will have to be indicated not just in pre-packaged but also in non pre-packaged foods. In addition, on pre-packaged foods specific allergens will have to be included in the list of ingredients and emphasised through a typeset which distinguishes them from the rest of the ingredients. Member States will be free to introduce national rules to make it compulsory to provide consumers, in respect of non pre-packaged foods with same sort of information required on the labels of pre-packaged foods.

To improve legibility, for the first time, a minimum font size will be prescribed in legislation which will have to be used for all mandatory labelling information. In addition to font size, the European Commission will also develop rules for legibility including such aspects as font type, text colour and contrast.

Perhaps one of the most sought after changes to be introduced will be in respect of country of origin labelling, which is to be extended to include fresh pork, lamb and poultry. A number of years ago the Irish Government proposed introducing such rules on a national basis. Its proposal was rejected by the European Commission and other Member States, in part because the issue was to be addressed within the new rules which at the time were still under discussion. The Commission will be obliged to examine the practicalities of further extending country of origin labelling to meat used as an ingredient in foods, meats other than beef, lamb, pork or poultry, and milk, unprocessed foods and ingredients used as more than 50% of a food.

Disappointingly perhaps, there is still no requirement to list ingredients of alcoholic drinks or their energy (calorific) values. This possibility is to be examined by the European Commission. However, there is still nothing to prevent a producer providing this information on a label on a voluntary basis.

We would encourage food producers, in the spirit of offering better information to consumers, to begin to re-label their products without waiting for the law to apply or the lead-in period to expire.

These new labelling rules aim to ensure that people are not misled by the appearance, description or visual presentation of food packaging. Overall, the changes to labels should be welcomed by consumers as an improvement on current requirements. Whilst the main changes are almost agreed, a number of implementing rules have yet to be developed. Aimed at providing greater detail on how requirements of the new regulations must be met, the drafting of these implementing rules will ensure that discussion and debate on food labelling rules will continue for some time.



Alan Reilly

Alan Reilly
CEO

Campylobacter controls in the poultry food chain

The FSAI recently published a report of its Scientific Committee, *'Recommendations for a Practical Control Programme for Campylobacter in the Poultry Production and Slaughter Chain'*, which recommends a series of measures to be taken by poultry farmers, processors and retailers to reduce the incidence of the harmful campylobacter bacteria in poultry.

Campylobacteriosis is the most frequently reported gastrointestinal bacterial illness in humans in Ireland and across the EU. National data from the Health Protection Surveillance Centre shows that in 2009, 1,808 cases of campylobacteriosis were reported and the provisional figure for 2010 is 1,666. A number of risk factors have been associated with human campylobacteriosis. These include the consumption and/or handling of raw or undercooked poultry or other meats, raw milk, surface waters, cross-contamination of ready-to-eat foods during food preparation as well as direct contact with animals.

Poultry is regarded as one of the most important reservoirs for *Campylobacter* spp. and constitutes a very significant vehicle for the transmission to humans. A scientific opinion of the European Food Safety Authority (EFSA) estimates that handling and preparation of chicken and consumption of undercooked chicken meat accounts for approximately 30% of human cases of bacterial campylobacteriosis, while 50% to 80% may be attributed to the chicken reservoir as a whole.

Campylobacteriosis is the most frequently reported gastrointestinal bacterial illness in humans in Ireland and across the EU.

The scientific report recommends that the Irish poultry industry develops and implements its own voluntary code of practice based on the recommended control measures detailed in the report, such as:

- Improved on-farm hygiene and restricting access to possible sources of contamination (i.e. improved biosecurity)
- A voluntary monitoring programme on the farm and in the slaughterhouse to alert farmers and processors when additional controls are needed and to enable them to assess the effectiveness of their control measures. As part of this monitoring programme, it proposes microbiological criteria in broilers (i.e. pre-harvest); and on carcasses (i.e. post-harvest) which should be validated and then subjected to periodic review; taking into account the results generated by pre- and post-harvest analyses and of emerging research.

The report recommends that an incentive scheme should be adopted by the industry to reward high standards of biosecurity and compliance with the pre-harvest microbiological criterion. It suggests

that the incentive scheme could take the form of a bonus and/or penalty scheme and that repeated breaches of the pre-harvest criterion should result in removal from the Bord Bia Quality Assurance scheme.

Campylobacter is a naturally occurring bacterium found in the intestinal tract of birds. It is a widespread and challenging problem for the poultry sector, as demonstrated by an EFSA study which found that, on average throughout Member States, 71% of flocks presented for slaughter and 75% of whole birds at the end of the slaughter process were contaminated. In Ireland, the prevalence in broiler batches was 83% and the prevalence of contaminated carcasses was 98%. Some Member States and countries outside the EU have been quite effective in reducing contamination in poultry and this report draws on their experience.

In recognition of the fact that dramatic improvements are unlikely to be achieved quickly, the report calls on retailers to ensure that raw chicken is packaged in leak-proof packaging with safe handling and cooking instructions clearly visible at time of purchase. It recommends that labels should advise consumers that whole birds are ready-to-cook and that in the interests of safe handling, washing of the carcass should be avoided, as this can significantly spread contamination around the kitchen. In addition, as many Irish people have a tendency to wash chicken meat, the advice not to wash chicken should be carried on portions as well. This report is available on our website at the following link <http://bit.ly/mX412W>.



New Food Additives Legislation

In the past, food additives legislation has been considered to be quite complex and difficult to interpret. However, new legislation in the form of the Food Improvement Agents Package (FIAP) will be coming into force on a phased basis over the next couple of years, which should make regulation of food additives more straightforward and easier to interpret.

There is a general principle that food additives must be approved on an EU-wide basis and until recently the general rules governing the authorisation and use of colours, sweeteners and so-called miscellaneous additives were set out in several different European Directives. Since mid 2009, those general principles for use have been transferred to a single European Regulation on food additives (Regulation (EC) No 1333/2008), however the specific conditions for use of each of the individual colours, sweeteners and miscellaneous additives continue to be regulated within the various Annexes of three of the respective directives (sweeteners (94/35/EC), colours (94/36/EC) and miscellaneous additives (95/2/EC)). The European Commission and Member States have been working to review and combine the existing measures into two annexes that will be appended to the new regulation. These two new annexes, one covering the use of additives in foods, and the other covering the use of additives in other additives were adopted at Standing Committee in April 2011, and provided they are endorsed by the European Parliament, are due to come into effect in April 2013. The existing annexes of the old Directives will then be repealed.

