

## FOOD STANDARDS AGENCY – FORWARD EVIDENCE PLAN 2011

### NOTIFICATION OF FUTURE ACTIVITIES AND INVITATION FOR FEEDBACK

The attached document summarises the topic areas in which the Food Standards Agency expects to take forward new science and evidence activities, including, where necessary, issuing requests for science and evidence proposals in financial year 2011/2012. These will deliver the evidence it needs to support its [Strategic Plan 2010 – 2015](#) (and possible future needs), published in December 2009 (and which is currently under review. )

This Forward Plan has been developed as part of the Agency's business planning and builds on the input received in developing the Strategic Plan and the [Science and Evidence Strategy](#) (also under review alongside the Strategic Plan.) The evidence needs have been prioritised using the process described in the Science and Evidence Strategy (see Annex A, page 21), led by the Agency's Chief Scientist.

The Agency indicated its intent to publish a forward plan in its response to the [GO-Science Review](#), published in August 2009. We are doing this for several reasons:

- To inform the Agency's stakeholders and help identify whether they are aware of any work either completed or on-going in these areas which we should take into account to help us focus our final requirements before issue;
- To draw to the attention of other funders to see if there are areas on which we could work more collaboratively on these or future needs;
- To provide early notice of possible tender opportunities to potential contractors, to stimulate interest;
- To also seek comments and suggestions on how best to progress some of the strategic science challenges facing the Agency

In some of these areas, more work is still needed to develop the final requirements, but the attached summaries should hopefully provide a good indication of the direction of travel. Also, in some areas, the requirements may be procured using frameworks already in existence. Calls for open competitions will be advertised at : [www.food.gov.uk/researchprocurement/](http://www.food.gov.uk/researchprocurement/)

The Agency also maintains a Research E Newsletter mailing list which is used for providing information on research at the Agency and email alerts when tenders/requirements are advertised. If you wish to subscribe to this mailing list, please go to the following link and follow the instructions: [http://www.food.gov.uk/aboutus/how\\_we\\_work/procurement/resreq/](http://www.food.gov.uk/aboutus/how_we_work/procurement/resreq/)

It should be noted that this forward plan is subject to budgetary confirmation and the possibility that some of the research areas may be displaced by priority evidence needs emerging within the year. The publication of this forward plan does not commit the Agency to awarding contracts for any or all of the opportunities listed.

## **Invitation for feedback – by 16 February if possible**

While it will not be possible at this stage to hold discussions on individual topics, there are some very specific questions on which we would welcome feedback. This should be sent to the following e-mail address:

[CST@foodstandards.gsi.gov.uk](mailto:CST@foodstandards.gsi.gov.uk)

All replies will be forwarded to the team dealing with the research area within the Agency for consideration and follow up as appropriate.

### ***To all recipients:***

- Are you aware of any work completed or on-going which might duplicate work outlined in the attached descriptions – please provide references or other details (to the e-mail address above) so that we can refine our requirements, if needed.
- Please also provide any comments or suggestions on how you would consider it best to progress some of the strategic science challenges facing the Agency.

### ***To other funders***

- Please contact us at the above e-mail address if there are any areas on which you would like to discuss collaborative working – either in relation to these current needs or possible future needs in the Agency's remit.

We expect the first requests for proposals to be issued in some of the identified issues in the next 2-3 weeks.

## **FOOD STANDARDS AGENCY – FORWARD EVIDENCE PLAN 2011**

### **Outline Description of Proposed Activity Areas**

The proposed activities have been grouped below into broad subject areas as follows:

#### **FOOD SAFETY:**

Microbiological safety of food

Chemical contaminants

Food additives

Toxicology

Food allergy

Novel, including GM, foods

Animal Feed

#### **FOOD LAW ENFORCEMENT, EFFECTIVENESS OF INTERVENTIONS/NEW APPROACHES**

#### **CROSS CUTTING PROGRAMMES**

Social science

Other cross cutting programmes

FSA IN SCOTLAND: Diet and Health

## **FOOD SAFETY**

### **MICROBIOLOGICAL SAFETY OF FOOD**

#### **The second study of infectious intestinal disease in the community (IID2 Study)**

An extension to the IID2 Study is proposed to make use of the IID2 data, and data from other sources, to estimate the UK burden of foodborne disease and to quantify the contribution of various food commodities. The Agency requires this data to underpin its work on food safety by allowing us to monitor progress in reducing foodborne illness, to identify priorities for the development of control strategies, and to identify the foods that are associated with the greatest burden of disease.

#### **Norovirus research workshop**

Norovirus is estimated to cause over 200,000 cases of foodborne illness annually in England and Wales. However, the virus has a number of significant transmission pathways and, due to the interactions between these, efforts are needed to control the risks from various sources in order to maximise the impact of any interventions. As such, research is needed to identify risk management options for the foodchain and in waterways to prevent foodborne contamination, and to limit person-to-person spread. It is proposed to hold a meeting to engage various stakeholders on the subject of norovirus, thereby raising its profile and highlighting its impact on public health. The key aim will be to identify the research priorities that need to be addressed by the Agency and/or in partnership with other Government Departments, industry and other funding bodies to develop risk management strategies.

#### **A literature review on the survival and persistence of norovirus in foods and on food preparation surfaces**

As indicated above, norovirus is estimated to cause approximately 200,000 cases of foodborne disease annually in England and Wales. There are significant gaps in our knowledge on how norovirus is able to survive and remain infective in foods and on food preparation surfaces. This includes information on heat inactivation, response to changes in pH, ability to survive in food and on surfaces and food handlers' hands over time, and the effectiveness of disinfectants/detergents/hand sanitizers in removing the virus. A literature review will provide an indication of the main research gaps and where the future research priorities lie. The proposed study may also identify potential interventions and inform FSA advice for the controls for foodborne viruses in the foodchain.

#### **Establish the prevalence of norovirus found in shellfish supplied to consumers in the UK**

Human enteric viruses are known to be a major cause of infectious intestinal disease in the UK. Direct person-to-person spread and infected food handlers are a key transmission route, although contaminated food, particularly shellfish, is frequently associated with outbreaks of disease. This proposed project has three main aims.

The primary aim is to gather data on the prevalence and titre of norovirus in shellfish being supplied to UK consumers, i.e. the end product available to consumers through the retail and catering sectors; Although work is underway to establish the prevalence of norovirus in harvesting areas, there is no robust UK-wide data on norovirus prevalence in the shellfish after depuration. Therefore, a secondary aim is to gather data on the efficacy of current depuration processes used in the UK to reduce norovirus titre. Thirdly it is proposed to test a subset of samples for the presence of sapovirus to evaluate shellfish as a potential source of this infection.

