

**Advisory Committee on the  
Microbiological Safety of Food**

# **Annual Report 2001**

**Advises the Food Standards Agency on the  
Microbiological Safety of Food**



The Advisory Committee on the Microbiological Safety of Food (ACMSF) was established in 1990 to provide the Government with independent expert advice on the microbiological safety of food.

The Committee's terms of reference are :-

**to assess the risk to humans from microorganisms which are used, or occur, in or on food, and to advise the Food Standards Agency on any matters relating to the microbiological safety of food.**

The various issues addressed by the Committee are detailed in its previous Annual Reports<sup>1-9</sup> and in a series of subject-specific reports.<sup>10-19</sup>

## Contents

Subject	Paragraph
<b>Foreword</b>	
<b>Introduction</b>	<b>1</b>
<b>Administrative matters</b>	<b>2 –22</b>
Committee and Group meetings	2 -7
Membership	8 –17
Re-appointment of Chairman	9
Retirements	10-11
Re-appointment of Members	12
Appointment of new Members	13
Periods of appointment	14
Spread of expertise	15-16
Membership and Register of Members' Interests	17
Openness	18-21
Improving public access	18-19
First open meeting	20
Second open meeting	21
Work of the other advisory committees and cross-membership	22
<b>The Committee's work in 2001</b>	<b>23-66</b>
<i>Salmonella</i> in eggs	23-25
Second Report on <i>Salmonella</i> in Eggs	23-24
Safe use of eggs by caterers	25
Food Standards Agency foodborne disease and poultry strategies	26-32

Foodborne disease strategy	26-28
Poultry strategy	29-32
<i>Campylobacter</i>	33-34
<i>Escherichia coli</i>	35-37
Joint FSA (Scotland)/Scottish Executive <i>E. coli</i> O157 Task Force	35-36
IVC News	37
<i>Mycobacterium avium</i> subsp. <i>paratuberculosis</i> (MAP) in milk, and Johne's disease	38-39
<i>Mycobacterium bovis</i>	40-41
<i>Clostridium botulinum</i>	42
High pressure processing	43-44
Ready-to-eat fruit and vegetables	45-46
Surveillance	47-51
Surveillance Working Group	47-48
Ready-to-eat foods with added spices	49
Microbiological Food Surveillance Group	50
Epidemiology of Foodborne Infections Group	51
Consultation exercises	52-62
Food Standards Agency review of the scientific advisory committees	53-54
Review of risk procedures	55
<i>Listeria monocytogenes</i> control measures	56
BSE Inquiry	57
Code of practice for scientific advisory committees	58
Distance selling	59
Use of human experimental data	60

Management of foodborne outbreaks	61
Review of FSA research and surveillance	62
Foot and Mouth Disease	63
Agricultural disposal of sewage sludge	64-65
Information papers	66
<b>A forward look</b>	<b>67-72</b>
Annex I	Membership of the Advisory Committee, its Working Groups and <i>ad hoc</i> groups
Annex II	Register of Members' Interests
Annex III	Surveillance Working Group : comments on draft protocol for Food Standards Agency (FSA) <i>Salmonella</i> in eggs survey
Annex IV	FSA review of scientific advisory committees.
Annex V	Review of risk procedures used by the Government's advisory committees dealing with food safety
Annex VI	Control of <i>Listeria monocytogenes</i> in ready-to-eat foods
Annex VII	Public consultation on the Government's interim response to the BSE Inquiry
Annex VIII	Code of practice for scientific advisory committees
Annex IX	Distance selling : sales of food and animal feed via the internet or by mail order
Annex X	Review of the Food Standards Agency's research and surveillance
Annex XI	References



