

**DRAFT MINUTES OF THE FIFTY-SIXTH MEETING OF THE ADVISORY
COMMITTEE ON THE MICROBIOLOGICAL SAFETY OF FOOD HELD ON 9
JUNE 2005 AT THE NEW CONNAUGHT ROOMS, 61-65 GREAT QUEEN
STREET, LONDON WC2B 5DA AT 10.30 A.M.**

Present

- Chairman : Professor B Reilly
- Members : Mr J Bassett
Dr D Brown
Professor P Hunter
Mr A Kyriakides
Ms E Lewis
Mr P McMullin
Mr P Mepham
Professor S O'Brien
Professor L Piddock
Dr Q Sandifer
Professor P Williams
- Assessors : Mr P Gayford (Defra)
Dr J Hilton (FSA)
- Secretariat : Dr L Foster (Administrative Secretary)
Dr P Cook (Scientific Secretary)
Mrs E Stretton
- Others : Dr S Stringer (IFR): agenda item 6
Ms G Hoad (FSA): agenda item 6
Ms J Webster (FSA): agenda item 6
Dr R Skinner (Consultant): agenda item 7
Mrs S Appleby (FSA): agenda item 7
Mr S Pugh (FSA): agenda item 9
Members of the public – see Annex I

1. Chairman's introduction

- 1.1 The Chairman welcomed ACMSF Members and members of the public to the 56th meeting of the Committee.

1.2 The Chairman also welcomed Dr Sandra Stringer from the Institute of Food Research, Geraldine Hoad and Jacqui Webster (both FSA) who would be presenting agenda item 6. Dr Roger Skinner (consultant) and Mrs Sarah Appleby (FSA) were also welcomed, and would be presenting agenda item 7. Lastly, the Chairman welcomed Stephen Pugh (FSA) who would be presenting agenda item 9.

1.3 The Chairman asked Members to identify any items for discussion under any other business at the end of the meeting. There were none.

2 Apologies for absence

2.1 Apologies for absence were received from Professor Mike Gasson, Dr Kay Hadley, Professor Tom Humphrey, Mr Sue Davies and Mr Sydney Neil.

3 Declarations of interests

3.1 The Chairman reminded the Committee of the need to declare any conflicts of interests relating to items on the agenda. Mr Kyriakides reported, in connection with agenda item 6, that Sainsbury's was working on reducing product salt levels. He also reported that Sainsbury's sold minimally processed baby food (agenda item 8) and eggs (agenda item 9). Similarly, Mr Bassett reported that Unilever was also involved in salt reduction work (agenda item 6). Mr McMullin reported that his some of his clients were major egg producers in the UK (agenda item 9).

4 Minutes of the 55th meeting (ACM/MIN/55)

4.1 Members approved ACM/MIN/55 as a correct record of the previous meeting subject to one minor amendment to amend the wording of paragraph 8.2, line 8 down to read 'Veterinary Medicines Directorate'.

The Secretariat was asked to arrange for these final minutes to be posted on the Committee's website.

Action : Secretariat

5 Matters arising

5.1 The Chairman drew attention to the Secretariat information paper ACM/738 detailing matters arising from previous meetings. The Chairman informed members that individual actions would be kept on record until the outcome of the matter arising was known.

Action : Secretariat

5.2 There were no other matters arising identified by members of the Committee.

Salt reduction – impact on food safety

6.1 At the Chairman's invitation Ms Hoad and Ms Webster introduced agenda item 6, which comprised a presentation by Dr Sandra Stringer from the Institute of Food Research. Ms Hoad outlined paper ACM/739 explaining that the Food Standards Agency and the Department of Health have been working to secure reductions in salt levels in foods to help deliver the FSA's target of reducing salt consumption to 6g by 2010. She added that salt could be an important factor in the safety of food, and, as such, the FSA did not intend that salt reduction should compromise product safety. She outlined the basis of the IFR review in terms of supporting development of guidance on salt reduction for smaller companies.

6.2 Summing up, she sought the Committees' view on further work was needed in light of the IFR Report's conclusions. She also asked the Committee to comment on:

- the scope for reducing the level of salt in certain foods without impacting on microbiological safety;

- the ability of industry to undertake salt reductions, particularly small manufacturers;
- how to address the needs of small manufacturers e.g. by the development of guidance.