### **System dynamics modelling of norovirus**

The different transmission routes for norovirus all interlink with each other, which means that a change in the prevalence of any one may indirectly impact others. It is proposed to develop a system dynamics model to show how the transmission routes interact with each other and how potential changes in volumes from different sources (both food and non food related) are likely to impact on the overall levels in the population. This will highlight the relative impact of interventions focused at different sources of contamination which will inform future work, and the potential impact of foodchain interventions on the norovirus disease burden. Similar models have previously been produced for a variety of health issues such as flu epidemics, to understand the dynamic spread of disease.

### **Workshop to identify research priorities to improve understanding of the factors that lead to *E.coli* O157 colonisation in cattle and the role of supershedding in the transmission and maintenance of infection.**

The Public Inquiry into the September 2005 *E. coli* O157 outbreak in South Wales made numerous recommendations, many of which are being addressed through the FSA's Food Hygiene Delivery Programme. One of the recommendations was to 'explore the feasibility of identifying 'supershedder' cattle on farms as a potential means of reducing the prevalence of *E. coli* O157' to minimise the likelihood for this pathogen to enter the foodchain. In order that this recommendation can be fully addressed, the FSA has recognised that further fundamental research is required to improve our understanding of factors that lead to *E. coli* O157 colonisation in cattle and the triggers/mechanisms that make certain animals become 'supershedders'. In order to inform our future strategy in this area, we intend to hold a workshop, involving scientists, policy makers and funders, to identify the specific research areas that need to be taken forward by the FSA and other research funders to enhance our knowledge base and help us to address the risks associated with *E. coli* O157 shedding and transmission at the farm level.

### **Stakeholder engagement workshops with procurers of foods for healthcare settings to aid implementation of activities to reduce listeriosis in the UK**

Listeriosis (the disease caused by the bacterium *Listeria monocytogenes*) is rare but often serious and a rise in the number of cases has occurred since the year 2000, mainly in vulnerable groups of the UK population. In order to tackle this rise, we plan to hold stakeholder engagement workshops with procurers of foods for healthcare settings across the UK, such as hospitals, care homes and care in the community.

We wish to engage with procurers of foods to vulnerable people in these settings to raise awareness of listeriosis and to ensure that the risk posed by it is taken into consideration as part of the procurement and supply process. We believe that if successful, this approach could result in the protection of many vulnerable people in hospitals, care homes, and the community throughout the UK, without the need to seek legislative change.

### **Decision support tools for controlling *Listeria monocytogenes* in food manufacturing**

Cases of *Listeria monocytogenes* infection have doubled since 2000 and listeriosis is the leading cause of death from foodborne disease. Targeting *Listeria* food safety advice at those consumers most at risk is important in tackling this problem. However, finding ways to reduce exposure of vulnerable consumers to *Listeria* in ready to eat foods remains important. In terms of the number of microbiological incidents reported to the Agency each year, those involving *Listeria* are the second most frequent after incidents involving *Salmonella*. Whilst few of these incidents are linked to known cases of listeriosis it is evident from these incidents that more work is required to understand the sampling and testing regimes used by manufacturers (particularly SMEs) of ready to eat foods and their approaches to controlling *Listeria* in the food supply chain. The research required will critically review the evidence base relating to effective *Listeria* control in ready to eat chilled food manufacturing and supply. The key elements will be used to develop and populate a decision support tool to assist food businesses and enforcement officers in their work. Outputs from this work should improve the collective understanding of *Listeria* control in the food manufacturing environment, particularly for SMEs. The work should contribute to reducing contamination of finished products and hence less consumer exposure to *Listeria* via the food chain.

### **Provision of food safety information to cancer patients at high risk from listeriosis**

Evidence suggests that cancer patients are at particular risk of contracting listeriosis. This social science research will explore the current provision of food safety information to cancer patients across the UK. Existing evidence on the issue will be reviewed and the various interactions between healthcare professionals and cancer patients, including those involving the delivery of food safety messages, will be identified and catalogued. These findings will be sense checked and supplemented by a series of interviews and/or focus groups with healthcare professionals and cancer patients which will explore current and preferred routes and timings of delivery for food safety messages. It is anticipated that this work may involve follow-up research to develop a communications strategy for delivering our food safety messages to cancer patients through healthcare channels. The outputs of this research will provide essential information to allow the development of effective healthcare communication channels to disseminate our food safety messages on listeriosis to cancer patients across the UK.

## **FSA survey - retail samples of pre-packed cooked or cured meats from Small to Medium Enterprises (SMEs)**

This survey aims to determine the prevalence and levels of *Listeria* spp. and *Listeria monocytogenes* in pre-packed cooked and cured meats sold at small to medium enterprise (SME) retail outlets in the UK. The previous FSA survey of retail cold sliced meats with particular reference to *L. monocytogenes* was based on market share and therefore the majority of samples were collected from the large retailers. A recent HPA study of human listeriosis in England (2001-2007) found that the study cases (particularly the elderly which is a high risk group) were more likely to purchase foods from smaller convenience stores than the general population and so this survey will focus on these SME retailers. This survey will also cover fermented and cured meat products which were excluded from the FSA survey. As well as looking at the prevalence and levels of *Listeria* spp and *Listeria monocytogenes*, the survey will also look at other microbiological parameters such as *Enterobacteriaceae* and *Escherichia coli* and physical characteristics such as water activity and pH.

## **Listeria research workshop to identify research priorities and engage with industry and other funding bodies**

The workshop would be held with international experts, industry representatives and funding bodies to engage with these stakeholders on the subject of listeriosis in order to identify key research needs and co-funding opportunities.

## **Assessment of consumer attitudes to poultry decontamination treatments**

Last year a number of Campylobacter Citizens forums were used to explore aspects around consumer acceptability to interventions designed to reduce Campylobacter levels in poultry, including poultry decontamination treatments applied in the slaughterhouse. Further focussed research is now required in order to have a more robust, quantitative assessment of UK consumers' attitudes to potential poultry decontamination processes, in particular those applied in the slaughterhouse, including drivers/barriers to their acceptability. This study will involve two stages, first to develop, frame and test appropriate questions and second to survey a number of consumers to gather responses to those questions, potentially using an Omnibus survey. The research outputs will support the Agency's consideration of which interventions will be most cost-effective in controlling Campylobacter in chicken.

## **Exploration of barriers to and drivers for on-farm biosecurity behaviours**

Consistent application of stringent biosecurity is considered key in controlling Campylobacter colonisation of poultry. Research is required to investigate the factors that drive farmers and catching teams to apply biosecurity standards, exploring the motivators behind these behaviours (for example penalties and incentives) and barriers to their consistent application. The study is expected to involve several strands of work including observational studies to assess current behaviours, measurement of biosecurity practices where possible and use of focus groups to explore potential biosecurity incentives and motivators. There is also potential to use these focus groups to develop and test educational tools which aim to encourage application of biosecurity measures. This work will assist the Agency in

understanding how to influence behaviour change amongst poultry farmers and catchers and how to communicate effectively with them to improve acceptance, understanding and compliance with biosecurity standards on-farm.