## Foreword

1. I am pleased to present the Annual Report of the Advisory Committee on the Microbiological Safety of Food (ACMSF) for the calendar year 2001.
2. This has been a year marked by great change in the membership of the Committee. Four Members whose terms of appointment ended on 31 March were re-appointed. I am very pleased to have them back with us. Nine Members retired. I am extremely grateful to those 9 individuals, some of whom had been with the ACMSF since its inception in 1990, and all of whom had contributed greatly to the work of the Committee and its outputs.
3. In accordance with Nolan principles, the Food Standards Agency (FSA) advertised to fill the vacancies created by these retirements and also to add to the breadth and diversity of the Committee's expertise by recruiting a virologist, someone with experience of small and medium sized enterprises, and an overseas representative. The advertisements generated a tremendous amount of interest. The Secretariat sent out almost 250 information packs in response to enquiries received, and we attracted over 100 applications. These were whittled down to 2 dozen candidates who were interviewed. I was pleased to participate, as Chairman of the ACMSF, in the sift and interviewing processes.
4. Standards were very high. Thirteen new Members were ultimately appointed by the FSA. I commiserate with those who were not appointed, and thank them for putting themselves through an exacting selection process. To our new colleagues, I extend a warm welcome. I am confident that they will find the work of the Committee varied, interesting, challenging and very worthwhile.
5. Despite the inevitable complications caused by the 2001 appointments round, the Committee has been able to conduct its business with minimal disruption. Our Second Report on *Salmonella* in Eggs<sup>18</sup> went forward to the FSA in January and was published on 9 May. We held a well-attended media briefing to coincide with the launch of the Report.
6. I noted in last year's Annual Report<sup>9</sup> that *Salmonella* infections in humans had declined since 1998, and that we believed that steps taken by the industry to reduce *Salmonella* in eggs had contributed to this improvement. We now look forward to the planned FSA *Salmonella* in eggs prevalence survey which we recommended in our Second *Salmonella* in Eggs Report.<sup>18</sup>
7. This year, Members of the Committee were very pleased to note the results of the FSA's baseline survey of *Salmonella* in UK retail chicken, published in August. The substantial drop in the occurrence of *Salmonella* in retail chicken is in line with our vision of what was achievable which we

included in the 1996 ACMSF Report on Poultry Meat,<sup>14</sup> and represents a notable advance in improving consumer protection.

8. The Committee completed a review of the possible public health risks to consumers of meat from cattle with evidence of *Mycobacterium bovis* infection.<sup>19</sup> This had been requested by the FSA. The Committee's conclusion was that the risk, if any, is very low. However, we made a number of recommendations to the FSA and offered for consideration a number of management options for reducing the risk still further. I am grateful to the *M. bovis* Working Group, and its Chairman – Professor Mac Johnston – for their hard work.
9. The ACMSF's next major task will be to take an in-depth look at *Campylobacter*, which is now the biggest identified cause of bacterial infectious intestinal disease in the UK. Despite this, we still know too little about the origins of *Campylobacter* infection, the routes of transmission, and the mechanisms by which the organism causes disease. We have decided to set up a Working Group, which will begin its deliberations early in 2002, to identify any important gaps and omissions in what has been done to reduce *Campylobacter* in food and food sources, and to develop advice which will be of use to the FSA in evolving its strategy for reducing foodborne disease. To set the ball rolling, a workshop is planned for February 2002 to help focus attention on key questions and whether or not these have been satisfactorily addressed.
10. If I may touch on a few of the other topics addressed by the Committee during 2001, we revisited *Mycobacterium avium* subsp. *paratuberculosis* (MAP). We had previously recommended that the FSA should convene a group of stakeholders to explore possible control measures. This took the form of a conference which was held in May. In addition to attending the MAP conference, Members had the opportunity to consider and comment upon the Agency's draft strategy for the control of the organism in milk. We also had the chance to examine the revised guidance on vacuum packaging and associated processes produced by the FSA and designed to protect against the risk of growth and toxin production by *Clostridium botulinum* in such food products. We also received an interesting and informative update from the Public Health Laboratory Service on the microbiological status of fresh fruit and vegetables.
11. The standing Surveillance Working Group was reconstituted, following the changes in ACMSF membership from 1 April which I have already mentioned. The Group's first task was to comment on the draft protocol for the FSA's planned prevalence survey of *Salmonella* in UK shell eggs. This is the survey we recommended in our Second Report on *Salmonella* in Eggs.<sup>18</sup>
12. I am very pleased to report that the Committee continued its drive to open up its work to greater public scrutiny. Agendas, most papers, and the minutes of our meetings have, for some time now, been posted on our website; and we held our second open meeting in December. As with our

first open meeting in December 2000, we did not attempt to construct a special agenda for the occasion. Instead we invited the public to attend what was one of our routine quarterly meetings, and conducted business in the usual way. The agenda contained some substantive food safety issues, including the microbiological status of fresh fruit and vegetables, the draft MAP strategy, and *Clostridium botulinum* guidance. As in 2000, around 30 members of the public attended. Again, we included a time slot at the end of the meeting to allow members of the public to ask questions about our work or to comment on microbiological food safety issues. The bulk of questions posed and statements made related to MAP, reflecting the considerable interest generated by this topic.

