

DISCUSSION PAPER

ADVISORY COMMITTEE ON THE MICROBIOLOGICAL SAFETY OF FOOD (ACMSF)

Horizon scanning : some preliminary thoughts

Introduction

1. In the past, a number of very important ACMSF reports have had their genesis in ideas put forward by Members of the Committee as a result of developments in agricultural practice, food technology, microbiology etc. It is appropriate that the Committee should, from time to time, review new developments and consider what implications they may have for food safety.
2. The most recent exercise of this type was carried out in March 2000. A number of topics were identified for the future work programme including risk control, *Campylobacter*, ready to eat fruit and vegetables, *Listeria* and *Mycobacterium avium* subsp. *paratuberculosis*. Further action has now been taken on all these topics, ranging from detailed discussions on the basis of commissioned papers through to the establishment of an ACMSF working group (in the case of *Campylobacter*). With action now taken on all the topics identified and with a large number of new members on the Committee, it is now an appropriate time to take stock and to invite members to identify new topics for consideration.

A framework for identifying issues

3. The Chief Medical Officer's recently published strategy for combating infectious diseases, "Getting Ahead of the Curve", identifies a list of factors driving change. This may be a useful starting point for Members' considerations. The factors in question are:
 - Impact of technology
 - Environmental change and land use
 - Global travel and trade
 - Climate change
 - Microbial adaptation

- Human behaviour
- Impaired immune systems

Possible areas for consideration

4. One of the areas in which ACMSF members may be able to flag up issues that might otherwise be overlooked is in relation to technological changes – both in terms of **new or changed processes and novel products**. In the past, such consideration led to the Committee's report on Vacuum Packaging and Associated Processes and, more recently, the Committee has given further advice on the control of *Clostridium botulinum* as a possible hazard in a range of "new" products, such as part-baked breads. A further consideration under this sub-heading is the role of **new in-process decontamination procedures**, such as alternatives to chlorine in the washing of fresh fruit and vegetables, in-shell pasteurisation of eggs and irradiation.
5. The Committee has already provided advice to contractors involved in the risk assessment of the application of sewage sludge to agricultural land, a practice set to increase with the prohibition of disposal of such wastes at sea. This work will continue. However, there may be other **features of modern agricultural practice** with implications for food safety, including changed patterns of farming, different patterns of husbandry and the extension of farming processes to new species such as fish.
6. **Travel** has been identified as an important risk factor for Intestinal Infectious Disease and for infection due to specific pathogens, notably *Campylobacter*. The extent to which this effect is a result of different behaviours whilst travelling remains to be clarified. A further examination of this is planned by the *Campylobacter* Working Group.
7. **Imported foods** are another aspect of global travel and trade that raise food safety concerns. The Agency Board discussed a paper on Imports in October 2001 and agreed a ten-point plan to address current concerns. The ten action points are:
 - Bringing imports of products of animal origin under Agency co-ordination
 - Improving liaison with enforcement authorities and central government on food safety
 - An electronic information database for port health authorities with relevant local authority access
 - Revised guidance for port health authorities and local authorities
 - The training of port health officers

- Funding for specific sampling and monitoring
 - Improved local authority administration for Heathrow
 - Increased powers for port health officers over personal imports
 - Restricting points of entry to UK for products which are not of animal origin
 - Prior notification of imports of products which are not of animal origin
8. The Committee has already identified concerns about **traceability**, particularly in relation to fresh produce. Among the papers circulated for information to Members at this meeting are a paper on traceability, considered by the Board at its February meeting (ACM/578), and a paper on current developments within Codex Alimentarius relating to fresh fruits and vegetables (ACM/574).
9. **Global warming** may impact upon food safety through effects on the quality of potable water used in food production, or through flooding of agricultural land. It remains to be seen whether warmer summer temperatures will increase the incidence of foodborne disease. However, such phenomena will not change the basic principles of food hygiene.
10. The area that is perhaps most difficult to “horizon scan” is the area of microbial adaptation. In the past, the Committee has responded to the emergence of new pathogens such as *E coli* O157 and to the threats posed by the spread of antimicrobial resistance. It has also considered emerging animal pathogens in relation to their zoonotic potential. Members’ views are sought on possible **new microbial hazards**, including recently-described animal infections and the potential for the transfer of pathogenic factors between microbial species.
11. **Changes in eating patterns** are thought to have played a major part in the increase in foodborne disease over recent years. Such changes include an increasing tendency to eat out and a decreasing tendency to prepare food in the home. This is already an area of interest in the foodborne disease strategy.

Action required

12. Members are invited to consider the work already in hand on a number of areas of concern and to suggest topics for future consideration by the Committee. In particular, information is sought on potential hazards associated with:
- New processes

- Novel products
- New decontamination processes
- Changes in agricultural practice
- New microbial hazards
- Imported food
- Changed patterns of eating

Secretariat

March 2002

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