### **Campylobacter risk management programme – stakeholder workshop**

BBSRC, Defra and FSA have developed a cross government [Campylobacter Research and Innovation strategy](#) and are in the process of selecting and commissioning projects in response to a collaborative research with industry call. In order to communicate the outcome of the call and enable successful project teams, industry collaborators and funders to disseminate and input ideas into project plans and in future years project outputs a yearly workshop will be held.

## **FISH/SHELLFISH HYGIENE**

### **Development and assessment of specific probes for detection and monitoring of toxin-producing phytoplankton species in Scottish waters**

Under EU regulation 854/2004 the Food Standards Agency in Scotland, as a Competent Authority, has a statutory responsibility to carry out a phytoplankton monitoring programme in Scottish shellfish harvesting waters. To this end, samples from Scottish harvesting waters are routinely tested for presence of a number of toxin producing phytoplankton species using light microscopy. However, it has been recognised that this method is not suitable for differentiation between toxic and non-toxic sub-groups of *Alexandrium tamarense* species or between toxin producing *Azadinium spinosum* and non-toxin producing *Azadinium obesum*.

The aim of this study is: (a) to trial fluorescent in-situ hybridisation (FISH) probes for detection of Paralytic Shellfish Poisoning (PSP) producing strains of *A. tamarense*; (b) to develop and assess specific probes (FISH or quantitative Polymerase Chain Reaction (q-PCR)) for detection and monitoring of azaspiracid-producing *A. spinosum*; (c) determine the seasonal abundance of toxic *Azadinium* sp. and *Alexandrium* sp. in Scottish coastal waters. This work will further our knowledge in phytoplankton testing techniques and their potential use in the phytoplankton monitoring programme in Scotland.

### **Survey of biotoxins in whole king scallop placed on the market in Scotland**

Under EU Regulation 854/2004 the monitoring of shellfish in Scotland is carried out by the Food Standards Agency. The official controls on wild pectinidae (scallops) harvested outside classified production areas are carried out in fish auctions, dispatch centres and processing establishments. There are over 60 such businesses approved in Scotland. Food business operators (FBOs) harvesting wild pectinidae outside production areas or handling such scallops must comply with the EU Regulation by ensuring that products placed on the market comply with the health standards laid down in the regulation as proved by a system of own checks.

The aim of this project is to study levels of ASP, PSP and DSP toxins in whole scallops placed on the market and assess whether the current Official Control (OC) regime is effectively protecting public health.

### **Environmental impacts on *E. coli* levels in shellfish flesh samples: 3 case studies**

The aim of this project is to conduct a comprehensive investigation of the relationship between heavy rainfall and the occurrence of elevated *E. coli* levels in shellfish from a range of classified harvesting areas in Scotland. As part of the statutory monitoring programme, shellfish samples are collected for microbiological examination by contracted laboratories. Anecdotal evidence from routine monitoring suggests that heavy rainfall leads to *E. coli* levels in samples which fall outwith the normal classification for a particular area, and previous research conducted on one Loch in the West Coast of Scotland showed a high correlation between the two factors. This study would test the hypothesis that high *E. coli* levels in shellfish can be attributed to heavy rainfall over a range of loch types in Scotland. The output would provide a more robust evidence basis for the sampling regime within the classification system and enable better local management of shellfisheries by the industry.

### **Prevalence of marine nematodes in farmed fish in Scotland**

The purpose of this project is to proactively obtain data on the prevalence of parasitic nematodes in economically important marine farmed fish species in Scotland to identify information on the prevalence rates in these fish and to provide information on any potential risk to human health. This is to support the development of specific policy in this area. The main parasite of interest would be anisakid parasites since these have been identified by EFSA as the main risk to human health. Since these are marine parasites the study will focus on marine farmed fish in Scotland. Man is an accidental host of anisakid parasites and can become infected through the consumption of raw or undercooked finfish and cephalopods (i.e squid). Infection with a live parasite causes a painful gastric condition known as anisakiasis that can prove fatal in exceptionally rare cases. Anisakid worms can also trigger an allergic reaction in sensitive individuals, although the pathway of this allergy is not fully understood. The Food Standards Agency has previously conducted research into the prevalence of these parasites in certain wild fish species and also in farmed salmon and it wishes to complete the suite of work by investigating the prevalence in all other commercially viable fish species farmed in marine waters in Scotland. The study would need to include a statistically robust number of samples of each fish species to allow a negligible level of risk to be confirmed within suitable confidence levels.

### **Histamine in commercially important susceptible fish species in Scotland.**

Histamine or scombroid poisoning is a foodborne chemical intoxication associated with the consumption of spoiled fish flesh that is high in histamine. The disease causes rapid-onset headaches, sweating, rash, nausea, vomiting and diarrhoea which normally lasts a few hours but is known to continue for up to 2 days. It is

thought that the incidence of scombroid poisoning is vastly under-reported due to the short lived effects or mis-diagnosis as an allergy. The fish species normally associated include those with high levels of free histamine in flesh and include tuna, mackerel, sardines and pilchards. The majority of cases recorded in the UK are linked to mackerel and tuna. There have been a small number of records of fish samples taken in Scotland that have had levels of histamine above that permitted in the microcriteria and there have been several historic recorded cases of histamine poisoning in Scotland. Histamine formation occurs due to colonisation of certain spoilage bacteria during periods of temperature abuse and improper handling. Once histamine formation has occurred subsequent chilling, freezing or cooking will not destroy the amine. FSA in Scotland would like to conduct a study reviewing the risk management practices employed throughout the entire fish processing chain (for at-risk species) in relation to controlling histamine formation to allow the development of information and recommendations for relevant food businesses and enforcement officers on how best to prevent this.

## **CHEMICAL CONTAMINANTS**

### **Survey of Acrylamide & Furan in UK Retail Products – 2011/12**

The purpose of this project is to respond to Commission Recommendation 2010/307/EU to survey acrylamide in retail products and continue the survey work already in progress.

This survey is necessary to gain further data in addition to that collected over the last 3 years to allow a better understanding of acrylamide formation and lead to better minimisation strategies for Food Business Operators. The survey is also necessary to determine whether the CIAA (Confederation of the Food and Drink Industries of the EU) toolbox has been successfully implemented.

The survey will examine levels of acrylamide in products known to contain high levels of acrylamide. This further monitoring will allow the UK to determine whether 'indicative levels' that have been produced by the Commission are achievable while ensuring consumer safety and will help examine ways of reducing acrylamide levels in these products.

