

**MINUTES OF THE FORTY-FIFTH MEETING OF THE ADVISORY
COMMITTEE ON THE MICROBIOLOGICAL SAFETY OF FOOD held on 19
september 2002 at aviation house, 125 kingsway, london wc2 at 10.30
am**

Present

Chairman : Professor D L Georgala

Members : Dr G R Andrews
Dr D W G Brown
Ms S Davies
Professor M J Gasson
Professor T J Humphrey
Professor P R Hunter
Mrs P Jefford
Mr A Kyriakides
Professor P Mensah
Dr S J O'Brien
Mr B J Peirce
Mr D J T Piccaver
Dr Q D Sandifer
Dr T D Wyatt

Assessors : Mr P J R Gayford (DEFRA)
Dr R Skinner (FSA)

Secretariat : Dr J Hilton (Medical Secretary)
Mr C R Mylchreest (Administrative Secretary)

1. Chairman's introduction

1.1 The Chairman welcomed Members to the Committee's forty-fifth meeting. He explained that the main business would cover horizon scanning, advice on the on-farm control of *Campylobacter* in chickens, and the human health impact of the agricultural disposal of treated sewage sludge.

2. Apologies for absence

- 2.1 Apologies for absence were received from the following Members - Dr Hadley, Professor Johnston and Ms Lewis (the latter through illness).
- 2.2 Apologies were also received from 2 assessors – Dr McIlroy (NIDARD) and Dr Pryde (FSA/S).

3. Declarations of interest

- 3.1 The Chairman reminded Members of the need to declare their interests in any of the day's agenda items. No such declarations were made.

4. Minutes of the 44th meeting (ACM/MIN/44/REV.1)

- 4.1 The Chairman said that draft minutes of the 44th meeting had been circulated to Members in July. Comments received were marked in the tracked version (ACM/MIN/44 (REV.1)).
- 4.2 Members approved the amended minutes as a correct record of the 44th meeting. The Secretariat was asked to arrange for these to be posted on the Committee's website.
Action : Secretariat

5. Matters arising (ACM/596)

- 5.1 The Chairman drew Members' attention to information paper ACM/596 outlining action taken in connection with the various matters arising from the minutes of the 44th meeting. This was noted.

6. Horizon scanning (ACM/595)

- 6.1 The Chairman introduced ACM/595. He recalled that the Committee had had 2 previous discussions on horizon scanning. In March 2002, the Committee had held an initial discussion and Members had been asked to suggest topics for further discussion. A degree of prioritisation had then taken place in preparation for a further round of discussions in June 2002. Following that meeting, the Chairman had been asked to short-list some of the topics suggested by Members for more detailed consideration.
- 6.2 The Chairman said that he was now proposing further work, as outlined in ACM/595, on 3 topics – imported foods; opportunistic pathogens (including carriage in food animals); and overseas travel (and other changes in eating habits). The criteria for choosing these topics had been that they had attracted the interest or concern of Members; that it had seemed important that the Committee should inform itself of the current situation with regard to the topics; and that the topics seemed amenable to some form of practical action. It was not intended that other topics suggested by Members should be abandoned. Rather, the

intention was that these should be revisited at a future round of horizon scanning.

6.3 Professor Georgala said that his suggestion was that a series of small *Ad Hoc* Groups should be set up to gather information in connection with the 3 topics identified, form a view on the need for, and type of, action, and advise the full Committee accordingly. The Chairman sought the views of Members on whether they regarded the topics as sufficiently interesting and significant and, if so, whether they could support the action proposed.

6.4 Among the points to emerge in discussion were :-

- **opportunistic pathogens** : in terms of the ACMSF's work, these were defined as organisms which might constitute a potential new food poisoning threat in the shorter-term but which had not previously been regarded as problematical. Examples might be organisms like *Aeromonas*, *Salmonella* Newport or parasites. To avoid confusion, Members felt that it might be better to refer to "newly emerging pathogens", rather than to "opportunistic pathogens". The latter term carried a more precise definition in the clinical setting (eg. organisms which occurred as part of the normal body flora but which might adopt a pathogenic role if, for example, the normal antimicrobial defence mechanisms of the host had become impaired).

- **imported foods** : to avoid any overlap with overseas travel, Members felt that the focus should be on the commercial movement of large volumes of food around the globe. Food chain management systems in producing countries were important, as was traceability. Attention might also be given to the threat posed by illegal immigrants working in the food industry without proper health checks. Members noted that the Food Standards Agency (FSA) had established a new Imported Food Branch, amongst other things to take forward the Agency's ten point plan on imported food controls. Members would find it helpful to be briefed on what the Agency was doing on imported food controls, and also on traceability and on the constraints imposed by EU labelling legislation on country of origin marking and Agency activity in this area.