13. With another year behind us, the Committee looks forward in anticipation to what 2002 will bring. We expect to learn the outcome of the FSA's review of the scientific advisory committees and will be able to evaluate what impact that will have on the ACMSF. I am sure that I speak for the whole membership when I say that we fully recognise the importance of the Committee evolving in parallel with changing events and demands.
14. May I finally record my thanks to Members of the Committee and its Working Groups, past and present. I greatly value their contributions to ACMSF business. I am also most grateful to the Secretariat for their essential role in the effective operation of the Committee.

**Professor Douglas L Georgala**  
**Chairman**



## **Introduction**

1. This is the tenth Annual Report of the Advisory Committee on the Microbiological Safety of Food (ACMSF) and covers the calendar year 2001.



## Chapter 1 : Administrative Matters

### Committee and Group meetings

2. The full Committee met three times in 2001 – on 21 March, 18 October and 5 December. All meetings were chaired by Professor Georgala. The 5 December meeting was the Committee's second open meeting (see paragraph 21).
3. The Working Group on *Mycobacterium bovis* met three times, under the chairmanship of Professor Johnston, who also held a number of bilateral drafting sessions with the Secretariat.
4. The standing Surveillance Working Group, met in February (see paragraphs 47-48) under the chairmanship of Mr Clarke. Following the extensive changes in ACMSF membership from 1 April (see paragraphs 10-13), the Surveillance Working Group was re-constituted (with the same terms of reference – see Annex I) under the chairmanship of Professor Humphrey.
5. The *Ad Hoc* Group on Sewage Sludge met in February, under the chairmanship of Dr Simmons (see paragraphs 64-65). Following the changes in ACMSF membership from 1 April, the Group was reconstituted (with the same terms of reference – see Annex I) under the chairmanship of Dr Wyatt.
6. The Committee agreed to set up a new *Campylobacter* Working Group (see paragraph 33).
7. Dr Jon Bell, Director of Food Safety Policy and Deputy Chief Executive of the Food Standards Agency (FSA), represented FSA Chairman Sir John Krebs at the March meeting of the full Committee. Dr Bell said that food safety was right at the top of the FSA's agenda. Microbiological safety was a key element and the Agency regarded the ACMSF as a frontline source of advice. The contribution made by ACMSF Members, and the time they gave over to Committee business, for little personal reward, were greatly valued. The Agency had been very interested in the outcome of the ACMSF's first open meeting (see paragraph 20). The Agency was fully committed to the principle of openness and was supportive of the steps taken by the ACMSF. Dr Bell said that the Agency would be embarking upon a review of the interaction between the FSA and the scientific advisory committees, including the ACMSF (see paragraphs 53-54). This did not imply dissatisfaction with the service the committees were providing. Rather, the review was intended to examine whether the current set up was appropriate to the needs of both the Agency and the committees. Dr Bell envisaged that the ACMSF would continue to advise the FSA for many years to come.

## Membership

8. Appointments to the ACMSF are made by the FSA, following consultation with UK Health Ministers (ie. the “Appropriate Authorities”), in compliance with Paragraph 3(1) of Schedule 2 to the Food Standards Act 1999. The Agency has decided that appointments to the ACMSF should be made in accordance with Nolan principles<sup>20</sup> and the guidance issued by the Office of the Commissioner for Public Appointments (OCPA).<sup>21</sup> Strictly speaking, the FSA is not bound, in making appointments to the ACMSF, to follow OCPA guidance. This is because the guidelines only cover appointments made by Ministers, and ACMSF appointments are not made by Ministers. The Agency has nevertheless decided that it would be right to comply with OCPA guidance.