A key element of the new legislation is that it brings together the three pieces of legislation covering food additives, food colourings and sweeteners, and introduces an authorisation system that will be based on a food categorisation system. This differs from previous legislation in that rather than listing the different sweeteners, colours and additives and setting out their conditions of use, the new legislation sets out foods under a food categorisation system and lists all additives approved for use within those particular categories.

The new legislation or FIAP consists of the following pieces of individual legislation, which are all available on the EU website http://ec.europa.eu/food/food/chemicalsafety/additives/new_regul_en.htm:

- Food enzymes (Regulation 1332/2008)
- Food additives (Regulation 1333/2008)
- Flavourings (Regulation 1334/2008).
- Regulation 1331/2008 - providing a common authorisation procedure for food additives, flavourings and food enzymes.

The new Annexes to accompany Regulation 1333/2008 (food additives) are not currently available on the EU website as these have only recently been adopted (April 2011) at the Standing Committee on the Food Chain and Animal Health, however it is anticipated they will be published in October 2011.

For the most part, there will be no changes to approved uses for the majority of food additives in the new legislation. There will however, be a small number of changes in certain instances, so manufacturers are advised to review the new Annexes to Regulation 1333/2008 when they become available to determine any potential issues. Manufacturers may wish to review product specification to ensure compliance with the new Annexes in advance of the Annexes coming into force. It is worth noting, however, that there have not been any additional uses permitted in the new Annexes, but in certain instances maximum levels permitted for particular additives in specific foods have been reduced.

A key element of the new legislation is that it brings together the three pieces of legislation covering food additives, food colourings and sweeteners, and introduces an authorisation system that will be based on a food categorisation system.

Food Categories:

The most significant aspect of the FIAP which is likely to affect food business operators is Annex II of Regulation 1333/2008. Food additives permitted to be used in specific food types will be listed against each category/sub-category of food, together with conditions of use. The food category system will consist of 19 food categories with sub categories specified within these. The main categories are set out below:

0. All categories of foodstuffs
1. Dairy products and analogues
2. Fats, oils and fat emulsions
3. Edible ices
4. Fruit and vegetables
5. Confectionery
6. Cereals and cereal products
7. Bakery wares
8. Meat
9. Fish and fisheries products
10. Eggs and egg products
11. Sugars, syrups, honey and table-top sweeteners
12. Salts, spices, soups, sauces, salads and protein products
13. Foodstuffs intended for particular nutritional uses as defined by Directive 2009/39/EC
14. Beverages
15. Ready-to-eat savouries and snacks
16. Desserts excluding products covered in category 1, 3 and 4
17. Food supplements as defined in Directive 2002/46/EC (excluding food supplements for infants and young children – to be confirmed)
18. Processed foodstuffs not covered by categories 1 to 17



(Continued from page 4)

Further details can be found in relation to sub-categories in Appendix 2 of the "Guidance on Food Additives" document produced by the FSAI which is available at the following link: <http://www.fsai.ie/WorkArea/DownloadAsset.aspx?id=10464>

While Annex II will contain a listing of the food categories and conditions of use for food additives, in addition to this, the European Commission has indicated that the conditions of use of the authorised additives will be made available via an online, searchable database on their website. It is also the intention of the European Commission to provide additional information on the interpretation of the Food Categorisation System in the form of a guidance document.

Timeframe of Application of the New Legislation:

As mentioned above, a review of the general and specific conditions of use for food additives has been carried out at EU level and adopted by the Standing Committee on the Food Chain and Animal Health (Annex II and III of 1333/2008). These Annexes are expected to be published in the official Journal in October 2011, followed by a transitional period of 18 months, meaning the new Annexes will not come into effect until April 2013.

The use of food additives already permitted in Directives 94/35/EC, 94/36/EC and 95/2/EC will continue to be permitted until the above Annexes to Regulation 1333/2008 come into effect.

New controls in relation to flavouring and enzymes are at the developmental stage at EU level and it is unlikely there will be any changes as regards control of these substances prior to 2012.

New Guidelines for Ready-to-eat Sprouted Seeds

The Food Safety Authority of Ireland (FSAI) has published guidelines for the safe production of sprouted seeds to be consumed raw, following the recent outbreaks of *E. coli* O104:H4 in Germany and France linked to the consumption of these seeds. These guidelines introduce pathogen control measures for seed suppliers and sprouted seed producers. These include testing and certification requirements for seeds and a disinfection step and testing for sprouted seeds. The measures are being introduced to reduce risks to consumers' health.

The production of sprouts requires high humidity and warm conditions that are also perfect for the growth of bacteria. Pathogenic bacteria like *E. coli* O157 (and related verotoxigenic *E. coli* such as *E. coli* O104:H4) and *Salmonella* spp. have been associated with outbreaks of human disease when contaminated sprouts have been consumed. Most sprouted seed outbreaks have been attributed to contamination of the seeds used for sprouting. The moist, warm conditions of sprouting can allow small numbers of pathogens present on seeds to multiply by several orders of magnitude during the sprouting period.

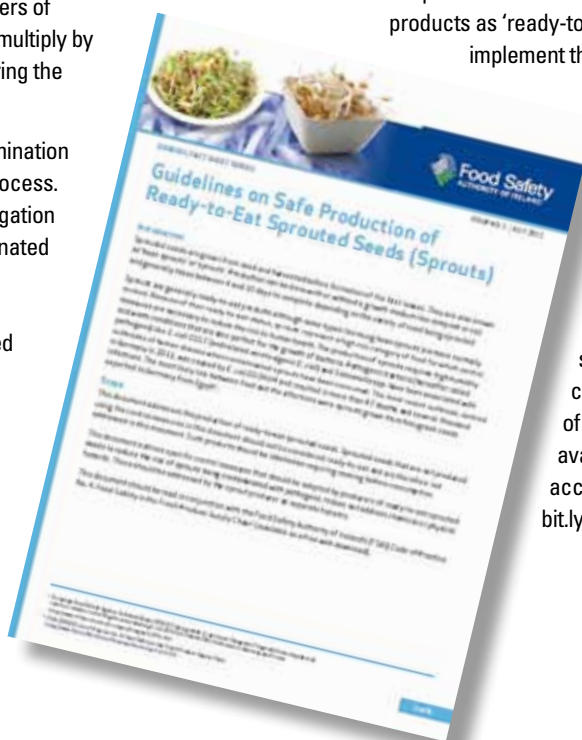
However, other potential contamination routes exist in the production process. These include contaminated irrigation water and wash water, contaminated growth media such as compost (when used), contaminated production equipment or infected food handlers. These routes of contamination should be controlled by good agricultural practices and good hygiene practices. The new guidelines outline specific control measures that should be adopted by producers

of ready-to-eat sprouted seeds to reduce the risk of sprouts being contaminated with pathogens. The guidelines should be read in conjunction with FSAI's Code of Practice No. 4: Food Safety in the Fresh Produce Supply Chain which is available on our website on <http://www.fsai.ie/WorkArea/DownloadAsset.aspx?id=1206>.

