

SfAM response to call for evidence to contribute to the Forward Evidence Plan of the FSA for 2011

The Society for Applied Microbiology (SfAM) would like to make the following points in relation to the items listed below:

Norovirus research workshop

- 1. A literature review on the survival and persistence of norovirus in foods and on food preparation surfaces**
- 2. Establish the prevalence of norovirus found in shellfish supplied to consumers in the UK**
- 3. System dynamics modelling of norovirus**

In response to points 1-3, we feel it would be useful to know the timing of each of the three components above and how flexible the last item is, bearing in mind that the results of the first two may inform the direction that the final activity may take.

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

This should take place in tandem with an assessment of the training undertaken by food handlers in these settings. Assessment of the food safety management systems and the attitudes and behaviour of the food handlers and managers should be undertaken.

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

This is a valid project and we would advocate involvement of SME food manufacturers as integral partners to any funded research. A multidisciplinary approach is required and subsequent training for enforcement officers will be needed to ensure that the tools are effectively implemented.

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

The etiology of *Listeria monocytogenes* is such that only immunocompromised groups are at risk of contracting disease from the organism. The recent increase in cases associated with the organism has been shown to come from diverse food sources and thus control measures targeting a particular food group are inappropriate. In the 1980's, when the major at-risk group was pregnant women, targeted advice was delivered via antenatal clinics regarding the types of foods they should avoid, such as pate and mould ripened soft cheeses. This proved extremely effective and led to a rapid reduction in numbers of cases within two years. A similar approach should also provide benefits for other immunocompromised groups and therefore this proposed provision is timely. One challenge may be to now identify the broader range of foods which present a risk for such groups e.g. butter, sandwiches, preserved meats as well as those more widely recognised.

Food safety information should also target the families and carers (including institutions) of cancer patients. It should be developed as part of a multidisciplinary team using innovative approaches to health education.

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

The need for this research has become evident through a number of outbreaks associated with these types of meat products and would help to inform the food safety information provided to at-risk groups.

One component of this survey should be analysis of the **practices** of the SME retailers rather than simply a survey of presence/levels of *Listeria* in the meats.

To illustrate the importance of good practice, below is an example of good practice that went wrong:

- 2008 Maple Leaf Foods, Toronto
- Deli meat identified as the source of an outbreak
 - 57 confirmed cases and 23 deaths
 - **Meat processing equipment identified as source**
- Prior to the outbreak, *Listeria* found in plant
 - Sites cleaned and re-tested
 - Negative results indicated *Listeria* removed
- Analysis of data showed that for 2 months prior to outbreak number of positive environmental swab tests increased
- *Listeria* is a widespread organism which has characteristics that allow its persistence in factory environments
- Environmental sources act as a route into foods and RTE foods are a notable risk
- Environmental monitoring is key in preventing product contamination by establishing effectiveness of sanitation
- Examination of trends over longer periods may allow better recognition of when routine sanitation is failing and prevent product contamination and hence outbreaks

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

As with the norovirus, it would be useful to know the timing of this component compared to the other *Listeria* work programmes to prevent missing important aspects – something this may happen if the work programmes start before the workshop has met and reported.

The recent increase in listeriosis and the change in the target groups now at risk (those over 60yr) has identified that our understanding of this organism is incomplete and a re-evaluation of research priorities for this organism should look to address these areas.

Assessment of consumer attitudes to poultry decontamination treatments

There is concern regarding the timing of this study. The FSA has just funded work on control of *Campylobacter* in the slaughter house (M01R0015 Controlling *Campylobacter* in the slaughterhouse) and is a partner in a joint funders (BBSRC/FSA/DERFA) interventions study to look at *Campylobacter* control in poultry across the food chain. These research areas might identify novel strategies for use in control of *Campylobacter* which would not be evident at this time but which may need an acceptance study of this nature.

Study of food handling behaviours in the home

SfAM do not feel that there are limited data. A number of studies have been carried out at University of Wales Institute Cardiff (UWIC), some of which are funded by the FSA (Projects B13008; B01015; B02010; B02015; B02016; B13010). A PhD student (UWIC funded) is currently examining the food handling and storage behaviour of elderly consumers.

One aspect that should be considered within this programme is the consumer's attitude to risk. 'Use by' and 'best before' date labelling are often considered confusing and in some instances consumers will take a calculated risk in eating something that is beyond its use by date.

Exploration of the factors influencing this decision-making would be a useful addition to this study.