### Re-appointment of Chairman

9. Professor Georgala was re-appointed as Chairman of the ACMSF for a further 3 year term commencing on 1 April 2001.<sup>22</sup>

### Retirements

10. The terms of appointment of the following nine Members of the Committee ended on 31 March 2001 :-

- Mr David Clarke
- Dr Tom Clayton
- Mr Derrick Kilsby
- Dr Michael Painter
- Professor Stephen Palmer
- Dr Terry Roberts
- Dr Norman Simmons
- Dr John Stevens
- Mrs Beti Wyn Thomas.

11. All these Members retired from the Committee. Professor Georgala placed on record his gratitude for the tremendous contribution the retiring Members had made to the work of the Committee and its Working Groups over the years. He expressed particular appreciation for the willingness they had displayed to work as part of a team and for their assistance in managing some long and difficult agendas. Professor Georgala offered his best wishes for their future endeavours.

### Re-appointment of Members

12. Four Members of the Committee whose terms of appointment also expired on 31 March 2001 were re-appointed for further terms from 1 April 2001<sup>23</sup> :-

- Mrs Patricia Jefford, until 31 March 2003

- Ms Eva Lewis, until 31 March 2003
- Professor Mac Johnston, until 31 March 2004
- Dr Tim Wyatt, until 31 March 2004.

### **Appointment of new Members**

13. In order to fill the vacancies which had arisen in the Committee's membership, advertisements were placed in the Guardian, New Scientist and British Medical Journal. More than 100 applications were received and these were sifted by a panel chaired by Dr Jon Bell (FSA) and comprising Professor Georgala (in his capacity as Chairman of the ACMSF) and Mrs Fiona McConnell, an independent assessor. The panel short-listed 24 candidates for interview. Interviews were conducted over 5 days in July and August, following which, recommendations for appointments were made to the Chairman of the Food Standards Agency. Following the necessary consultations (see paragraph 8), the following appointments were announced,<sup>23</sup> to take effect from 1 April 2001 :

- Dr Geoffrey Andrews, until 31 March 2004
- Dr David Brown, until 31 March 2005
- Ms Susan Davies, until 31 March 2005
- Professor Michael Gasson, until 31 March 2005
- Dr Katherine Hadley, until 31 March 2004
- Professor Tom Humphrey, until 31 March 2005
- Professor Paul Hunter, until 31 March 2004
- Mr Alec Kyriakides, until 31 March 2005
- Professor Patience Mensah, until 31 March 2003
- Dr Sarah O'Brien, until 31 March 2005
- Mr Brian Peirce, until 31 March 2003
- Mr David Piccaver, until 31 March 2003
- Dr Quentin Sandifer, until 31 March 2004.

### **Periods of appointment**

14. To ensure continuity, appointments have been staggered so that only a proportion of Members falls to be re-appointed or retire each year.

### **Spread of expertise**

15. Following the 2001 appointments round, a wide range of skills and expertise continues to be available to the Committee. Its Members are drawn from commercial catering, environmental health, food microbiology, food processing, food research, food retailing, human epidemiology, medical microbiology, public health medicine, veterinary medicine, and virology. The Committee also has an overseas representative, a Member with knowledge of small and medium sized enterprises, and two lay/consumer Members.

16. All Members have been appointed on an individual basis, for their personal expertise and experience, not to represent a particular interest.

### **Membership and Register of Interests**

17. Full details of the Committee and its Working Groups appear in Annex I. A Register of Members' Interests is at Annex II. In addition to the interests notified to the Secretariat and recorded in the Register of Interests, Members are required to declare any direct commercial interests in matters under discussion at each meeting, in accordance with the provisions of the ACMSF's Code of Practice (see Annual Report 1999, Annex IV<sup>8</sup>). Declarations made are recorded in the minutes of the meeting concerned.