To avoid confusion among consumers, the FSAI is advising producers of sprouted seeds who are using these guidelines to label their products as 'ready-to-eat'. Sprouted seed producers who cannot implement the control measures specified in the new

guidelines should continue to ensure that their products are labelled as 'cook before consumption'. Retailers and caterers should check that their suppliers of ready-to-eat sprouted seeds are following these FSAI guidelines.

The FSAI is advising members of the public who choose to sprout seeds at home, that they should continue to cook these products before consumption. This is because seeds certified free of pathogenic bacteria are unlikely to be widely available for some time. These guidelines can be accessed on our website on the following link <http://bit.ly/o9VWuW>



Steviol Glycosides

There has been much debate of late in relation to the authorisation of a new food additive known as steviol glycosides or E960. Steviol glycosides are high intensity sweeteners currently used in various food products in different parts of the world (e.g. Japan, USA, Australia).

Steviol glycosides are purified extracts of *Stevia rebaudiana* Bertoni which is a herbaceous plant from the chrysanthemum family which grows as a small shrub in parts of Paraguay and Brazil. The leaves of the plant contain a complex mixture of naturally sweet glycosides. Steviol glycosides used in food manufacture can be up to 250-300 times sweeter than sucrose and have no calorific value, making them an attractive option for food and beverage manufacturers catering to the market for foods and beverages with reduced, low or no sugar. The global intense sweeteners market is at present dominated by sweeteners such as aspartame and sucralose, however, interest in food ingredients from natural sources has led to great interest in the stevia plant or more specifically steviol glycosides.

Preparations of steviol glycosides are currently used as a sweetener in other countries in a number of applications, including fruit and milk-based drinks, desserts, yoghurts, confectioneries and as table-top sweeteners. They are white to light yellow powders that are freely soluble in water, reasonably thermally stable under the elevated temperatures used in food processing and do not undergo browning or caramelisation when heated, making them very user friendly in terms of incorporation into food products.

In terms of the safety of steviol glycosides, the European Food Safety Authority (EFSA) has reviewed the safety of these substances and, in its opinion of March 2010, established an ADI (Acceptable Daily Intake) for steviol glycosides, expressed as steviol equivalents of 4 mg/kgbw/day.

Stevia and steviol glycosides are not currently permitted for sale as food or food ingredients in Ireland and in most of the other European Member States (except France where national approval for a



particular form of steviol glycosides applies). However, following the conclusion by EFSA in 2010 that an ADI for steviol glycosides could be established, the European Commission and Member States have held discussions in relation to the foodstuffs in which this sweetener should be permitted and the maximum levels at which it should be present.

Although at present the use of this food additive in the EU is only permitted in France under a national provision, the EU's Standing Committee on the Food Chain and Animal Health has recently voted to approve the use of steviol glycosides as a sweetener for foods and beverages on the European market. In relation to the next steps, the authorisations for steviol glycosides have still to be formally adopted and published in the Official Journal of the European Communities. Once the EU legislation permitting steviol glycosides comes into force (expected in the autumn of 2011), it will apply immediately in Ireland and across the EU.

Chinese Visitors to FSAI

During July, a group of Chinese visitors from academia, the private sector, and Government organisations visited the FSAI to learn about food safety control in Ireland. Pictured with the group is Prof. Alan Reilly (CEO, FSAI) (third from right) and Prof. Pat Wall (Public Health, UCD) (fifth from right).



Visitors from Ukrainian State Services

In early July, the FSAI welcomed a delegation of senior personnel from the Ukrainian State Services who have responsibility for Ukraine's food safety control system which is currently undergoing significant consolidation and reform.

The purpose of this visit was to enable the participants to hear first hand about the legislative and institutional framework of the EU system, how it can be implemented in practice and the steps the Ukraine needs to take in order to increase opportunities for trade with the EU.



Visiting delegates pictured with Dorothy Guina Dornan (2nd from right), Acting Chief Specialist in Environmental Health and Gail Carroll (4th from right), Acting Contracts Manager, FSAI

Food, Exotic Travel and Reptiles in the NSSLRL's Annual Report, 2010

The National Salmonella, Shigella and Listeria Reference Laboratory (NSSLRL) was established in 2000 to provide reference laboratory services related to human salmonellosis. The laboratory also provides services related to *Shigella* and *Listeria*. The NSSLRL's role is to provide a timely clinical service (analytical and interpretative) to support other agencies in protecting public health. The laboratory is accredited to the ISO 15189 standard and its annual report for 2010 is available at http://www.nuigalway.ie/research/salmonella_lab/reports.html.

During 2010, 923 *Salmonella* isolates from patient samples and other sources, were typed by the NSSLRL. There were 364 human clinical *Salmonella* isolates, including 22 from blood. *S. Typhimurium* and its monophasic variant together account for 132 cultures, and *S. Enteritidis* for 70. In recent years, these have been the most common type in Ireland, and are also common throughout Europe and the world. Human infection peaks between May and November and travel outside of Ireland is an important factor in developing infection. Travel is particularly important in relation to typhoid and paratyphoid fever (nine cases in 2010), which occurs only in people with recent travel outside of Europe.

A major change in 2010, compared to previous years, was the number of people infected with a variant of *S. Typhimurium* called DT8. This previously very rare type caused a small number of infections late in 2009, but represented one in five *S. Typhimurium* infections in 2010. The NSSLRL contributed to the investigation, (which linked the infection with eating duck eggs) and to the subsequent actions to control the infection. There were a number of other outbreaks of salmonellosis in 2010, including an outbreak of *S. Enteritidis* phage type 14b that was resistant to the antibiotic nalidixic acid.