6.3 Ms Webster (FSA) outlined the scientific basis for the salt target as agreed by government and industry, and the work carried out with industry to assess the feasibility of proposed salt reductions. She explained that work was currently in progress to develop specific targets for industry to work towards, which would be published later this year. She also informed Members of the next phase of a public information Campaign to raise consumer awareness of the need to reduce salt intakes.

6.4 Dr Stringer outlined the aim of the review, microbiological considerations associated with reducing added salt and the effects of salt reduction on the growth of pathogens. She also summarised the main conclusions of the report.

6.5 In the ensuing discussion of the paper, a number of points were made:

- Members queried how small producers would take account of all the considerations highlighted in the IFR modelling, commenting that some small producers may not be aware of the microbiological implications of changing formulations. Members also commented that changes in product formulations could lead to an increase in thermal processing requirements of products. Members noted that these issues would need to be considered as part of the consultation on the salt targets.
- The importance of identifying key organisms and food groups that have the greatest significance in terms of salt reduction and impact on product safety was discussed. Members commented that minor changes in salt formulation could have a large impact on microbial growth of, for example, *Clostridium botulinum* in bacon and cured meats.

- Members discussed the accuracy of the model and the validity of the data used to build the model. The Committee was informed that the model was based on data from a wide range of European and US sources, and that all the predictive curves used in the model had been validated.
- Measurement of salt (sodium) levels needed to be standardised. Members identified a need for focussed research work to assess the microbiological implications associated with the replacement of sodium with potassium in foods.

6.6 The Chairman thanked Dr Stringer for her presentation. In summing up, he noted:

- the Committee's recommendation for additional work to refine the modelling, including the need to include challenge testing focussing down on *Clostridium botulinum*;
- the need to simplify the model to be more user-friendly for the small producer;
- the Committees' view that FSA needs to work with industry to ensure that guidance is available for small producers. Industry should not rush into making changes to salt levels without considering the impact of salt reduction on the microbiological safety of the specific product;
- that industry and the Agency should work together to review current salt levels with a view to establishing a baseline in individual products against which changes in salt formulations could be measured.

7 Illegal importation of meat – public health risks (ACM/741)

7.1 At the Chairman's invitation Dr Skinner (consultant) introduced paper ACM/741, which reviewed the implications for public health in terms of risk of illness from handling and consumption of bush meat brought into the UK. Dr Skinner explained that the report had been prepared at the request of the Food Standards Agency to examine possible microbiological hazards linked to the consumption and handling of

imported bush meat. The report was not intended to be a formal risk assessment. Due to the lack of published data available, the views expressed in the document aimed to indicate, in a qualitative way, the likelihood of there being a risk associated with the hazards examined. A second report examining UK controls in place to tackle illegally imported meat was expected to be presented to the Committee at a later date.

- 7.2 Members were informed that the outcome of the report indicated that the risk from ingestion of bush meat cooked in a traditional manner (slow stewing) was considered to be extremely low. There might be a very low risk in relation to monkey pox virus for those preparing bush meat for cooking. The greatest risk from microbiological hazards was due to cross-contamination of other foods in the kitchen with common foodborne disease organisms that may be present on the bush meat prior to cooking.
- 7.3 The Chairman informed the Committee that the *ad hoc* Imported Foods Group had already considered the report, although this had been carried out in correspondence as it had not been possible to convene a meeting of the Group. He invited the Chair of this *ad hoc* Group (Mr Mepham), to present the Group's views.
- 7.4 Mr Mepham thanked the FSA for the opportunity to comment on the report. The Group accepted that a formal risk assessment was not possible due to the lack of available data. However, in an attempt to gather more evidence, consideration should be given to analytical examination of imported meat seized at, for example, airports. The assumption that ingestion of traditionally cooked food presented a low risk was questioned, as cooking methods may vary and therefore such a control method could not be relied upon. The Group was also concerned about risks from unknown hazards. In summing up, Mr Mepham reiterated that more analytically-based evidence was required before the Group could provide a considered assessment of the risks.