## **Openness**

### **Improving public access**

18. The ACMSF is committed to improving public access to its work. The Committee's agendas, minutes and papers (subject to certain exceptions on grounds of commercial or other sensitivity) are all publicly-available and are posted on the FSA website at :

**<<http://www.food.gov.uk/science/ouradvisors/microbiogsafety>>**

19. The Committee also has an individual e-mail address :

**<[acmsf@foodstandards.gsi.gov.uk](mailto:acmsf@foodstandards.gsi.gov.uk)>**

### **First open meeting**

20. During 2001, the Committee reviewed the outcome of its first open meeting, held on 5 December 2000 (see Annual Report 2000, paragraph 13<sup>9</sup>). The general view amongst Members was that the meeting had been successful and that the presence of members of the public had not served to inhibit the conduct of Committee business. While some of the topics discussed could have given rise to food scare stories, Members felt that the discussion had helped clarify the issues for members of the public present. Members also considered that the public question and answer session had been very worthwhile. Members made a number of suggestions for future open meetings. These are recorded in the minutes of the meeting (ACM/MIN/40) which are available on the Committee's website.

### **Second open meeting**

21. The Committee held its second open meeting on 5 December 2001, at Trinity House, Trinity Square, Tower Hill, London EC3. Thirty-one members of the public and others attended the meeting. An opportunity was provided at the end of the agenda for public statements and questions

about the day's business and also about the Committee and its work more generally. A summary of the various points made is annexed to the minutes of the meeting (ACM/MIN/42), which can be found on the ACMSF's website.

## **Work of the other advisory committees and cross-membership**

22. Members received regular reports throughout the year of the work of the other advisory committees. In addition, Dr Simmons served as a member of the Advisory Committee on Novel Foods and Processes, providing a direct link between ACMSF and ACNFP. On Dr Simmons' retirement from both Committees in 2001, the cross-membership role was assumed by Professor Johnston.



## Chapter 2 : The Committee's Work in 2001

### Salmonella in Eggs

#### Second Report on Salmonella in Eggs

23. The Chairman submitted the Committee's Second Report on *Salmonella* in Eggs<sup>18</sup> to the Chairman of the Food Standards Agency, Sir John Krebs, on 2 January 2001. The Report was published on 9 May 2001. In a press release<sup>24</sup> announcing publication, Sir John thanked the ACMSF for producing the Report. The Committee issued a press release of its own<sup>25</sup> publicising the Report, to coincide with a well attended media briefing conducted by Professor Georgala, accompanied by Dr Mike Painter and Professor Tom Humphrey, chairman and member respectively of the *Salmonella* in Eggs Working Group.

24. The Report contains over 30 recommendations which the ACMSF hopes will help existing efforts to improve the microbiological quality of UK-produced shell eggs. Launching the Report, Professor Georgala said :-

*"We believe we are seeing a real success story here. There has been a sustained drop in human Salmonella cases since 1997. We believe that this reflects a corresponding fall in the levels of Salmonella in eggs. There are reasons for believing that these improvements flow from the widespread vaccination of egg laying flocks against Salmonella enteritidis, combined with improved flock hygiene measures. We now need independent scientific confirmation that the prevalence of Salmonella in eggs has indeed reduced. We have therefore recommended that the Food Standards Agency should carry out a survey of retail eggs for this purpose. Eggs are a raw animal product and we have asked the FSA to maintain rigorous monitoring against the possible future appearance of other salmonellas."*

#### Safe use of eggs by caterers

25. At the Committee's October meeting, Members considered the report of a pilot study commissioned by the FSA to estimate the nature and extent of adherence by the catering industry to Government and ACMSF advice on the safe use of eggs. In response to specific questions addressed to the Committee, Members said that they regarded the methodology as satisfactory; felt that extending the study nation-wide was unlikely to add to the sum of knowledge; did not regard any of the 4 sectors surveyed as more problematical than the others; endorsed the need for a standard approach to food hygiene across all 4 sectors; felt that the use of

disclaimers in nursing homes where soft eggs were requested was unacceptable but considered that this should be taken up as part of a more general approach to promote the broader responsibility of operators to ensure proper attention to best hygiene practice in kitchens; and thought that the survey results would be interesting to the FSA in developing its food hygiene publicity strategy of which catering was a key element.

