**FOOD STANDARDS SCOTLAND**

**FORWARDS EVIDENCE PLAN 2016-17**

**NOTIFICATION OF POTENTIAL AREAS REQUIRING SCIENCE & EVIDENCE AND INVITATION FOR FEEDBACK**

Food Standards Scotland (FSS) bases policy decisions on the best available science and evidence. This document outlines our science and evidence activities that are under consideration for the financial year 2017-18 to support the strategic outcomes of the [Corporate Plan 2016-2019](http://www.foodstandards.gov.scot/publications-and-research/shaping-scotlands-food-future-our-strategy-to-2021-1).

1. Food is safe
2. Food is authentic
3. Consumers have healthier diets
4. Responsible food businesses flourish
5. FSS is a trusted organisation
6. FSS is efficient and effective

This forward plan is dependent on budget, priorities and that evidence covering some of these areas may become available from other sources throughout the year. The forward plan’s publication does not commit FSS to funding particular projects any of these areas.

We commission Science, Evidence and Information on a contract basis, to help us develop our policies. Then we publish the results, and the data, on this website.

We will advertise all opportunities to apply for our contracts on the Public Contracts Scotland website. If you wish to see the opportunities, it is recommended that you sign-up to Public Contracts Scotland, for free.

This plan has been published:

* To make stakeholders aware of the future areas of research and evidence gathering that will be of importance for FSS in the near future and provide the opportunity for feedback;
* To stimulate interest from other research providers and potential contractors and to provide early warning of potential tender areas for the forthcoming year;
* To make other research funders aware of our science and evidence needs in order to facilitate collaboration, as appropriate, and ensure that duplication of funding does not occur;
* To obtain comments on our strategic direction of science and evidence needs.

Attached is a summary of our current science and evidence projects and a forward look at our potential science and evidence requirements.

**Invitation for feedback – by 31 May 2017.**

We welcome your comments and feedback on our potential future science and evidence requirements by 31 May 2017. All feedback and comments should be sent to Susan Pryde at [susan.pryde@fss.scot](mailto:susan.pryde@fss.scot).

**Potential future science and evidence requirements**

**Diet and Nutrition**

Work will contribute to delivery within outcome 3: Consumers have healthier diets and outcome 5 FSS is a trusted organisation. [**Setting the direction for the Scottish Diet**](http://www.foodstandards.gov.scot/downloads/Board_meeting_-_2017_March_08_-__Diet_and_Nutrition_one_year_on_0.pdf)agreed by the FSS Board in January 2016 [and updated in March 2017](http://www.foodstandards.gov.scot/downloads/Board_meeting_-_2017_March_08_-__Diet_and_Nutrition_one_year_on_0.pdf) sets out the key principles and proposed broad measures for FSS action to reduce calorie intake and rebalance the diet. Our Communications Strategy aims to influence consumer behaviours using tailored messaging targeted to the intended population groups based on their particular risk, behavioural and demographic profiles.

**Food Protection Science and Surveillance**

Work will contribute to delivery within outcome 1: Food is safe, Outcome 2: Food is authentic, outcome 4 responsible food businesses Flourish, outcome 5 FSS is a trusted organisation and outcome 6: FSS is efficient and effective. Through a[**Strategy for Reducing Foodborne Illness**](http://www.foodstandards.gov.scot/consumers/food-safety/foodborne-illness)whichaims to target the key pathways that are responsible for the transmission of microbiological, chemical and radiological risks throughout the food chain, a developing [**Food Surveillance Strategy**](http://www.foodstandards.gov.scot/publications-and-research/fss-board-meeting-8-march-2016)which is capable of generating the intelligence required to identify risks to the health of consumers in Scotland and the reputation of Scottish produce and so consumers need to have confidence that the food they buy and eat is what they expect it to be, a developing [**Regulatory Strategy**](http://www.foodstandards.gov.scot/business-and-industry/safety-and-regulation/regulation-legislation/fss-regulatory-strategy)outlining how FSS will fulfil its role as a national regulator in Scotland, and a high level framework which will be used to inform the targeting of regulatory interventions in a proportionate and risk based manner, with the clear message that compliance with food safety requirements is good for consumers and good for business and a Communications Strategy)which aims to influence consumer behaviours using tailored messaging which is targeted to the intended population groups based on their particular risk, behavioural and demographic profiles.