Also having ongoing comparable data is crucial if the Agency wish to do any trend analysis and see if industry acrylamide reduction work is having a beneficial effect.

For risk assessment purposes EFSA has also called for further data on furan contamination in foods and therefore appropriate samples from this acrylamide survey will also be analysed for this contaminant to respond to this request and ensure that the UK is prepared for EU working group discussions.

## **An Investigation of Geochemical Lead Contamination of Cattle, Sheep and Free Range Chickens on UK Farms – 2011/12**

Lead poisoning is the most frequent cause of on-farm food safety incidents that are reported to the Agency leading to risk assessments being carried out and the provision of risk management advice to the farmer.

In addition to point source and ingestion of metallic lead, lead poisoning can also arise from animals ingesting soil with high levels of geochemical lead.

In the case of exposure to geochemical lead, there is evidence that the 16 week withdrawal or recovery period, used where a lead point source has been identified, and where the affected animals are moved to a low risk area on the farm (or to another farm) is not sufficient to eliminate the lead as the exposure is persistent .

Blood lead levels generally can only be used to indicate whether exposure has occurred, but limited data show that even if blood lead levels are low, the lead levels in eg: the kidneys, could still be high particularly for prolonged periods of exposure, as is the case with geochemical lead.

The Agency would like to obtain data on the extent of lead contamination in meat (liver, kidney and muscle), offal and eggs from farm regions of high geochemical lead in the UK and to also determine whether blood lead levels can be used as an indicator of the lead levels in meat and offal entering the food chain, where animals prior to slaughter have been known to have grazed on UK farms in areas of high geochemical lead contamination.

This investigation will help determine the appropriate level of risk assessment and risk management advice the Agency needs to provide for geochemical lead poisoning when responding to lead incidents occurring on farms and help mitigate against high levels of lead.

### **Total Diet Studies for Environmental Contaminants**

These total diet studies will encompass a number of groups of environmental contaminants and are required for several purposes. Firstly, they will be used to verify that controls introduced since previous total diet studies have been effective and will indicate any need for further tightening e.g. in relation to PAHs, dioxins. Secondly, they will be used to establish the direction of trends and current exposure for contaminants that have been under investigation in recent years and for which the EU may consider introducing limits (e.g. brominated flame retardants, perfluorinated compounds). Thirdly, they will establish a baseline for newly emerging contaminants for which knowledge of dietary exposure is limited or unknown (e.g. polychlorinated naphthalenes, mixed halogenated dioxins). They will also provide the background level of exposure for use in risk assessment in the event of contamination incidents. The project will include the development of a sampling plan and the collection of approximately 1,000-1,200 samples from around the UK. These

will be composited into 20 food groups for the analysis. It is likely that the sampling and analysis will be commissioned under separate contracts.

### **Investigation into the effects of processing on pesticide residues in food**

The Committee on Toxicity (COT) report on “Risk assessment of mixtures of pesticides and similar substances,” published in 2002, recommended research be conducted into the effects of processing and preparation on the bioavailability and chemical nature of residues. This work is required to enable realistic assessments of exposure, and thereby risk, from mixtures of pesticides in the diet, and from pesticides and similar substances from all sources and pathways combined. An FSA-funded project has already assessed the effects of storage time, washing processes, peeling and various cooking methods on residue levels of a small selection of pesticides in certain types of apples and potatoes. It is envisaged that this new project would assess additional pesticides in additional foods, focusing on pesticide residues that are most detected in UK surveillance, which belong to groups of pesticides with common modes of toxic action, and where data gaps on the effects of processing exist.

### **Investigation into the content and patterns of ergot alkaloids in ergot sclerotia from cereals grown in the UK.**

This project will investigate the levels and the patterns of ergot alkaloids in wheat, barley and rye ergot sclerotia originating from different parts of the UK with different climatic conditions. Ergot alkaloids can have severe health effects and although they are generally managed through good agricultural practice they have still been reported in cereals originating from several countries around the world, including the UK. These contaminants have previously been discussed at an EU level and there have been indications that we may be heading towards setting legislative limits at some point. Since any prospective limits will have an impact on the UK industry, it is envisaged that a better understanding of the relationship between the content of sclerotia present and the level of individual ergot alkaloids in UK cereals will lead to improved control of the presence of ergot in foods and feeds, thereby ensuring consumer protection and minimising any administrative burden.

## **FOOD ADDITIVES**

### **Survey on the level of artificial colours in takeaway meals**

This survey will check whether the level of artificial colours in sauces (e.g. Indian takeaway meals) comply with the relevant additive legislation and will show if the “Southampton” colours are being used in sauces. The samples will be taken from catering outlets (i.e. takeaways rather than supermarket pre-packed meals) and focus on highly coloured meals e.g. tikkas.

The Agency called for a voluntary ban on the “Southampton” colours by UK manufacturers by the end of 2009, but we have little information on whether they are

still being used in takeaway meals. In addition, previous work showed that takeaway establishments were using high levels of colours in their meals that exceeded the maximum permitted limits specified in additive legislation.

## **TOXICOLOGY**

### **2011 Annual T01/T10 Research Programme Workshop**

Effective delivery of the research that is funded by the Agency and ensuring that project outcomes are informative to Agency policy needs is only achieved by close working between Agency project officers and research contractors. Annual research workshops with all current contractors can be an invaluable part of effective project monitoring as well as creating a forum for researchers to discuss their research, network, and provide constructive challenge/feedback to their peers, which enhances the value of the research.

A two day Workshop will be organised with T01 (Risk Assessment of Food Chemicals) and T10 (Mixtures: toxicology and exposure research) research programme contractors, officials and key invited stakeholders. The purpose will be to review and discuss progress on projects funded under these programmes in the past year, and to provide the opportunity to discuss any issues that have relevance to other projects across the programmes, including identifying opportunities for wider collaboration.

## **FOOD ALLERGY**

### **Survey of allergen advisory ("may contain") labelling and allergen content of UK retail foods**

Understanding the extent of use of 'may contain X' type allergen advisory labelling on food products in the UK market, and whether and how this relates to actual levels of allergens in such foods, is needed to inform the Agency's work to develop risk based, proportionate, allergen management levels ('action levels'). The aim is that such action levels would be used by the food industry, regulators and enforcers, to inform decisions about allergen management, advisory labelling and risk assessment. Ultimately this is expected to lead to greater transparency and consistency in the use of allergen advisory statements on food labels in the future, with such statements only being used where the level of risk warrants it, thereby protecting the safety of food allergic consumers and maximising food choice.