In 2010, as in previous years, there was a significant level of resistance to antibiotics in *Salmonella*. Almost half (48%) were resistant to one or more antibiotic, and 30% were multi-drug resistant. As in previous years, *S. Typhimurium* accounts for a high proportion of multidrug resistant isolates. There is a particular ongoing problem with a very highly antibiotic resistant (ESBL-resistant) *S. Concord*, that is found in children adopted from Ethiopia. This has been a concern in several countries for a number of years and there were five cases in Ireland in 2010. In general, *Salmonella* with the most worrying antibiotic

resistance patterns are strongly associated with travel in Asia and Africa.

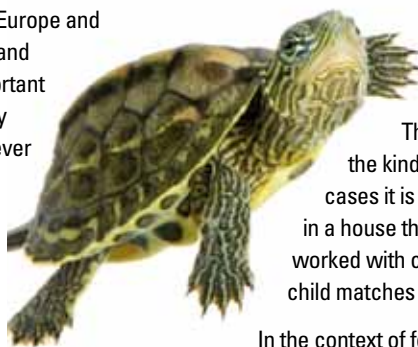
During 2010, there was a significant level of infection of children with *Salmonella* as a result of contact with reptiles. Healthy reptiles (snakes, turtles, lizards) very often carry several different kinds of *Salmonella* in their gut. These are types of *Salmonella* that are not common in mammals.

The link with reptiles is often suspected because of the kind of *Salmonella* detected in the child, and in most cases it is confirmed that there is a reptile in the home or in a house they visit. In a number of cases, the NSSLRL has worked with colleagues to show that the *Salmonella* in the child matches a *Salmonella* in the suspect reptile.

In the context of food safety, there is a particular interest in linking *Salmonella* infection acquired in Ireland with particular types of foods. This is ongoing work that the NSSLRL has contributed to, along with veterinarians and food microbiologists, through applying some of the latest genetic typing methods (MLVA) to *Salmonella* from human and non-human sources. In 2010, as in 2009, it was possible to show the same MLVA fingerprint in some *S. Typhimurium* cultured from patients, from foods and/or food producing animals.

Through its links with the European Centre for Disease Control (ECDC), the NSSLRL contributes to the investigation of outbreaks with an international dimension; for example, linking to the UK 2010 outbreak of *S. Bareilly* infection associated with contaminated bean sprouts.

The NSSLRL also provides typing of *Shigella* spp. and *Listeria monocytogenes*. At present, the picture related to these pathogens is less complete than for *Salmonella* as the NSSLRL does not receive such a high percentage of cultures from around the country - although this situation is improving incrementally.



Legislation Update

Irish legislation

Official Control of Foodstuffs

The Department of Health (DoH) have introduced the European Communities (Official Control of Foodstuffs) (Amendment) Regulations 2011 (S.I. No. 344 of 2011)

This new legislation gives further effect to Regulation (EC) No. 882/2004 in particular by giving effect to Articles 28 and 54 of Regulation (EC) No. 882/2004 which deal with the collection of charges to cover expenses incurred in carrying out additional official controls and enforcement measures in cases of non-compliance.

EU Member States are required under Article 28 of Regulation (EC) No. 882/2004 to charge for expenses arising from additional official controls undertaken. This Article specifies that "When the detection of non-compliance leads to official controls that exceed the competent authority's normal control activities, the competent authority shall charge the operators responsible for the non-compliance for the expenses arising from the additional official controls". Normal control activities are defined in the EU Regulation as being "the routine control activities required under Community or national law and, in particular, those described in the plan (national control plan) provided for in Article 41" with the Regulation listing activities that exceed normal control activities as including "the taking and analysis of samples as well as other

controls that are required to check the extent of a problem, to verify whether corrective action has been taken, or to detect and/or substantiate non-compliance".

Article 54 of Regulation (EC) No. 882/2004 places an obligation on competent authorities in each EU Member State to take action in cases where they identify non-compliance that will ensure that food business operators remedy the situation. The EU legislation specifies that all expenditure incurred pursuant to these actions must be borne by the food business operator.

The Food Safety Authority of Ireland (FSAI) and the Health Service Executive (HSE) are both designated as competent authorities in this legislation and, are currently in the process of finalising guidance on the implementation of the S.I. The level of the additional charges under the S.I. is currently being examined by the HSE. When finalised, additional information will be posted on the FSAI webpage http://www.fsai.ie/legislation/food_legislation/official_control_of_foodstuffs/general_provisions.html

Crops and oils

The Department of Agriculture, Fisheries and Food has published the European Communities (Marketing Standards) (Crops and oils) Regulations 2011 (S.I. No. 378 of 2011)

These regulations revoke the previous rules (S.I. No. 153 of 2010) and they supplement the provisions of EU legislation

regarding the application of quality standards for crops and oils, including fresh fruit and vegetables. They also provide the necessary powers for authorised officers and updated penalties for offences.

EU Legislation

Fruit and vegetables

Commission Implementing Regulation (EU) No. 543/2011 laying down detailed rules for the application of Council Regulation (EC) No. 1234/2007 in respect of the fruit and vegetables and processed fruit and vegetables sectors has been published in the EU Official Journal.

The previous rules covering the fruit and vegetables and processed fruit and vegetables sectors have been amended several times so in the interests of clarity, those rules are repealed and all the implementing rules are incorporated in this new Regulation which also includes some additional amendments which are considered necessary in the light of experience.

EU Proposed legislation

Food Labelling

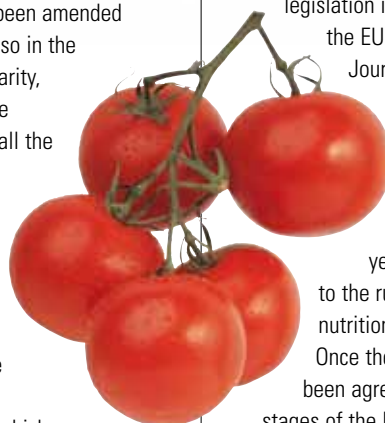
In early July, the European Parliament voted to adopt the compromise text for the draft Regulation on the provision of food information to the consumer. This proposed Regulation will merge and amend Directive 2000/13/EC on the labelling of foodstuffs and Directive 90/496/EC on nutrition labelling for



foodstuffs. As part of the EU regulatory procedure this text will need to be formally adopted by the Council after which it can be published in the EU Official Journal. This is expected to take place in the autumn. Once the legislation is published in the EU Official Journal, businesses will have three years to adapt to most of the rules, but five years in regard to the rules on nutrition labelling. Once the proposal has been agreed at all stages of the EU regulatory procedure, the FSAI will provide more information.