* Survey of STEC in minced red meat on sale in Scotland;
* Investigation of STEC risks associated with the production of wild venison in Scotland;
* Microbiological risks in unpasteurised cheeses;
* Surveillance Study of Antimicrobial Resistance (AMR) in Campylobacter on Chicken and AMR in Salmonella on Pork sampled at retail;
* Exposure assessment of acrylamide risks associated with the Scottish diet;
* Consumer attitudes on food authenticity and provenance;
* Research to model the attribution of Campylobacter infection in Scotland;
* Review of evidence for the contribution of the food chain and non-foodborne transmission routes to infectious intestinal disease (IID) in Scotland;
* Hepatitis E survey in retail products in Scotland;
* Development of an on-line guidance tool for shelf-life determination;
* Identifying chemical contaminant risks associated with the Scottish diet and food production chain;
* Development of an on-line early warning tool for biotoxin risks in Scottish harvesting areas; and
* Market research on consumption and purchasing behaviours of Scottish consumers with regard to food commodities associated with foodborne disease

**Current Projects 2017-18: Nutrition, Science and Policy**

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| **Project Title** | **Brief Description** | **Start Date** | **End Date** | **Corporate Outcome** |
| **Estimation of Food and Nutrient intakes from Living Costs and Food Survey data in Scotland 2001 to 2013** | This project was commissioned to monitor progress towards the Scottish Dietary Goals using data from the Living Costas and Food Survey. This work is part of a rolling programme to update the annual trends in food consumption and nutrient intake and a full report containing data containing data up to the end of 2013 will be published in September 2017.  The findings in the [interim report](http://www.foodstandards.gov.scot/sites/default/files/LCF%20Survey%20Short%20Report%20on%20SDG%20for%202013%20170615%20%282%29.pdf) (published in August 2015) indicate that there has been little change in dietary intakes and that the majority of the dietary goals are not being met. | 01/04/2015 | 30/09/2017 | Outcome 3-consumers have healthier diets |
| Marketing strategies used within premises by out of home businesses | This project was commissioned to collect information on marketing strategies used within premises by out of home businesses operating in Scotland, including the nature and location of the strategies used.  The results of the project are due to be published in April/May ’17. | 12/12/2016 | 31/03/2017 | Outcome 3-consumers have healthier diets |
| **Diet Big Number** | The project was commissioned to produce a systematic review (including assessing strength and identifying gaps), documentation and critique of the evidence on:  * the direct and indirect economic‎ costs of overweight obesity and diet related (non-communicable) disease in Scotland; * the cost effectiveness of measures to reduce overweight, obesity and diet related (non-communicable) disease. | 01/03/2017 | 31/07/2017 | Outcome 3-Consumers have healthier diets |