The proposed survey would sample chocolate and biscuit type products (these being food types in which allergen cross-contamination can be a particular risk). Samples would be used to gain information on the extent of use and nature of 'may contain X' type labelling on these products as well as quantitative measurement of milk, peanut and hazelnut allergens. These data would be used to determine whether the

presence/nature of the labelling relates to the actual level of allergen present in the food (or to whether it is present at all); and to gather data on what levels of cross-contamination are actually found in real foods on the UK market which UK consumers are being exposed to. These data can then be compared with clinical food challenge data and used to inform labelling policy and the development of allergen action levels.

### **Extension to existing FSA funded project T07062- Management of food allergens: From threshold doses to analysis in food**

The application of probabilistic risk assessment processes will always be limited unless good quality data on intake of allergens in foods are available. However, current analytical methods for determining allergens in food require further development and this is hampered by the lack of clinically relevant reference and quality control materials.

The EuroPrevall food challenge dessert matrix has a good shelf life at room temperature, is homogeneous and has been clinically validated through the EuroPrevall oral challenge studies for a number of allergenic foods. These attributes make this a suitable candidate for a use as a quality control material for allergen analysis. Under current FSA project T07062, the EuroPrevall chocolate dessert matrix is being put through a ring trial study using lower levels of allergens to assess its suitability as a quality control material. The availability of a clinically validated reference material would facilitate method comparison through collaborative testing. This work will also compliment ongoing studies in the EU Framework 6 funded network of excellence MoniQA project and those led by Health Canada. Participants and leaders of both of these studies are involved in this project to maximise the synergies between them.

### **2011 Annual T07 Food Allergy and Intolerance Research Programme Workshop**

Effective delivery of the research that is funded by the Agency and ensuring that project outcomes are informative to Agency policy needs is only achieved by close working between Agency project officers and research contractors. This is enhanced by regular monitoring of project progress and experience has shown that holding an annual T07 research Workshop with all current contractors can be an invaluable part of effective project monitoring as well as creating a forum for researchers to discuss their research, network, and provide constructive challenge/feedback to their peers, which enhances the value of the research.

This work will deliver a two day Workshop with T07 Food Allergy & Intolerance Research Programme contractors, officials and key invited stakeholders in November 2011. The purpose will be to review and discuss progress on projects funded under the programme over the preceding 12 months, and to provide the opportunity to discuss any issues that may arise in one project that could have relevance to other projects.

## **NOVEL, INCLUDING GM, FOODS**

### **Exploring consumer responses to the labelling of GM food and the use of GM-free labelling schemes**

The legislation on GM food and feed is currently being evaluated by the European Commission. A report is expected to be made available early in 2011 after consideration by the Commission. This will provide a catalyst for discussions at EU level on a range of issues, including the need (if any) for revisions to the current labelling requirements.

In addition, some EU countries have introduced schemes to allow producers to label products as “GM-free” or “without GM”, although the rules of these schemes tolerate some GM materials (low level adventitious presence, use of certain GM additives etc.) and the products that carry these labels do not need to be completely free from the use of biotechnology.

This research will explore UK consumer responses to GM labelling and their views on “GM-free” labelling schemes. Depending on EU developments, it might include attitudes to specific changes to the current labelling regime

### **Validation of detection methods for GMOs**

The current G03 project G03032 aims to develop a new bioinformatics tool that will optimise the screening of samples for authorised and unauthorised GMOs. In addition, singleplex and multiplex polymerase chain reaction (PCR) approaches are being developed to target existing and new genetic elements being incorporated into next-generation GMOs.

Under European law methods of analysis for food must be subject to a collaborative trial to determine the repeatability and reproducibility (precision) of the method (i.e. the method must be validated). In such a collaborative trial a number of different laboratories analyse the same homogenous test materials using the new method. The results from the different laboratories are then compared to determine the robustness and reproducibility of the method.

Once fully validated these methods of analysis can be used by official control laboratories and will simplify the task of screening for the ever increasing number of GMOs both authorised and unauthorised.

## **ANIMAL FEED**

### **Provision of technical advice on animal feeds**

There is wide ranging EU legislation on animal feeds which is aimed to protect consumers of livestock products, animal health and provide information to purchasers of feeds. This includes controls on undesirable substances (e.g. contaminants such as heavy metals, aflatoxins and dioxins), authorised feed

additives (e.g. vitamins and trace elements) and marketing and use (e.g. labelling declarations). The Agency requires independent advice to support the negotiation and implementation of this legislation and related policy on feed standards. Expertise required includes on animal nutrition. Existing and future work in this area includes assistance on the assessment of applications for new feed additive authorisations and assessing industry animal trial protocols for such authorisations. The Commission is also currently carrying out a major exercise to re-evaluate some thousand existing feed additive authorisations. The maximum permitted levels set for undesirable substances are under review and may be extended.

## **FOOD LAW ENFORCEMENT, EFFECTIVENESS OF INTERVENTIONS/NEW APPROACHES**

### **Improving the safety of imported food and feed**

Improving the safety of imported food and feed is one of the key policy outcomes the FSA is working towards in its strategic plan. We envisage one of the ways we will make progress is through working internationally to reduce the risks from food and feed originating in non-EU (“third”) countries.

New work to examine key global food chains and establish the root causes of food safety incidents will start to give us a better understanding of emerging and re-emerging risk, and will inform surveillance and the checks that are carried out on commodities arriving at the UK border. This approach could be complemented with targeted bilateral or multilateral engagement with key trading partners in order to reduce the number of consignments and quantity of non-conforming consignments of higher risk commodities arriving at the UK border. To this end, we wish to commission research to map current bilateral or multilateral co-operation activities across relevant governments’ departments to identify existing vehicles and opportunities for developing shared approaches. We would also consider the private sector where appropriate. This would also identify any gaps to enable the FSA to support approaches to control the risks at third country sources.

### **Analysis of Wines**

Control authorities for the wine sector in Member States are entitled to take samples of wine products to ensure that there are no serious infringements, especially in regard to fraudulent treatment or risks to health. The UK is a major market for wines from other Member States and Third Countries. A limited sampling programme of wine in the UK could help improve compliance. The Agency’s wine standards inspectors may carry out sampling if fraud or contamination of wine is suspected. Those samples would then need to be analysed at a suitable laboratory.

### **Analysis of the FSA's Wine Standards Database**

The FSA has an (Access-based) database of information on the enforcement activities of the wine standards inspectors over many years. Analysis of this data

could provide useful indicators for targeting future wine standards enforcement activity to optimise compliance. This analysis might help inform what types of interventions work best, and which areas should be a focus for inspection.

### **Development of a risk-based food sampling model for Local Authority officers**

Local Authorities (LAs) are required to carry out risk-based sampling as part of their responsibility for official controls. At present there is only limited practical advice on how to do this. A review of methods in use within the UK, and at EU and international level, would help develop best practice that can be used to promote a consistent approach across LAs. This work would support LAs in prioritising their resources for food sampling on areas of greatest risk. It could also be incorporated into the Agency review of the Food Law Code of Practice in recognition of the important role of sampling in official control activity.