Action : Secretariat

- **overseas travel** : it was noted that this was a very large subject and the boundaries of the ACMSF's work would therefore have to be carefully delineated. There was plentiful expert food safety advice available to those travelling abroad and some information about the burden of diarrhoeal disease amongst those returning to the UK from foreign travel. However, little hard information was available about the aetiology of such infections, although many were presumed to be water-associated. Being able to differentiate between infections acquired abroad and in the UK was important in terms of developing the strategy for reducing foodborne disease. Travellers to tropical destinations could face different problems depending upon whether they were based in cities or in the countryside (where, eg, water supplies might be drawn from wells). Members noted

that the Epidemiology of Foodborne Infections Group was planning to review the data available from routine surveillance, which might assist their consideration of this issue.

- 6.5 Members agreed to the proposal to set up 3 *Ad Hoc* Groups to tackle these three topics. The Chairman undertook, with the assistance of the Secretariat, to consult individuals about membership of the various groups.
Action : Chairman/Secretariat

- 6.6 Members noted that new work was appearing in the medical and scientific literature in relation to the chronic sequelae of foodborne infection, associated particularly with irritable bowel syndrome. Indications were that sequelae could be very long-term. It was thus important for Government to recognise that infectious intestinal disease (IID) was not simply an acute infection. This was particularly important in assessing the cost of IID. Dr O'Brien undertook to provide a briefing paper for Members, concentrating on the most important food poisoning organisms. One Member drew attention to the problem of persistent diarrhoea (e. lasting more than 14 days), which fell into a category between acute and chronic, and was particularly important in relation to the health of children.

Action : Dr O'Brien

7. On-farm control measures against *Campylobacter* spp. in chickens (ACM/597)

- 7.1 The Chairman reminded Members that he had forewarned them of his intention to feed advice emanating from the *Campylobacter* Working Group into the Food Standards Agency as and when it became available, in view of the organism's importance in relation to the Agency's foodborne disease and chicken strategies. He said that the Working Group's early programme had centred on the gathering of information about the importance of broilers as a source of *Campylobacter* infections in humans. The Group had taken both oral and written evidence and had concluded that poultry did indeed play a significant part in the causal chain of events leading to human foodborne illness. Furthermore, the Working Group had concluded, on the basis of the evidence they had seen, that something could and should be done to address the problem. Some farms had shown that *Campylobacter* could be tackled successfully, on the basis of robust biosecurity, good husbandry and high standards of stockmanship. The performance of the worst operators needed to be raised to the standard of the best.

- 7.2 The Chairman invited Members to consider the Working Group's advice (ACM/597) and agree that it could be submitted to the FSA as advice of the full ACMSF. He said that the advice was provisional and would be supplemented as necessary as the Working Group continued its deliberations. The final advice, fully referenced, would form part of the Committee's published report and would come back to the Committee for their prior approval. In the ensuing discussion of ACM/597, Members offered the following comments :-

- it should be made clear that *Campylobacter* infection was easier to control in intensively reared birds than in extensively reared birds. Consumers needed to understand that organic production might be more open to contamination with organisms such as *Campylobacter* than that based on housed birds.
- in order to ensure that crates going on to farms were clean, washing/disinfection would be better carried out at the farm not, as now, at the processing plant. However, Members noted that this presented logistical difficulties, because there were many farms involved, which was why washing was done centrally at the slaughterhouse.
- it should be made clear that the evidence of the benefits of feed withdrawal was equivocal, and that the practice actually added to the stress the birds faced. It was felt that a false assumption might be that, because the practice yielded benefits in the red meat sector (in terms of clean carcass policies), similar benefits accrued in the case of poultry.
- Figure 1 might be improved in a number of ways, including by explaining the vertical axis and the terms “hock burn” and “pad burn”.
- the advice provided in ACM/597 was UK-orientated. But, given the importance of imported supplies to the UK market, and the potential shift by UK multiple retailers etc to sourcing from non-UK origins, there was a need to signal that UK hygiene practice and welfare standards might not always be replicated by non-UK producers.
- advantage was seen in pointing to the value of surveillance data in assessing the effectiveness of *Campylobacter* counter-measures. The FSA chicken survey had been the starting point for the Agency’s foodborne disease/chicken strategies. The use of industry data also provided a valuable monitoring tool (eg. as used by the ACMSF for its Second *Salmonella* in Eggs Report). It was felt that it would be useful to assess what proportion of producers were implementing best practice and what success they were achieving in reducing *Campylobacter* infection.
- if thinning was to be discontinued, a means needed to be found of reflecting the increased costs in the producer price, and avoiding placing home-produced poultry at a competitive disadvantage. This was something that the FSA might usefully address in its discussions with stakeholders. The Agency needed to emphasise that some producers were successfully reducing the incidence of *Campylobacter* in flocks and that that success had been associated with improvements in general flock cleanliness and health. Whilst there were costs associated with improvements in hygiene practice, there were also possible economic benefits.
- the ACMSF’s attitude to thinning needed to be clearly stated. In an ideal world, the Committee would favour discontinuation of the practice

which compromised the integrity of biosecurity measures. However, the poultry industry had made it very clear that the economics of production were dictating that, far from tailing off, this practice was actually increasing. The ACMSF was therefore clear that, if thinning was to continue, it was only acceptable in conjunction with very rigorous attention to all key biosecurity measures (crate washing, clothing, footwear, etc). Efforts to achieve this needed to be redoubled.