## **Food Standards Agency foodborne disease and poultry strategies**

### **Foodborne disease strategy**

26. The Food Standards Agency has set itself a target of reducing the incidence of foodborne disease in the UK by 20% by April 2006. The ACMSF was consulted on the FSA's foodborne disease strategy paper, which was supplemented by a paper dealing with setting the baseline for the foodborne disease target. By way of introduction, Professor Georgala reminded Members that the Committee had, over time, offered wide-ranging advice on tackling foodborne illness. The Agency's strategy reflected much of that advice, including that on the greater use of HACCP, improving the microbiological status of poultry meat, helping consumers protect themselves from the risk of food poisoning, addressing the question of foodborne viral infections, etc. In considering the FSA's draft strategy, the object was not to repeat past advice but instead to address the technical issues raised in the papers.
27. In discussing the papers, Members offered a number of detailed comments. These are recorded in the minutes of the 40<sup>th</sup> meeting (ACM/MIN/40 paragraph 10.6).
28. To help the FSA in the implementation of the strategy to meet its foodborne disease reduction target, the Agency established a Foodborne Disease Strategy Consultative Group involving a cross-section of stakeholders. The ACMSF was kept informed of the Consultative Group's deliberations. In addition, two ACMSF Members, Mrs Jefford and Dr Wyatt, served as members of the Consultative Group. Members also received a copy of the FSA's press release announcing the benchmark against which it will measure the trend of foodborne illness in the UK over the next 5 years.<sup>26</sup>

### **Poultry strategy**

29. In its Report on Poultry Meat<sup>14</sup> published in 1996, the ACMSF called upon all sectors to set ambitious but attainable targets for the reduction of *Salmonella* in poultry meat. In the Committee's view, there was no reason in principle why the prevalence of *Salmonella* contamination in the finished raw product should not within the next few years be reduced to a single figure percentage, on the basis of existing technology, with the longer-term aim of effective elimination of poultry meat as a significant source of

*Salmonella* in the nation's food supply. The FSA set itself a target of reducing *Salmonella* in UK-produced chicken by at least 50% by 2005. The ACMSF was consulted on a draft strategy based on the outputs from a multi-disciplinary stakeholder workshop (attended by ACMSF Members) which the FSA had held in October 2000. The draft also reflected existing legislation, codes of practice, etc. The FSA proposed that, in the first instance at least, the main area of focus for the strategy should be the broiler growing farm, namely the testing of flocks and the scheduling of slaughter so that positive flocks were processed at the end of the day; improved cleansing of poultry crates; and enhanced biosecurity. The ACMSF welcomed the approach of involving key stakeholders and then synthesising the output into a strategy. Members regarded the identification of specific targets for action as a useful starting point. Further details of the Committee's consideration of the draft strategy are recorded in paragraph 10.8 of the minutes of the 40<sup>th</sup> meeting (ACM/MIN/40).

30. The FSA established a stakeholder Consultative Group on *Campylobacter* and *Salmonella* in Chickens (CGCSC) to contribute to technical discussions and provide support for the Agency as it works towards meeting its poultry target. Professor Georgala is the ACMSF's representative on the Group. The Committee was kept regularly informed of the Group's work. The FSA has additionally established 4 sub groups of the CGCSC (dealing with broiler production, *Campylobacter*, crate washing and knowledge transfer). Professor Hunter is the ACMSF's nominated representative on the *Campylobacter* sub group.
31. In order to be able to measure progress against its target, the FSA carried out a survey of contamination of UK-produced chicken on retail sale, for the purposes of establishing a baseline. The results of this baseline survey, announced on 16 August 2001,<sup>27</sup> were reported to Members at the Committee's October meeting. Members were informed that, in the light of the results of the baseline survey, the FSA had adjusted its previously announced priorities and amended the remit originally given to its Consultative Group (CGRSC). The baseline survey had shown that 5.8% of chicken on retail sale in the UK was contaminated with *Salmonella*. This drop in contamination levels meant that the Agency's *Salmonella* reduction target had been met well ahead of schedule. *Salmonella* levels had fallen to within the range which the ACMSF had thought achievable in the shorter-term.<sup>14</sup> However, the baseline survey had also shown 50% of retail chickens to be contaminated with *Campylobacter*. The Agency had thus decided that, while the work on *Salmonella* should continue, the reduction of *Campylobacter* in chickens should be accorded a higher priority. The remit of the FSA's Consultative Group had been extended to cover *Campylobacter* too, as one of the first steps in developing a strategy for the reduction of this organism in chickens.
32. ACMSF Members regarded the FSA's baseline survey as both comprehensive and useful. The *Salmonella* results are clearly very encouraging, and reflect the great strides made by industry to improve the microbiological status of poultry meat. Members nevertheless welcomed