### **Review of capacity and current arrangements for Official Control Laboratories**

Recent food incidents have highlighted that there is a need to critically examine current analytical provision arrangements for food in the UK by Official Control Laboratories (OCLs). The review would examine the scope of work undertaken by OCLs to estimate the current capacity, flexibility of the system and consider possible future needs. Capacity to analyse for emerging risks that are as yet unidentified is of particular interest. Such a review could provide options on realising capacity to meet future demands, especially for urgent rapid sampling requirements during incidents affecting the chemical safety of food.

### **Co-ordinated feed and food sampling programme, focussing on imports**

Sampling and surveillance of food and feed is an essential approach to protecting public health and the priorities for this programme will be based on information and intelligence gathered by the Agency, including on emerging risks. This programme builds on the previous programme of grants provided by the FSA to LAs for sampling of imported feed and food. It will provide a co-ordinated, risk-based approach for sampling that is targeted at the FSA's priorities for feed and food safety, particularly of imports. Ideally the samples will be taken as Official Control samples as part of LAs' enforcement activity, although consideration would be given to alternative approaches to sampling. The programme would support LAs in protecting the foodchain, and the emphasis placed on this in the run up to the 2012 Olympics. It is proposed that the sampling information will be submitted via the UK Food Surveillance System (UKFSS) allowing the results to be available in real time.

### **Co-ordinated food sampling programme in Scotland**

In addition to the UK-wide food and feed sampling programme outlined above, the FSA in Scotland proposes to work with Scottish Local Authorities to develop a separate centrally co-ordinated food sampling and surveillance programme to improve intelligence on the safety in foods sold in Scotland. This programme will be based on analyses of historical data collected by Scottish LAs which is available on the UK Food Surveillance system (UKFSS), Scottish food safety incidents, and FSA

intelligence on emerging risks. As with the UK –wide programme, it is proposed that samples will be taken as Official Control samples as part of LAs’ enforcement activity, although consideration would be given to alternative approaches to sampling. Information gathered from this programme will also be submitted to the UKFSS to provide the Agency with real time access to results and allow appropriate and timely enforcement action to be taken.

### **A foodchain-wide approach to risk assessment.**

There is a need to ensure that regulator resources are focused to where it matters, to where there is an impact and delivery of improved public health. This work will require a review of the understanding of risk across the foodchain, considering : approaches taken by regulators, indicators and measures of risk and how consequences (short term illness, longer term ill-health) are considered. In-house analysis is already underway and will shape what this research will need to address. Research may need to examine the current arrangements for risk assessing food standards and identify factors to help develop a common framework for assessment of risk from food. The benefits of this research will be to ensure resources are targeted effectively across the food chain and across the different regulators delivering official controls. Routine and ongoing synthesis of all data available to FSA will help inform strategy, policy and operational delivery ensuring FSA improves its flexibility and responsiveness in a risk-based manner.

### **Linking input and outputs to outcomes.**

An outcome of the FSA strategy has been to reduce foodborne disease. The regulatory regime works to improve compliance, with the assumption that this will produce the outcome of reducing foodborne disease and ill-health. A research review of official controls delivery in other member states with regard to risk and impact will help to identify if improved compliance has improved public health outcomes.

### **The future impact of internet selling of food.**

The UK has a high volume of commerce conducted on the internet. Whilst a majority of transactions involving purchase of food are likely to be founded in food businesses known and already regulated, not all are. A London local authority group has been established to address internet food fraud. Increasingly food is being sold via the internet on a global basis. A pilot study carried out by a local authority showed that over 10,000 food products were being sold every day on internet auction sites and a number of these were the higher-risk products of animal origin. The aim would be to conduct research to identify and analyse the current market of food sales in UK (including imports), assess the amounts and types which are ‘grey market’ (ie non-regulated as a food business operator (FBO)) and the associated risks. The report should also consider approaches deployed in other regulatory sectors and provide recommendations for approaches to improved risk-based regulation in this sector and how risks and practices might change in the near and medium term future.

### **Building on approaches to earned recognition.**

Making better use of third party assurance scheme data has become increasingly more attractive in times of decreased regulator resources. There are many schemes operating in the UK and the primary production sector is particularly well served. There are fewer schemes operating across the foodchain and very few address the SME/catering sector. As capacity will no doubt develop within this sector, it is a timely opportunity to fully understand the role that such schemes can have within a UK wide regulatory approach and particularly consider the impact that scheme(s) usage by the regulator will have on SMEs. This work should also review schemes currently operating and examine what impact they have had on compliance and burdens on FBOs and local authorities. It will seek to develop a greater understanding of the landscape of such themes, mapping them to official controls and state intervention approaches, their development and changes. It should examine the roles of current scheme operators, their perceptions and scope for contributing to the future regulatory landscape.

### **Benefits from cross-regulator regulation.**

Research to identify opportunities for improved co-regulation and sharing information across regulators will reduce burdens on business and burden on regulator resources. A common approach to regulation could be based on a 'confidence in management' indicator. It is not known to what extent this measure can function as a predictor to future performance or if compliance in one sector indicates compliance levels in another. This work aims to review scope for shared approaches and identify what has been successful in other areas and limitations.

### **Improving compliance through segmentation of the food business operator population.**

The current approach by FSA to improving compliance tends to be based on traditional inspection escalation approaches. Other regulators have developed a more targeted approach by conducting research on segmenting the regulated population. For example, HMRC carried out analysis of data coupled with qualitative research to classify tax payers into groups by common characteristics to help improve targeting and effectiveness of regulator approaches to achieve compliance. FSA has commissioned a range of research examining barriers and levers for improving compliance in FBOs. The aim would be to review the current FSA (and other relevant) body of research and conduct research similar to the HMRC work within the FBO population where needed. This would allow consideration across the whole chain to help adopt more effective and efficient approaches by regulators.

### **A tool to diagnose culture in food business operators.**

There are a number of diagnostic approaches used to examine aspects of culture in businesses. A review will be undertaken of current tools deployed in the regulation sector by regulators and private organisations such as management consultants, and an assessment of the cost-benefit analysis of different tools will be undertaken

to identify successful approaches. One or two of these will then be selected and developed to apply to the food sector.

### **Models for maintaining and improving professional development of food regulation practitioners.**

Maintaining professional standards within local authority enforced sectors is challenging in the current environment and it is likely to become more difficult as resourcing of attendance at formal training courses becomes more difficult. Working with CIEH, REHIS and TSI, we wish to consider current arrangements for updating knowledge, improving skills and development of environmental health practitioners and trading standards officers working within the field of food regulation. We wish to gain an understanding of the effectiveness of the different approaches currently used and recommend options for future developments, particularly in light of changing future LA landscapes.

