

ADVISORY COMMITTEE ON THE MICROBIOLOGICAL SAFETY OF FOOD

DISCUSSION PAPER

HORIZON SCANNING

Issue

The purpose of this paper is for the Committee to revisit the outcomes of the January 2015 horizon scanning workshop where members identified microbiological issues of concern and ranked these issues in terms of strategic priority and urgency.

Background

In January 2015 the Committee had a horizon scanning workshop and follow-up discussions at the Committee's January and June meetings. The workshop was opened with a presentation on the Food Standard Agency (FSA) Strategic Plan 2015 - 2020 and an overview on the FSA Science and Evidence Strategy. Members had completed a questionnaire before the workshop which had asked the following questions:

- Can you identify any emerging issues that might present a risk to the public?
- Is there any information that needs to be brought to the FSA's attention to help consumers make choices based upon current evidence?
- Are there any risks or opportunities associated with new food technologies not already considered by the ACMSF?
- Are there any risks or opportunities arising for consumers as a result of the changing landscape of food production?
- Is there anything else to bring to the FSA's attention?

The questions were considered in group sessions. Following discussion there was agreement on a group of common themes which members agreed to take forward under the following headings.

- Impact of new technologies: advances in whole genome sequencing in metagenomics of pathogens and samples, interpretations from resulting data from the application of these technologies in a risk assessment context, the way food processing is changing and novel processes focussing on current food processing technologies and other technologies on the horizon.

The other headings included:

- Changes in the food system: exotics and imports, new sources of food/ingredients, globalisation of food supplies, internet sales.
- Societal/Social change: consumer information, communication, influencing behaviour; use of new media and improving science communication.

- Climate change: how it impacts on behaviour of pathogens and organisms such as vibrios and other organisms.
- Antimicrobial Resistance (AMR): a huge cross governmental issue. It was highlighted that ACMSF already has an active working group but may need to consider what more can be done as part of the subgroup's ongoing work programme.
- Understanding the impact of ACMSF's work in supporting the FSA, how the advice is used in risk management and how to evaluate impact of the Committee's advice.

Members used the June 2015¹ meeting to endorse the ranking of these themes/topics which are as follows:

Genomics: Identified as a significant emerging issue. Challenges included the volume, processing and meaning of data - how do risk assessors and risk managers adapt and respond to make full and proper use of genomics and the data generated from its application.

Changes in food system: Exotics and imports (illegal and personal imports), new sources of food/ingredients such as insects as an alternative source of protein for human use and for animal feed, globalisation of supply, internet sales and fresh produce (Hepatitis A where it is endemic in relation to products that come from those countries that supply the UK with produce).

Societal: Consumer information, use of the different social media channels and communicating through others. What difference has any of the FSA campaigns made to consumers (such as the annual FSA food safety week and the *Campylobacter* campaigns). Have these had any effect on consumer behaviour?

Climate: This relates to the way in which climate change may change microbiological hazards that we are exposed to. For example, *Vibrio* spp. and the impact of climate change on other microorganisms.

Antimicrobial Resistance (AMR): AMR in the food chain (a huge cross governmental issue). ACMSF is keeping a watching brief via its Working Group on AMR.

Other topics that were considered important were: *Campylobacter* and understanding the impact of the Committee's work and the use of their advice in risk management.

The Committee recognised that demographic change in terms of the challenges of an increasingly elderly population was another area likely to become important in the future. Members also raised the question of using the Newly-Emerging Pathogens Working Group, which met infrequently to discuss particular topics, might have a wider role in horizon scanning.

¹ <http://acmsf.food.gov.uk/sites/default/files/acmsf85june2015.pdf>

Although the subject of genomics was ranked top for attention to be tackled through a subgroup members agreed (following a presentation they received on the FSA *Campylobacter* Retail Survey) that as it was 10 years since the Committee issued its report on *Campylobacter* and as reducing *Campylobacter* in chicken is a key strategic priority for the Agency², a subgroup should be set up to revisit this issue.

In November 2015 the ACMSF Ad Hoc Group on *Campylobacter* (chaired by Professor Sarah O'Brien) was setup. The group participated as reviewers in the FSA's *Campylobacter* research review programme that was held in March 2016. Subgroup had its first meeting in May 2016 and is working towards updating the Second *Campylobacter* report published in 2005. Their terms of reference is: *To assess the actions that have taken place since the publication of the Second Campylobacter report and make proposals to assist the FSA in evolving its strategy for reducing the incidence of foodborne Campylobacter infection in humans.* Group is aiming to present its report to the Committee by spring 2017.

Action

Members are invited to:

- a) Revisit the outcomes of the January 2015 horizon scanning workshop and the identified microbiological issues of concern
- b) Indicate whether there are any new microbiological issues of concern
- c) Comment on the ranking of the topics and indicate what topic(s) they would like to include in the ACMSF work plan
- d) Consider whether to involve other relevant Scientific Advisory Committees in future ACMSF horizon scanning workshops. Would this help identify possible cross-cutting issues?

Secretariat
October 2016

² <http://acmsf.food.gov.uk/sites/default/files/acmsf85june2015.pdf>