the FSA's assurance that, despite the marked reduction in *Salmonella* contamination, pressure was being maintained to reduce levels still further. Members were concerned about the levels of *Campylobacter* contamination and supported the FSA's intention to refocus its priorities in order to give greater attention to this organism. They noted that further analysis of survey data remained to be completed and looked forward to seeing final reports – first on *Salmonella* and later on *Campylobacter* – once these became available.

## ***Campylobacter***

33. The ACMSF has identified *Campylobacter* as an important topic for the Committee's future work. The organism has become the single biggest identified cause of bacterial food poisoning in the UK. As part of its work programme for the immediate future, the ACMSF therefore decided to establish a Working Group to examine all current information about this pathogen and its role in foodborne disease. At its October meeting, the Committee agreed terms of reference for the Group, namely to :-

- identify any important gaps and omissions in action taken to reduce *Campylobacter* in food and food sources and in the knowledge base; and
- develop advice which will assist the Food Standards Agency in evolving its strategy for reducing the incidence of foodborne *Campylobacter* infection in humans.

34. Members also agreed to hold a workshop as a precursor to the Working Group getting under way. This would help focus on key questions, on whether these had been resolved by work already carried out and, if not, whether answers were still required in order to move matters forward. It is anticipated that the workshop will be held in February 2002.

## ***Escherichia coli***

### **Joint FSA (Scotland)/Scottish Executive *E. coli* O157 Task Force**

35. In 2000, the Scottish Executive Minister for Health and Community Care appointed an *E. coli* O157 Task Force under the joint sponsorship of the Food Standards Agency (Scotland) and the Scottish Executive Health Department. The Task Force remit was, in the light of existing and emerging information on the incidence of *E. coli* O157 in Scotland, to review the risk to health of the public in Scotland, and current activities to prevent human infection with *E. coli* O157; assess the effectiveness of the present arrangements for co-ordination of action at national and local level; consider what future measures would help protect public health; and report by May 2001.

36. Whilst food was not the Task Force's principal focus, it was an important element of their work. Dr Simmons attended relevant Task Force meetings on behalf of the ACMSF and reported back to Members. A summary of the main features of his oral report appears at Annex B of ACM/MIN/40. The food chapter of the Final Report of the Task Force (which is available on the FSA's website at <[http://192.168.10.12/food\\_agency\\_site/scotland/ecoli.htm](http://192.168.10.12/food_agency_site/scotland/ecoli.htm)>) reflects the ACMSF's own advice.

### **IVC News**

37. The International VTEC/STEC Club (IVC) is a meeting point to promote communication among those various groups throughout the world studying VTEC infection. ACMSF Members were kept informed of developments via IVC News which draws together information on outbreaks, case clusters, O157 isolation trends, interesting strains etc.

### ***Mycobacterium avium* subsp. *paratuberculosis* (MAP) in milk, and Johne's disease**

38. As noted in its Annual Report 2000 (paragraphs 38-42),<sup>9</sup> the ACMSF has been kept regularly informed of developments in relation to *Mycobacterium avium* subsp. *paratuberculosis* (MAP) and has provided advice on the results of Government-funded research and surveillance. It was on the recommendation of the Committee<sup>28</sup> that the FSA convened a group of stakeholders to consider all aspects of the control of MAP in milk, including control in primary production and developments in dairy technology, taking due account of consumer concerns such as the risk of exposure in children. The FSA conference arranged for this purpose, was held in London Docklands on 23 and 24 May 2001.<sup>29</sup> ACMSF members attended. The Committee is equally concerned that efforts to control MAP in milk should also address the problem of the organism in animals, where it causes Johne's disease. During 2001, ACMSF Members were informed of the results of an assessment by the Scottish Agriculture College's Veterinary Science Division of surveillance and control of Johne's disease in farm animals in Great Britain.<sup>30</sup>