Foods For Particular Nutritional Uses – New Commission Initiative

Foodstuffs for particular nutritional uses are foods that are different from foods for normal consumption and are currently regulated, as products which are specially manufactured and intended to satisfy the particular nutritional requirements of specific categories of the population. The designation under



which a dietetic food is sold is accompanied by a suitability statement for the particular nutritional use and the specific group of the population to whom the food is intended, e.g. gluten-free food for those with coeliac disease, processed cereal-based food for young children, infant formulae for infants from birth etc.

children and food for patients under medical supervision.

Further to these objectives, the proposal also aims at creating a single legal measure that regulates lists of substances such as vitamins, minerals and other substances that may be added to the categories of food covered by this proposal. This would combine

discussed by the European Parliament and the Council and depending on those discussions, rules could be adopted by the end of 2012. A copy of the proposal can be viewed on the EU website at http://ec.europa.eu/food/food/labellingnutrition/nutritional/index_en.htm.

Revised EU Guidelines on Import of Polyamide and Melamine Kitchenware

The European Commission has published revised EU guidelines on conditions and procedures for the import of polyamide and melamine kitchenware. The purpose of the guidelines is to provide guidance on the application of Commission Regulation (EU) No. 284/2011 which lays down specific conditions and detailed procedures for the import of polyamide and melamine plastic kitchenware originating in or consigned from People's Republic of China and Hong Kong Special Administrative Region, China.

The Regulation (EU) No. 284/2011 aims to ensure uniform import procedures at EU level of kitchenware made of polyamide and melamine originated or consigned in China and Hong Kong regarding the release of primary aromatic amines (PAA) and formaldehyde. The guidelines are available at:

http://ec.europa.eu/food/food/chemicalsafety/foodcontact/docs/20110614_guidelines_china_measure_en.pdf

EU Publications

The EU have placed on their website a Guide to good manufacturing practice for "liquid, concentrated, frozen and dried egg products" used as food ingredients (non-ready-to-eat egg products). http://ec.europa.eu/food/food/biosafety/hygienelegislation/docs/guide_good_manufacturing_practice_en.pdf

The guide concerns egg processing from delivery of shell eggs to the egg breaking plant to egg products shipment. It includes liquid, concentrated, frozen and dried egg products as well as egg products that are used as food ingredients but excludes ready-to-eat egg products, such as cooked and peeled eggs, poached eggs, omelettes, scrambled eggs and other cooked egg products.



EU rules on dietetic foods were introduced over 30 years ago and now due to the much greater variety of food products on the market, they need to be updated. With this in mind, the European Commission has published details of its new initiative on specialised food products which aims to simplify and clarify the rules that apply to products currently regulated as 'dietetic' foods, taking into account the evolution of the regulatory measures in relevant areas.

The proposal abolishes the concept of dietetic foods and provides for a new framework establishing general provisions only for a limited number of well-established and defined categories of food that are considered as essential for certain vulnerable groups of the population, i.e. food intended for infants and young

into one list the three different lists of substances which are currently included in three different legal measures.

With the publication of the draft proposal by the European Commission, its content will be

The following Regulations have been introduced over the last few months in Ireland:

S.I. No. 312 of 2011

European Communities (Classical Swine Fever) (Restriction on imports from Germany) Regulations, 2011

S.I. No. 313 of 2011

European Communities (Control of Organisms Harmful to Plants and Plant Products) (Amendment) Regulations, 2011

S.I. No. 302 of 2011

European Communities (Pesticide Residues) (Amendment) Regulations, 2011

S.I. No. 325 of 2011

European Communities (Official Controls on the Import of Food of Non-Animal Origin) (Amendment) (No. 2) Regulations, 2011

S.I. No. 344 of 2011

European Communities (Official Control of Foodstuffs) (Amendment) Regulations, 2011

S.I. No. 378 of 2011

European Communities (Marketing Standards) (Crops and oils) Regulations, 2011

Joint FSAI/Teagasc Seminar: Product Shelf-Life and Microbiological Criteria

The FSAI in partnership with Teagasc will host a one day seminar on Shelf-Life and Microbiological Criteria on **November 17th 2011** in the training centre of Ashtown Research Centre, Dublin.



The safety of foodstuffs is mainly ensured by a preventive approach, such as implementation of good hygiene practice and application of procedures based on hazard analysis and critical control point (HACCP) principles. Testing against the criteria set down in Regulation (EC) No. 2073/2005 on the Microbiological Criteria for

Foodstuffs should be undertaken by food business operators when validating or verifying the correct functioning of systems in place.

Determining the shelf-life of foods is also important for ensuring their microbiological safety. In particular, shelf-life is important for those foods which are perishable, ready-to-eat and/or support the growth of pathogens. The shelf-life of foods depends on a number of factors particularly the nature of the food itself, the processing it has received and how it is packed and stored.

Since the introduction of Regulation 2073/2005, the FSAI has published a number of documents in relation to various aspects of the legislation including shelf-life and provided training to the official agencies. However, following an online survey carried out by the FSAI in March 2011, there remain many issues in relation to shelf-life and interpretation of the legislation which need to be addressed.

The proposed seminar will address the issues raised in the FSAI survey. The seminar will be provide presentations from representatives of the European Commission, food industry, laboratories and various official agencies. Parallel afternoon workshops will follow where participants can choose to attend a workshop of interest, with



relevance to Regulation (EC) No. 2073/2005. The FSAI will provide a workshop for food businesses to assess their own compliance with the requirements of Regulation (EC) No. 2073/2005 while Teagasc will provide a number of other workshop options for participants to attend.

The seminar is aimed primarily at food business operators but will also be of relevance to official agencies. Managers, supervisors, team leaders and those responsible for quality control, product development and HACCP in their food business should attend. The fee for attending the seminar will be €100 and places are limited.