- 7.5 Mr Bassett supported the comments made with regard to traditional cooking controls. However, he cautioned against blanket testing of meat. Professor Hunter noted that the emergence of zoonotic diseases was a major risk factor to human health in hunter-gatherer populations.
- 7.6 Dr Brown stated that the comments made in the report that there may be a very low risk in relation to monkey pox virus for those handling bush meat in the preparation of cooking were reasonable. He added that as viruses did not multiply and were heat labile in food, the greatest risk of exposure was at the time the animal was captured or butchered. He also agreed with the view expressed in the paper that bush meat presented a very low risk of viral infection to the UK population.
- 7.7 Dr Hilton requested more specific advice from the ACMSF on the precise nature of their concerns; in particular she requested advice that distinguished between risks of foodborne transmission of viruses, and risks of transmission during preparation and handling of food. She also asked for more specific advice on the nature of the analyses they would consider useful, commenting that testing of foods for microbiological agents might not be very useful in terms of assessing the microbiological risk to human health from bush meat. The Chairman suggested that an analysis of the nature and species of the meat seized by Customs would be a useful starting point to begin to consider the likelihood of pathogen presence and survival.
- 7.8 In summing up, the Chairman informed Members that the issues raised by the FSA in relation to Dr Skinner's report would be discussed when a second report on illegal import controls was presented to the ACMSF at a future meeting. The Committee also agreed to keep bush meat on their agenda as part of horizon scanning activities. He added that it would be useful to take advantage of the availability of seized meat to help quantify risk, exposure characterisation and animal origin, requesting that the FSA consider this matter further.

Action: FSA

8 Infant botulism (ACM/742)

8.1 At the Chairman's invitation Professor O'Brien (Chair, *ad hoc* Group on Infant Botulism) introduced paper ACM/742. She thanked the members of the *ad hoc* Group on Infant Botulism for their contributions and in particular its co-opted members Professor Mike Peck (Institute of Food Research) and Dr Mike Stringer (Chipping Campden Food Research Association). She added that paper ACM/742 was a draft report, and that any comments made by the Committee would be taken into account before the report was finalised. Professor O'Brien outlined the remit of the Group explaining that the report reviewed the potential risk to human health associated with the consumption of chilled or frozen baby foods, particularly in relation to *Clostridium botulinum* and infant botulism. She also outlined the approach adopted to carry out the review.

8.2 Professor O'Brien summarised the key conclusions from the report, noting that:

- having reviewed the microbiology and epidemiology of infant botulism, there was no evidence to suggest that chilled and frozen infant weaning foods have been implicated in causing infant botulism;
- there were mixed views within the scientific community as to whether some cases of Sudden Infant Death Syndrome (SIDS) could be misdiagnosis of extreme forms of infant botulism. There were no UK data available, and as such, there might be merit in assessing the link between SIDS and infant botulism on a UK basis;
- any minimally processed chilled or frozen baby food intended for infants should have suitable controls in place to destroy non-proteolytic *C. botulinum* spores or prevent any growth during the shelf life of the product/after defrosting (if frozen). Procedures must also be in place to prevent recontamination of minimally processed baby foods after heat processing;
- a code of practice for the safe production of minimally processed baby foods should be developed;

- Local Authorities need to be aware of the risks of infant botulism and there was a need for consistent guidance for EHOs to inform baby food manufacturers. Existing advice on food safety management based on HACCP should be reiterated. There was also a need for key controls and good manufacturing practice to be observed during the manufacturing process;
- a sub-Group carried out a risk assessment that was subjected to peer-review. Based on this risk assessment the *ad hoc* Group concluded that chilled and frozen infant foods were not a major source of infant botulism, and that these products were no more dangerous than other products already on the market. Further, if the controls to destroy non-proteolytic *C. botulinum* were in place, there was no reason why manufacturers should not be allowed to market these foods. The Group also recommended that there was further merit in carrying out an extended risk assessment exercise. Finally the Sub-Group recommended that, based on a consideration of risk, honey should not be added to foods specifically targeted at infants under 12 months of age (unless these foods received a full botulinum cook or an equivalent process control).

8.3 The Chairman thanked Professor O'Brien for her report, which the Committee considered to be thorough and comprehensive. In summing up, he confirmed that it was the wish of the Committee to accept the draft report and that it would be issued by the ACMSF for public consultation, with a view to finalisation at the end of the year.

Action: Secretariat

9 Egg advice - update (ACM/743)

9.1 At the Chairman's invitation, Mr Pugh (FSA) presented paper ACM/743, updating Members on developments in relation to advice on egg consumption and use.

9.2 Mr Pugh outlined developments that had taken place with the Commission, noting that the National Outbreak Control Team Dossier was

presented to the Commission in December. The FSA was awaiting a response. He added that the survey of non-UK eggs at retail sale was currently in the first few months of sampling, and a survey of catering eggs was under development.

- 9.3 The Chairman thanked Mr Pugh for his update, agreeing that it would be premature to review ACMSF advice before the surveys had been completed.