### **Evaluating and improving communication by FSA on matters around enforcement.**

FSA provides much information to local authorities and FBOs and FSA needs to ensure that communication with FBOs and local authorities to improve compliance is as effective as it can be. This work will examine the impact of current communication mechanisms and their content for assessment of impact by tracking through the impact of a sample of recent communications. Much information is currently disseminated via the FSA website, although it is not known for example, if FBO SMEs access the FSA website for information or others routes. Enforcement information is provided to LAs through regular emails to an email account. Review of other regulators' approaches should identify new and innovative approaches, for example partnership approaches might be more effective, eg working with and through trade associations to produce guidance and provide training to FBOs.

### **Future Meat Controls**

The current meat inspection system does not address the main meat borne pathogens of today, which are microbiological and cannot be detected by traditional inspection techniques. The FSA is committed to improving public health and has begun a programme of work to develop the evidence base for a proportionate, risk-based and effective system of meat controls, as set out in its Strategic Plan for 2010-2015.

### **Qualitative risk assessment of visual inspection of red meat (all age & species)**

Visual inspection of red meat carcasses could potentially reduce the risk of cross contamination and require less resource than traditional inspection. This will permit staff resource to be redirected to other activities where official controls are needed to guarantee public health, animal health and welfare protection. On the other hand, visual inspect may miss certain lesions that could be an indicator of a public health, animal health or animal welfare hazard.

The FSA therefore wants to determine whether visual inspection of red meat represents a risk to public health, animal health and welfare and whether it is as effective as traditional meat inspection.

### **Review of food chain information and collection and communication of inspection results for all species**

The FSA wishes to evaluate the implementation of Food Chain Information (FCI) and Communication Collection and Communication of Inspection results for all species, with a view to identifying potential changes that would provide more valuable information to slaughterhouses and farmers, and that would support an improved system of meat controls.

### **Trial- visual inspection for outdoor fattening pigs**

Visual inspection can reduce the risk of cross contamination and the cost of official controls. However, despite those considerations the uptake from the UK pig industry has been very low. This is due to the impracticality of adopting visual inspection under the current conditions as it is limited to indoor fattening pigs.

In 2010 the FSA commissioned a risk assessment “Comparison of post-mortem inspection findings of outdoor and indoor fattening pigs: a qualitative risk assessment approach”. We are now looking at testing that risk assessment in slaughterhouse conditions, and to gather data to evaluate whether visual inspection of fattening pigs can be extended to outdoors fattening pigs.

### **Trial -the use of plant inspection assistants in approved game handling establishments**

An independent study was commissioned by the FSA in 2005 to ascertain the risks from food-borne illness from the handling and consumption of UK wild game meat, and to assess whether the consequences of additional inspections over and above the operator’s HACCP-based procedures, are proportional to those risks. The FSA now wishes to gather data to evaluate whether the use of plant inspection assistants in approved game handling establishments could represent a risk to public health, animal health and welfare and that it is a model that is as equally effective as traditional inspection.

The use of PIAs (Plant Inspection Assistants) in certain AGHEs (Approved Game Handling Establishments) would allow staff resource to be re directed to other food area where official controls are needed to guarantee public health, animal health and welfare protection.

### **Meat controls - Social science**

The delivery of a new model for meat controls will require multidisciplinary evidence. Official controls need to address microbiological hazards, but social science research will be required to ensure that future controls use interventions which are effective in practice and which encourage compliance from food business operators.

There are three key areas that social science research will investigate: i) drivers and barriers in relation to Food Business Operators taking full responsibility for food safety, ii) drivers and barriers in relation to veterinarians / meat hygiene inspectors (what makes an effective enforcer) and iii) the effectiveness of audit and verification as a regulatory mechanism (are the regulatory tools available to enforcers effective?). Research will seek to understand how managers, employees and officials interact with the current meat controls system and explore the potential impact of any future changes to the system.

## **CROSS CUTTING PROGRAMMES**

### **SOCIAL SCIENCE RESEARCH PROJECTS**

**(NB: these are projects lead directly by the Agency's social sciences research unit (SSRU) – however, there are a number of other topic areas in other sections which involve social sciences approaches where SSRU are acting as internal advisers to other team leads)**

#### **Study of food handling behaviours in the home**

Little is known about actual food handling behaviours/ food safety practices within the domestic kitchen – this information is crucial in order to aid our understanding of what people *actually* do, rather than what they say they do. The aims of this research will be to collect information on food safety practices and behaviours in the home; collect information on people's attitudes towards food safety practices in the home; unpick the differences between what people say they do and what they actually do; and investigate behaviours related to a range of pathogens (e.g. listeria, campylobacter etc).

The work will also examine fridge temperatures and explore the specific topic of cross contamination including the practice of washing chickens. To achieve these aims it is anticipated that a mixed qualitative methodology will be used, including for example video diaries, in depth interviews, fridge temperature readings and kitchen swabs. The study may use the 'Food and You' survey as a sampling frame, recruiting participants based on their food safety behaviours and/or attitudes.

#### **Evaluation of the National Food Hygiene Rating Scheme for England, Wales and Northern Ireland and the Food Hygiene Information Scheme in Scotland**

At its December 2008 meeting, the FSA's Board highlighted the importance of adequate monitoring and evaluation of the national Food Hygiene Rating Scheme (FHRS) and the Food Hygiene Information Scheme (FHIS) in Scotland, to review progress and assess the impact of the schemes. The operation of the FHRS and FHIS will contribute to the Agency's strategic aim to secure a further reduction in foodborne illness.

This project will evaluate the overall impact of the two hygiene rating schemes, and the process by which they are developed and implemented, taking into account the impact of existing local food hygiene rating schemes. It will consider the following:

- consumer awareness and understanding of the schemes and their impact on consumer behaviour;
- uptake by local authorities and impact of the schemes on the intervention-rating programme and on their resources;
- business understanding of the schemes, levels of voluntary display, and impact on compliance levels, and business turnover; and
- impact on the incidence of foodborne illness.

The project will comprise an overall evaluation combining review and analysis of existing data sources with specifically commissioned studies.

### **Food Hygiene Delivery Programme research exploring culture and behaviours in enforcement bodies**

This research will explore the culture within enforcement teams and behaviour of enforcement officers: in particular their communication with food business operators. This work directly supports the Food Hygiene Delivery Programme and has been recognised as being critical to the overall success of the Programme. This research builds on the Agency's recently published Regulation Cultures and Behaviours evidence review<sup>1</sup>, which identified regulatory culture as being a significant evidence gap.

The research will include stakeholder interviews, case studies and focus groups to explore this topic with enforcement officers. There will also be the option to pilot and evaluate interventions to test what works in securing regulatory compliance. These interventions will build on the available evidence from both this work and other work in the Agency.