If you are interested in attending the seminar or require further information, please email the FSAI at Shelflifeseminar2011@fsai.ie

New Board Member Appointed to FSAI



Ms Miriam Cashell has recently been appointed to the Board of the FSAI. Miriam is a graduate of Environmental Health, holds a post graduate diploma in Food Safety from DIT and is a certified Lead Auditor. She is a Principal Environmental Health Officer with the HSE, based in Cork city, where she leads and manages a team accredited to NSAI 9001:2008. Her motivation is directed at delivering a client focused high standard of best practice in food safety issues.

Miriam has over 30 years experience of working in the Environmental Health Service both in Ireland and previously in England as a chartered EHO. She is a member of the Cork Zoonosis Committee and has also served as a vice president of Impact, the public service trade union.

Her career has always encompassed the core principles of educating and promoting food safety practices within the food industry. She has a particular interest in training programmes for food workers in the areas of food safety and quality assurance. She has served on interdisciplinary groups developing protocols on food borne illness.

She has been involved in many national groups in developing and ensuring that best professional practice is available both in guidance and legislation.

Many people contact our advice-line each month to ask questions on a variety of food safety issues. Some questions get asked time and time again – so in each issue of FSAI NEWS, we will feature a Frequently Asked Question. This issue's question is ...

Is food safety training a legal requirement for working in a food business?

It is a legal requirement that staff involved in a food environment are supervised and instructed and/or trained in food hygiene matters commensurate with their work activity. The responsibility for the supervision and training of staff lies with the proprietor of the food business.

There are various ways that food businesses can fulfil their legal obligations with regard to training of employees:

- designing, developing and delivering their own in-house training programme using relevant training guides
- recruiting the services of a training provider to either design or deliver training specifically for their business's needs
- attending training courses which are offered by training providers and training companies
- availing of various e-learning programmes - please note: these programmes must be used in

conjunction with management support and follow-up

- using 'off-the-shelf' packages for in-house trainers - please note: these packages will require individuals to have the necessary training to deliver the training appropriately

The FSAI also has two training guides available (Level 1 (Induction Skills) and Level 2 (Additional Skills); and Level 3 – Food Safety Skills for Management) that detail the food safety skills that food handlers and non-food handlers should be able to demonstrate in the workplace.

The guides contain relevant information, checklists and records that can help businesses meet their legal requirements for training. These can be downloaded free from our website http://www.fsai.ie/food_businesses/training_guides.html or you can obtain a copy by calling our advice-line on 1890 336677.

Details of training providers and training companies can generally be found in your local Golden Pages. However, since there is no national accreditation body for food safety training in Ireland it is important to ensure that the person providing the training is competent and qualified to

provide the level of training being undertaken, and best suited to your business needs.

To help with this, the FSAI has produced a leaflet on the legal requirement for training, with advice on what to look for when choosing a trainer – 'Food Safety Training: A legal requirement for everyone in the food industry'. This leaflet can

be downloaded free from our website at http://www.fsai.ie/resources_publications.html or a copy can be obtained by calling our advice-line.



Pictured at the publication of the survey results are (l-r) Ms Eibhlín O' Leary, Ms Oonagh Eustace and Ms Michelle Minihan of the FSAI.

Food Allergen Labelling

The FSAI recently published results of a food allergy survey which highlighted that some 94% of foods with precautionary allergen labelling did not actually contain detectable levels of the allergen referred to on the label.

Food Allergen Alerts

Since January 2010, the FSAI provides a free email and SMS text service to consumers to directly inform those suffering from food allergies of the presence of allergens in inappropriately labelled foods. Food allergen alerts are issued by the FSAI upon receipt of information that a food product poses a risk to certain consumers' health, due to missing or incorrect allergen labelling. Consumers interested in this area can subscribe to receive these alerts via the FSAI's website on http://www.fsai.ie/about_us/subscribe/subscribe_to_email_alerts.html

Enforcement Action by the Health Service Executive (January-June 2011)

The HSE, under service contract to the FSAI, is responsible for enforcement action in a range of food premises under their supervision. There are varying types of enforcement powers which provide the means of dealing with situations posing a risk to public health, including Improvement Notices, Enforcement Orders and Prosecutions. Enforcement is carried out by authorised officers appointed under the Food Safety Authority of Ireland Act, 1998 or the EC (Official Control of Foodstuffs) Regulations, 2010 (S.I. No. 117 of 2010).

Enforcement Orders in 2011

Enforcement Orders under the FSAI Act, 1998, comprise Improvement Orders (issued where an Improvement Notice is not complied with), Closure Orders (issued where there is likely to be a grave and immediate danger to public health at or in a premises, or where an Improvement Order is not complied with) and Prohibition Orders (issued where a particular product, class, batch or item of food is likely to involve a serious risk to public health). Orders under S.I. No. 117 of 2010 include Closure Orders (issued where there is a non compliance with food legislation in all or part of a food premises or all or some of its activities) and Prohibition Orders (issued where there is a non compliance with food legislation relating to a particular consignment, class, batch or item of food).

During the first six months of 2011, there were 39 Enforcement Orders served (28 Closure, 3 Improvement and 8 Prohibition orders). Following the trend of the previous two years, there was an increase in orders served during the second quarter of 2011 when compared with the first quarter (10 closure orders were issued in June alone (Fig 1). Similarly, there has been an increase in the number of Closure Orders issued during the first half of 2011 when compared with previous years.

Most orders were served under the Food Safety Authority of Ireland Act, 1998. The introduction in 2010 of the additional enforcement power of Closure Orders under S.I. No. 117 of 2010 (which applies to retail, catering and distribution premises, and manufacturers of foods of non-animal origin) may be associated with an increase in the total number of Closure Orders issued during the latter stages of 2010 compared to the same period in 2009. Seven of the 29 Closure Orders in early 2011 were issued under S.I. No. 117 of 2010. The majority (66%) of these

orders served to date were on premises within the service sector, with retailers following with almost 21% of Orders issued. The other business categories to receive Enforcement Orders during this period include manufacturers (8%) and distributors (5%). These statistics reflect the fact that the majority of premises under supervision are within the service and retail sectors (there were over 30,000 service sector and 10,000 retail premises under supervision in 2010).