**Current Projects 2017-18: Food Protection Science and Surveillance Projects**

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| **Project Title** | **Brief Description** | **Start Date** | **End Date** | **Corporate Outcome** |
| Understanding the factors governing Azadinium generated shellfish toxicity in Scottish waters | This project is a 3.5 year PhD studentship co-funded by FSAS with Scottish Association for Marine Science. The project will develop an understanding of the temporal and spatial dynamics of Azadinium, phytoplankton species producing known marine toxins (azaspiracids), in Scottish waters and of the environmental factors that govern these dynamics. A key outcome of this project will be evidence to allow targeted monitoring of Azadinium within the Scottish phytoplankton Official OC monitoring programme. | October 2013 | March 2017 | Outcome 1 – Food is safe |
| Employing source attribution and molecular epidemiology to measure the impact of interventions on human campylobacteriosis in Scotland | Over the past ten years, Food Standards Scotland (FSS) has been funding a programme of research in collaboration with the University of Aberdeen to improve understanding of the main sources of campylobacter infection in the Scottish population. The development of this research was based on similar work carried out in New Zealand which provided base-line data against which it was possible to measure the impacts of interventions on the contributions made by food and environmental sources of campylobacter to human illness. It is hoped that we will be able to replicate this in Scotland and provide key evidence to demonstrate the impact of action taken by the industry on public health outcomes. | December 2012 | March 2017 | Outcome 1 – Food is safe |
| Research programme to improve our understanding of the factors which lead to E. coli O157 shedding by cattle and intervention strategies for on-farm control (Co-funded with FSA) | This project seeks to address key gaps in our understanding of the factors which lead to supershedding in cattle and the contribution made by supershedders to transmission in animals, contamination of the food chain and human illness. The project will aim to determine shedding and transmission dynamics by colonisation trials under controlled conditions, look at the comparison of human and bovine EHEC O157 strains (this will involve a survey of farms in England, Wales and Scotland) and to model on-farm interventions to determine strategies with potential of reducing human illness. | January 2014 | November 2017 | Outcome 1 – Food is safe |
| Factors affecting variations in Campylobacter disease rates in Scotland | A previous FSA funded research project identified a lower incidence of reporting of campylobacter infection in deprived populations, but this was not observed with hospitalised cases. This project investigates the origin of these differences between deprived and prosperous populations in four ways. First, investigating potential biases at three different levels of the reporting pyramid: the community level, the GP level and the reported case level. Second analysing retrospective and prospective case and hospitalisation discharge data to determine whether the reported variation in disease still occurs. Third, carrying out a case control study to identify the sources of human campylobacteriosis and fourth performing a case-case analysis to determine differences in risk factors for deprived and less deprived (affluent) populations. | March 2015 | June 2018 | Outcome 1 – Food is safe |
| RESAS innovation project – Biosecurity practices for Scottish poultry farmers | Previous work undertaken on biosecurity methods and compliance on poultry farms has shown that biosecurity could be used to improve the efficiency of chicken growing while also significantly reducing the contamination of chickens with the campylobacter. This project will work with five pilot farms who are part of the Scottish Poultry Monitor Farm Group (looking to focus on those supplying Coupar Angus Poultry processor) to look at their biosecurity processes on farm and work with them to identify the key control points that need to be adhered to throughout production and where there are areas for improvement. Modified biosecurity procedures will then be implemented on farm and the effect on productivity and campylobacter status monitored. The findings will be shared widely with the farming community through the key partners to improve biosecurity on farms across Scotland. | April 2016 | October 2017 | Outcome 1 – Food is safe |
| RESAS innovation project - food authenticity methods | Authenticity of meat, fish and dairy products is of increasing concern to the general public, especially in the light of recent high-profile incidences of deliberate substitution such as the so-called “horse meat scandal” of 2013. While unusual, these high-profile cases can cause major damage to consumer confidence. The main innovation output of this project will be a new single test for multiple meat/dairy species that has been tested and validated in a surveillance situation at the four main laboratories in Scotland that carry out food testing. The test will therefore be closer to market and the project team will know what, if anything further is required for the test to be widely adopted. | April 2016 | March 2018 | Outcome 2 – food is authentic |
| Stirling University PhD on Behaviour Change | The basis of this project is to investigate the effectiveness of risk communication strategies such as public awareness campaigns that aim to motivate behaviour change towards food handling practices which prevent foodborne illness. The research aims to improve understanding of the attitudes, perceptions and preferences of different population groups in Scotland and will draw from FSS’s segmentation work by exploring the following questions:  1. how can approaches from consumer and behavioural economics be used to improve risk communication strategies in Scotland?  2. how can we tailor communication strategies for different groups within the Scottish population?  3. how can we measure the effectiveness of risk communication strategies? Does this show variation for different groups in the population?  4. What type of risk communication strategies would consumers prefer and value the most? | October 2016 | October 2019 | Outcome 1 – Food is safe |
| Co-ordinated Food Sampling Grants | Food Standards Scotland (FSS) is making funding available to Scottish local authorities (co-ordinated through liaison groups) for sampling and surveillance of food. This programme aims to provide a co-ordinated, risk-based approach for sampling, and covers both imported and UK-produced food, where relevant. | July 2017 | March 2018 | Outcome 1 – Food is safe  Outcome 2 – food is authentic |