- it should be made clear that, whilst notifications of human *Campylobacter* infections had reached a plateau over the past 4 years or so, *Campylobacter* was still far and away the biggest cause of foodborne, bacterial IID in the UK.
- the paper required greater precision in relation to research requirements.

7.3 In conclusion, Members confirmed that they were content with the overall thrust of the draft and were also content for the advice to be submitted to the FSA, subject to some fine tuning of the text to reflect comments made. The Chairman agreed to carry this out in conjunction with Professor Humphrey and the Secretariat.

Action : Chairman/Professor Humphrey/Secretariat

7.4 The Chairman also drew Members' attention to ACM/599 which gave a brief progress report on the work of the *Campylobacter* Working Group since the Committee's 44th meeting.

8. Agricultural disposal of sewage sludge (ACM/598)

8.1 Dr Hilton introduced ACM/598. She said that the Government had initiated a wide-ranging review of the scientific literature, published in 1998, reflecting increasing concerns about the use of sewage sludge on agricultural land. The Government had announced its intention of revising current disposal regulations, to provide further safeguards against the transfer of pathogens from sludge into the food chain. A consultation paper on the proposed changes was imminent. However, the proposed changes had already been reflected in the Safe Sludge Matrix, which had been in voluntary use for some time. A three-stage research programme had been initiated to see whether the measures embodied in the Matrix adequately reflected a science-based approach to minimising risks. The first stage had involved method development; the second had looked at the reduction in pathogen levels provided by a range of sewage treatments. The third stage comprised a risk assessment. The ACMSF had already assisted with the peer review of the preliminary report of the microbiological aspects of the risk assessment for pathogens in biosolids, covering *Salmonella* and *Listeria monocytogenes*. The risk assessment for other pathogens was expected soon.

- 8.2 Dr Hilton drew attention to ACM/606 showing that conventional sewage treatments generally gave a 2 log reduction in pathogens, whilst enhanced treatments gave a reduction of 6 logs or better. Levels of pathogens found in sludge had been significantly below 6 logs. Members' advice was sought on the adequacy of the Safe Sludge Matrix in the light of the results of the research programme.
- 8.3 While the difficulty of offering a definitive view in the absence of the risk assessment was noted, Members felt that the Matrix followed a very cautious approach. It was felt that the use in one part of the Matrix of the term "salad" as a synonym for ready to eat vegetables was potentially misleading, especially in relation to permitted application and harvesting intervals. However, generally speaking, Members were satisfied that the sewage sludge applied to agricultural land in accordance with the requirements of the Safe Sludge Matrix should not present any unacceptable risks to food safety.

9. Any other business

- 9.1 A number of substantive issues were raised.
- 9.2 One Member wondered whether the Committee had given any consideration to the microbiological status of fresh fish at wholesale markets. In discussion, the general view emerged that fresh cold water fish were rarely implicated in IID in the UK. There had from time to time been small-scale, toxin-related problems associated with scombroid fish.
- 9.3 One Member drew attention to the importance of consumers realising the dangers of holding frozen or cool chain food items for prolonged periods in car boots. It was noted that this had been publicised in Government food safety literature and should feature more prominently in the FSA's food hygiene initiative as the focus of that broadened to include more specific guidance on temperature control.
- 9.4 Finally, 2 Members expressed reservations about the quality of the foodborne disease section of the Department of Health's Report on the Health Effects of Climate Change in the UK (extracts of which were provided for the information of Members as ACM/604).

10. Dates of future meetings

- 10.1 The Chairman reminded Members that the Committee's next (46th) meeting would be held at Trinity House and would be open to members of the public. Furthermore, he confirmed that, as recommended in the Report of the FSA's Review of the Scientific Committees, in future all of the ACMSF's quarterly meetings would be held in public.
- 10.2 The Secretariat provided further elaboration. Reflecting budgetary constraints, the first 3 of the Committee's quarterly meetings each year (to be held in March, June and September) would be held in Aviation

House. As space there was fairly tight, it might prove necessary to restrict numbers of members of the public attending. The fourth quarterly meeting each year (held in December) would be held externally, and there was therefore unlikely to be any need to restrict numbers attending.

- 10.3 In response to Members' questions, the Chairman confirmed that the intention was to conduct all of the business of the quarterly meetings in open session, in line with the FSA's wishes. It was not proposed to hold closed sessions to discuss particular agenda items. Professor Georgala reminded Members that some very sensitive issues had been discussed at previous open meetings (including *Clostridium botulinum* and *Mycobacterium avium* subsp. *paratuberculosis*). These had not given rise to food scare stories, nor had the presence of members of the public inhibited the Committee's consideration of the issues. Indeed, it was felt that the discussion had actually helped clarify the issues for those members of the public present.