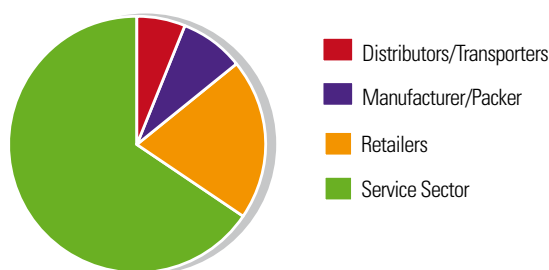


Fig 2: Service sector enforcement orders Jan - June 2011

Within the service sector, restaurants/canteens were subject to the most number of orders during this time, with 9 Closure, 2 Prohibition and 1 Improvement Order served. Take-away premises followed with 8 Closure and 2 Improvement Orders. Interestingly, there has been an increase in the number of Orders being served (Fig 2) on Take-Aways from 2009 – 2011. Ten orders were served on this business type over the first half of 2011 while 9 and 8 were served throughout the whole of 2010 and 2009 respectively. Also, the trend in the number of Enforcement orders being served on restaurants/canteens has begun to increase slightly in 2010 when compared with 2009. In contrast, the number of orders being served on supermarkets has dropped from 6 in early 2009 to 3 in 2011 to date (Fig 3). Details of all enforcement orders taken under the FSAI Act, 1998 and S.I. No. 117/2010 are published on the FSAI website.

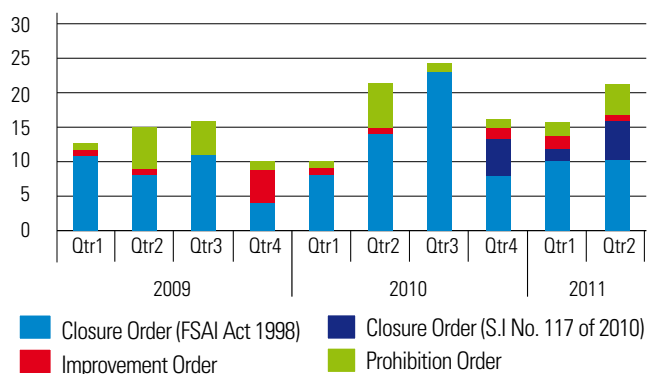


Fig 1: Quarterly enforcement orders 2009 - 2011

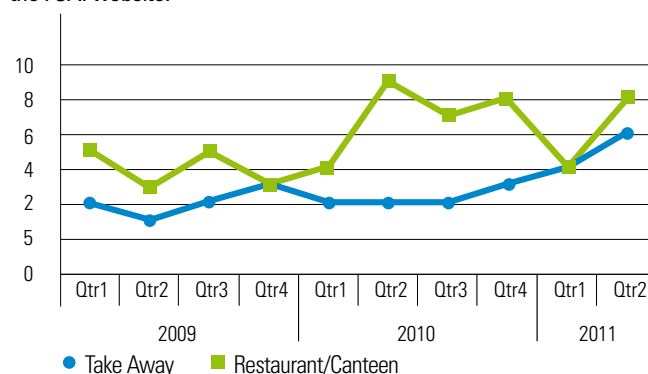


Fig 3: Quarterly enforcement orders for take-away premises and restaurants/canteens 2009 - 2011

(Continued from page 12)

Improvement Notices

Improvement Notices under the FSAI Act are issued where any activity involving the handling or preparation of food, or the condition of a premises is likely to pose a risk to public health.

There were 128 Improvement Notices served during the first half of 2011, under the Food Safety Authority of Ireland Act 1998. This is a 15% increase on the same period in 2010, where 111 notices were served. As in previous years, the majority of these (79%) were served on premises within the service sector, with retailers following with almost 14% of Notices issued in 2011.

Prosecutions

There was a decrease in the number of prosecutions taken by the HSE. Just three prosecutions were reported over the course of the first half of 2011 for all food legislation whereas 14 and 12 were reported during the first and second halves of 2010 respectively.

Enforcement measures under other legislation (such as compliance notices served under S.I. No. 432 of 2009, which applies to processors of animal-origin foods) are not included in these totals.

Overall the numbers of premises served with enforcement orders or notices should be considered in the context that they remain a very small proportion of the approximately 46,000 food premises in Ireland supervised by the HSE.

National Dairy Council Annual Conference

The National Dairy Council (NDC) held their annual conference in Dublin on the 14th June. The theme of the conference which was opened by Simon Coveney, TD, Minister for Agriculture, Food and Marine was *'Promoting Sustainable Dairy Growth'*. Dr Mary Flynn, Chief Specialist in Public Health with the FSAI presented at this conference on Consumer Health and Lifestyle Trends.



Pictured at the conference were (l-r): Zoe Kavanagh, Chief Executive, NDC; Paul O'Connell, Munster and Ireland rugby player; Professor Alan Reilly, Chief Executive, FSAI and Dr Mary Flynn, Chief Specialist in Public Health Nutrition, FSAI.

SHOP 2011 – Come visit our information stand!

Where: Simmonscourt, RDS, Dublin 4

Stand: C12

When: Tuesday, 27 September –
Thursday, 29 September 2011

SHOP is an annual food, drink, retail and hospitality event which is being held in the RDS from 27th-29th September. During the three-day event, FSAI staff will be available at our information stand to discuss any food safety questions you may have.

If you need advice on HACCP, the requirements of the food hygiene legislation or if you are looking for information on starting a food business, come and talk to one of our staff members who will be able to provide you with essential information that you need.

Entry to the event is free of charge and we look forward to talking to you.



Meeting of Heads of European Food Safety Agencies

A meeting of the Heads of the European Food Safety Agencies was held in Utrecht in June, organised by the Food and Consumer Product Safety Authority in the Netherlands.

As well as agencies from within the EU, the group was joined by representatives from similar agencies of Norway and Switzerland and the Food and Veterinary Office of the European Commission. During the meeting the group considered the revision of the EU Regulation on Official Controls, examined current arrangements for inspection fees

as an incentive for compliance, made suggestions for improvements in cross border administrative assistance and cooperation and agreed on a pilot programme on benchmarking of agencies. Following on from this, a working group to be lead by the Food Standards Agency in the UK will consider how to ensure greater transparency in the use of risk assessment and uncertainty in risk management decisions that affect food safety. Pictured below are the various representatives from the European Food Safety Agencies who attended the meeting.



5 minutes with..... Si Chen



Si Chen started an internship with the FSAI in July. She is 28 years old and comes from Harbin, in the province of Heilong Jiang, China. Her primary degree is in Microbiology. Si is currently studying for a Masters in conjunction with a PhD in agri-food safety at China Agriculture University, Beijing.