10. Committee sub-groups

Infant botulism

Botulism in cattle

- 10.1 The Chairman informed Members that four meetings of this Group had taken place to date. The last meeting was held on 23 March. At this meeting a detailed discussion of contributions for the draft report took place. The Group debated the use of the mouse assay test as an aid to clinical diagnosis and management of incidents. Issues surrounding the current voluntary restriction on milk and meat from farms where cattle botulism was suspected were also discussed. The Group was currently finalising the text by correspondence. It was anticipated that the Group would present the outcome of its deliberations to the Committee at the September ACMSF meeting.

Newly-emerging pathogens

- 10.2 At the Chairman's invitation, Professor Hunter reported that there had been limited activity via the message board as they were not aware of any major threats to the food supply.

10.3 The Chairman thanked all the Chairs of the Sub Groups for their contributions.

Safe Cooking of burgers

10.4 At the Chairman's invitation, Professor Williams reminded Members that this short-life *ad hoc* Group was set up following an approach to the FSA by a US burger chain concerning the stringent UK time/temperature cooking requirements for burgers. The first meeting of this Group took place on 23 March.

10.5 The Group discussed the scope and approach to the work and agreed its Terms of Reference. Members identified what information and evidence was required to support their deliberations. This included a review of the literature, information on global epidemiology and modelling investigations. Appropriate sources of oral evidence were also identified (caterers, meat producers). The next meeting of this Group was scheduled to take place over the summer period.

Working Group on surveillance

10.6 In the absence of Professor Humphrey, Professor Reilly briefly reported that the Surveillance Working Group had recently been asked to comment on the draft survey protocols for the testing of non-UK eggs entering into retail and catering for the presence of *Salmonella*.

11. Dates of future meetings (ACM/744)

11.1 The Chairman brought to Members' attention paper ACM/744 which listed the dates for remaining ACMSF meetings in 2005.

13. **Any other business**

13.1 The Chairman informed Members that following her promotion, Ms Hoad would be moving to a new post within the Agency. He thanked Ms Hoad for her support over several years as a long standing Member of the Scientific Secretariat.

13.2 The Chairman also recorded his thanks on behalf of the ACMSF, to the Committee's Secretariat for the smooth organisation of the Committee's meetings, and provision of high quality papers for discussion.

14. **Public questions and answers**

14.1 The Chairman invited the members of the public present to ask any questions they might have on the work of the Committee, or to make any observations.

14.2 Mr Tom Miller (Food Regulatory Affairs consultant) referred to Annex 3 of May 2005 Board paper on Foodborne Disease recently published on the FSA web site (not circulated for this meeting), noting the number of deaths attributed to *Clostridium perfringens*.

14.3 Dr Hilton replied that *Clostridium perfringens* data was based on laboratory reports. Special testing was required to detect the organism and its toxin, and the likelihood of these being carried out depended upon a number of issues. Therefore the data was easily influenced by the number of outbreaks in which testing was carried out. Professor O'Brien added that a recently published paper in the journal of Emerging Infectious Diseases used a variety of data sources to monitor the incidence of foodborne disease. Hospital data on disease severity and deaths was subjected to certain limitations, whereas information on deaths extrapolated from outbreaks was more reliable. Deaths attributed to *Clostridium perfringens* tended to occur in the elderly.

- 14.4 The Chairman reminded the Committee of the limitations of UK surveillance systems, stressing the importance of ensuring such systems were adequately resourced.

15. There being no further business, the Chairman thanked Members and members of the public for attending and closed the meeting.

**LIST OF MEMBERS OF THE PUBLIC ATTENDING THE ACMSF'S
55th MEETING**

Mr T Burrough	
Dr C Chan	FSA
Mrs K Cheesman	Food & Drink Federation
Mrs O Coffey	FSA
Mr J Cottrill	FSA
Kirsty Dinsdale	ADAS
Kaarin Goodburn	Chilled Food Association
Mr N Kingcott	Consultant
Ashleigh Lyon	Greggs
Dr B Lund	IFR
Mr K Matthews	Meat & Livestock Commission
David McCleery	Food Safety Promotion Board
Tom Miller	Food Regulatory Affairs Consulting Ltd
Dr B Mitchell	HPA
Ms G Mulholland	Defra
Mr R Nugent	DirectTable Foods Ltd
Annette Sansom	CCFRA
Mr T Sawers	Tulip Ltd
Mr R Westhead	FSA