### **Evaluating Food Standards Agency training, guidance and local initiatives**

The FSA provides a broad range of small scale but important activities for local authorities, businesses and the public to deliver food safety and, in Scotland and Wales, healthy eating information. Activities may include training courses, workshops, issuing guidance and running public facing events such as roadshows. This project will develop a toolkit or set of principles for the Agency to use in evaluating such activities, to review their success and identify improvements for the future.

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<sup>1</sup> Institute of Employment Studies Cardiff Work Environment Research Centre, September 2010, Evidence review on regulation cultures and behaviours.  
[http://www.foodbase.org.uk/results.php?f\\_category\\_id=&f\\_report\\_id=551](http://www.foodbase.org.uk/results.php?f_category_id=&f_report_id=551)

Following this, it is likely that a number of small scale evaluations will be conducted over the year using the toolkit/principles; to better enable the Agency assess the impact of these initiatives and how they can be developed in addition to determining the suitability of the toolkit with regard to the types of activities that the Agency undertakes.

## **OTHER CROSS CUTTING PROGRAMMES**

### **E01 Research Programme Review**

The overall objective of the E01 Research Programme is to provide improved methods for the analysis and sampling of foodstuffs and to increase the quality of data obtained in food analytical laboratories. To date the aims of the E01 Research Programme have been:

- To develop specific methods of analysis, avoiding overlap other FSA Research Programmes which may also develop methods of analysis.
- To enable the successful validation of methods for possible introduction into EU legislation or be used for food control purposes in the UK.
- To initiate projects that support and develop advances in quality assurance procedures and theories. e.g. proficiency testing, measurement and sampling uncertainty, recovery, multivariate quality control.
- To aid the operation of a Collaborative Trial Programme, run according to internationally harmonised protocols, to validate chemical and microbiological methods. These may then be used for Food Standards Agency surveys or by enforcement authorities and industry.
- To provide proficiency test materials whereby the analytical performance of laboratories, and the methodology that they use, may be assessed.

The E01 Research Programme was last formally reviewed in 2004, consequently it is now due for another review. Outputs from the Review will be used to develop Agency policy on analytical methods of analysis and to define how best future research procured through the E01 research programme can underpin and support the Agency's strategic plan.

### **Collaborative Trial Programme**

Over the past 25 yrs the MAFF/Agency collaborative trial programme has funded/co-ordinated 163 collaborative trials. A collaborative trial is a procedure to assess and quantify the precision of a method of analysis. The precision of a method is usually expressed in terms of repeatability and reproducibility values. Collaborative trials are carried out according to internationally developed and accepted protocols (e.g. ISO5725:1994 or the IUPAC Harmonised Protocol). Homogeneous test materials

are prepared and circulated to a minimum of 10 laboratories, each of which then analyses the materials using a defined method of analysis. Results from a collaborative trial also aid laboratories in estimating their own measurement uncertainties, an increasingly important consideration. The Agency supports collaborative trials to:-

- Assess whether a specific method of analysis is suitable for inclusion in legislation. Such legislation may be either national or international in origin.
- Assess whether a specific method of analysis is suitable for use in an Agency survey.
- Assess whether a specific method of analysis meets method criteria which may be prescribed by legislation.
- Ensure that UK food control laboratories are capable of enforcing legislation, or are capable of analysing analytes of interest to the (national and local) Competent Authorities. The same considerations apply, albeit to a lesser extent, to trade organisations.

### **Strategic Evidence Programme**

The Agency's Strategic Evidence Programme is designed to address cross-cutting and longer-term evidence needs across the Agency's remit of interest. The overall objectives of the Programme are to:

- deliver robust, cross-cutting evidence and analysis to support delivery, and to evaluate progress and the impact of our work across all our objectives
- inform future strategic priorities and our ability to deliver them in the longer term

In 2011/12 the Agency plans to populate the Strategic Evidence Programme with projects in the following areas:

- a 'Chief Scientist strategic challenge' to invite innovative and creative proposals for delivering the Agency's strategic objectives
- external advice on methodology and review of the Agency's internal operational research, economics, social science and statistics work
- independent quinquennial reviews of two of the Agency's Scientific Advisory Committees
- social science evidence reviews and evaluation to support Agency divisions; and social science evidence for Scientific Advisory Committees

## **FSA IN SCOTLAND: DIET AND HEALTH**

On 1 October 2010 the responsibility for nutrition policy in England transferred to the [Department of Health](#) and in Wales to the [Assembly Government](#). The Agency continues to advise and support Ministers in Scotland and Northern Ireland on nutrition policy.

On 1 September 2010 the responsibility for Food Labelling policy in England transferred to the Department for Rural Affairs (Defra). The Agency continues to advise and support Ministers in Wales, Scotland and Northern Ireland on food labelling policy.

The FSA in Scotland support the Scottish Governments National Food and Drink Policy and their route map towards healthy weight – *Preventing Overweight and Obesity in Scotland* by working to help improve Scotland's diet by providing effective support and expert nutrition advice to ensure consistent messages on all aspects of food policy including production and catering.

The FSA in NI is working in partnership with the Department of Health, Social Services and Public Safety and a number of other organisations to implement the recommendations of the "Fit Futures – Focus on Food Activity and Young People" task force report by providing consistent population based nutrition advice and encouraging the food industry to reduce salt, saturated fat and standardise portion sizes.

### **Development of computerised 24 hour recall for use in dietary surveillance of Scottish children and young adults (11-24yrs)**

The aim of this project is to develop and validate a computerised 24 hr recall program to assess the dietary intake of children and young adults living in Scotland.

The FSA in Scotland currently employs a number of different dietary assessment methodologies and secondary analysis to monitor the diet of the Scottish population. We now wish to develop a computerised dietary assessment methodology based on a 24 hour recall, initially for use with individuals aged 11- 24 years.

The first part of the project will scope existing online dietary assessment methods at an international level and examine and assess any existing tools which may help support the development of a system suitable for use in monitoring food and nutrient intakes in Scotland. Depending on the outcome of the scoping exercise, it is envisioned that the second part of the project would focus on the development of a fully automated computerised 24 hr recall, including automated data processing so that food and nutrient data would be immediately generated when data entry was complete.

### ***eatwell week* qualitative work**

The FSA in Scotland is planning a follow-on project to complement our ongoing *eatwell week* project which focuses on developing a resource that illustrates, what a healthy balanced diet (HBD) could look like over the period of a week.

Focus group research associated with the *eatwell week* project, has provided evidence that some health professionals and consumers may misinterpret certain aspects of the messaging around the healthy balanced diet. We wish to explore the reasons for this with a view to developing messages which are more easily understood and followed. It is anticipated that the research would concentrate separately on the views of consumers and health professionals and would most likely take a focus group approach.