Welcome to Ireland Si. Can you explain exactly why you are here?

Well, the main purpose of my stay is to learn and study the successful experience of food safety regulation in Ireland and the EU. Prof. Patrick Wall, UCD invited me to Ireland to continue my research. This is part of my thesis for my PhD doctorate which is due to be finished next June. My thesis will be submitted by my PhD supervisor Yunbo Luo who presides over China's Food Safety Twelfth Five Year Plan (2011-2015) to the Food Safety Commission Food Safety Office in China. Hopefully it will feed into the plan and help to improve the efficiency and effectiveness of food safety regulation in China.

Have you researched other countries' food safety control plans?

Yes, I have researched the Multi Annual National Control Plan for Switzerland, but this is my first time to go abroad to research in another country.

Where do you see yourself in a year's time?

I hope to find a job working for the Chinese government in the food safety area.

You've seen some of what the FSAI does, what is your opinion on food safety controls in Ireland?

I am very impressed with the coordination and consistency of official

food controls in Ireland. Official control activities are managed through service contract arrangements. All agencies have clearly defined objectives and operate documented procedures which ensure consistency of food control. During my stay in Ireland I plan on visiting a food business operator to get an insight into the mechanism of Ireland's recall and traceability system.

Can you tell us about your family in China?

Yes, my father is a Colonel in the Chinese army, he will be retiring in two years and my mother is a mathematics teacher in a primary school. I am an only child.

What is the traditional dish in China?

Rice, dumplings and hotpot. For me, nothing is more pleasant than sitting down with family and friends to a hotpot. The main ingredients are mutton, beef, vegetables and seafood in a broth.

So far, how are you finding the food in Ireland?

My first meal in Ireland was fish and chips as I was told this was a popular Irish dish. However, it was tasty but too dry. During my first week here it seemed that everyone just ate either hamburgers or sandwiches and there seemed to be cheese with every other dish so I found it quite difficult to be honest as I was not accustomed to this. But now, a few weeks on, I love hamburgers with cheese and tomato ketchup. I will definitely be eating more of these when I return to China.

Have you visited any interesting places in Ireland?

Yes, I visited the Wicklow mountains, an Irish pub, University Farm on Lyons estate and I saw Riverdance at the Gaiety. The show was fused with Irish dancing, tap dancing, Spanish Flamenco and other dance forms, I thoroughly enjoyed it.

FSAI hosts international workshop on official control audits

At the end of June, the Food Safety Authority of Ireland (FSAI) hosted a four day course on the Better Training For Safer Food initiative on the design and implementation of official control audit systems.

One of the objectives of the course was to ensure through the audit process the quality, consistency and effectiveness of official controls in the areas of food, feed, animal health and welfare as defined in Regulation 882/2004.

The course also aimed to spread knowledge and best practices of internal auditing procedures, according to the requirements of official control legislation and international standards. To this end, the course content focused on the requirements of Article 4.6 of Regulation 882/2004 and the audit guidelines contained in Decision 677/2006.

Delegates from 23 European countries attended the course in the FSAI. Staff from the FVO also attended as observers on behalf of the Commission to ensure the course structure and content complied with their detailed specification.

Over the four days of the course tutors from the FSAI, France, Holland and Belgium delivered presentations, promoted discussions among delegates and facilitated the breakout sessions and participant feedback. The combination of theory, and the exchange of views following the working group breakout sessions allowed participants share experiences and the already developed best practice in their competent authority. Feedback from the visiting delegates on the course was very positive and those who attended found the discussions and exchange of experiences very useful.



Members of the delegation who attended the training workshop.

Open Consultation

The FSAI is inviting comments on its consultation in preparation of a Statement of Strategy for the period 2011-2014. This statement of strategy is required under the Code of Practice for the Governance of State Bodies.

As consumer attitudes to food are constantly changing and the food industry has undergone significant structural reform over the last number of years and will continue to do so in the coming years, the

FSAI needs to adapt and evolve with these changes. We are therefore currently reviewing what we do and how we do it and would welcome your views on how we define our strategy for the period 2011 -2014.

Further information on this consultation is available on our website on http://www.fsai.ie/legislation/fsai_consultations/consultations_2011.html. Comments should be submitted as soon as possible.

Bike to Work

On Wednesday 22nd June, Dublin City Council hosted public 'Lunchtime Bike Ride' as part of the Bike to Work Day initiative. Pictured are Paul Flynn, Edel Keaveney, Frances Douglas and Leona Courtney, members of our Public Health Nutrition team who took part in the fun event to encourage exercise in the work place.



Recent Publications

The following publication was recently produced by the FSAI:

- **Factsheet:** New Guidelines for Ready-to-Eat Sprouted Seed
- **Report:** Recommendations for a Practical Control Programme for *Campylobacter* in the Poultry Production and Slaughter Chain.



Editor: Clodagh Crehan

Contributors: Anne Marie Boland, John Coady, Helen Crowley, Raymond Ellard, Rhodri Evans, Donal McCoy, Karl McDonald, Lisa O' Connor, Emma Reinhardt, Alan Tansey.

External Contributor: Prof. Martin Cormican, NUI Galway Medical School & Galway University Hospital.

© 2011 'Permission is granted to reproduce information contained herein with appropriate credit'.

FSAI: Abbey Court, Lower Abbey Street, Dublin 1

Tel: (01) 8171300 **Fax:** (01) 8171301

E-mail: newsletter@fsai.ie **Website:** www.fsai.ie



www.facebook.com/FSAI

Mailing List

FSAINews is a resource for all public health professionals, researchers, food scientists, food hygienists and quality control personnel working in food safety. We would like to ensure that anyone who may find it useful receives a copy. If you think there is someone else in your organisation who would benefit from receiving a copy please fill in the form below. You can also use this form to change your own mailing details.

Please add the following person to your mailing list for future issues:

NAME _____

JOB TITLE _____

ADDRESS _____

EMAIL _____

☐ By Email

☐ By Post

Change of mailing details:

NAME _____

JOB TITLE _____

ADDRESS _____

EMAIL _____

☐ By Email

☐ By Post

Please return this completed form to: Eleonore Donohoe, Food Safety Authority of Ireland, Abbey Court, Lower Abbey Street, Dublin 1.