39. At the Committee's December 2001 meeting, Members received, for information, an FSA report of the 23/24 May Conference, together with a review commissioned by the Agency of the evidence for a link between exposure to MAP and Crohn's disease in humans (see <http://www.food.gov.uk/science/sciencetopics/microbiology/mapinmilk>). Members were also invited to comment on a draft strategy for the control of MAP in milk. They welcomed it and indicated their broad support for it. They were satisfied that the strategy reflected the outcome of the FSA's stakeholder workshop. Members supported the aim of reducing the burden of MAP in cattle by tackling Johne's disease. They also emphasised the need to increase scientific understanding in relation to thermal inactivation of the organism, to enable more precise advice to be

given on optimal pasteurisation time and temperature combinations. The Committee re-iterated its conclusion that, as the risk to human health from MAP had not been established, there were no grounds for recommending any change to current advice on the consumption of milk.

## ***Mycobacterium bovis***

40. As reported in paragraphs 44-45 of the Committee's Annual Report 2000,<sup>9</sup> Members agreed, in response to an FSA request for advice, to set up a Working Group to review the possible health risks to consumers of meat from cattle with evidence of *Mycobacterium bovis* infection. The Working Group met on 3 occasions, under the Chairmanship of Professor Johnston. Members considered the Working Group's draft Report in October and approved its submission, with minor amplification, to the FSA as ACMSF advice. The final Report<sup>19</sup> was considered by the FSA Board in December. The Report recommended that :-

- all mycobacterial isolates from cases of human tuberculosis should be referred to reference laboratories for identification;
- enhanced surveillance of *M. bovis* disease in humans in England and Wales should be maintained and there should be support for a long-term analytical study based on the enhanced surveillance;
- the FSA should be alerted to any emergent significant trends which might indicate that eating meat from animals infected with *M. bovis* constituted a health risk;
- UK meat inspection legislation should be brought fully into line with EU Directive 64/433/EEC;
- certain improvements should be introduced governing the collection of data by the Meat Hygiene Service (MHS), on the scheduling of animals for slaughter, and on the conditions under which carcass sampling and inspection is carried out.

41. The risk assessment carried out by the ACMSF suggested that the risk, if any, from the consumption of meat sold as fresh meat for human consumption following assessment and action by the MHS in UK abattoirs was very low. Current controls seemed adequate to protect public health from the risk of *M. bovis* and the Committee therefore concluded that a possible option would be to retain current practices largely unchanged, but with the improvements recommended in the fifth bullet point of paragraph 40. If, however, the FSA considered that steps should be taken to reduce the very small risk still further, the Committee put forward 2 options for doing so. The first was to cease to allow meat from reactor cattle with visible lesions, or from cattle found to have localised tuberculous lesions on routine *post mortem* inspection, to be sold as fresh meat. Assuming that the whole carcass had not been condemned under the legislation, the

meat should not go for sale as fresh raw meat but could go for manufacture where there was an adequate heat treatment step in the process. The second option was that the carcasses of reactor cattle displaying no visible lesions on slaughterhouse inspection should be held in cold storage pending receipt of culture results. Carcasses which proved positive could then be either partially or totally condemned. The FSA Board accepted all of the recommendations from the ACMSF Report<sup>19</sup> except these latter two options. The option of holding suspect carcasses in cold storage pending receipt of culture results was not regarded as proportionate to the risk; and the Board felt that the recommendation concerning heat treatment of meat from reactor cattle should be deferred pending the outcome of discussions in Brussels.

## ***Clostridium botulinum***

42. In 2000, the ACMSF recommended that, given the development of a number of new food products, the FSA should, with the other interested parties, conduct a review of the industry code of practice for the manufacture of vacuum and modified atmosphere packaged chilled foods<sup>31</sup> (see Annual Report 2000 paragraphs 35-37).<sup>9</sup> At the Committee's December meeting, Members considered guidance prepared by the FSA on the safety and shelf-life of vacuum and modified atmosphere packed chilled foods with respect to psychrotrophic *Clostridium botulinum*. Members were invited to comment on the content of the guidance and were asked to consider whether :-

- the document encompassed the key elements contained in the industry code of practice<sup>31</sup> and the ACMSF's advice;<sup>10</sup>
- the document would benefit from any additional guidance (eg. a risk assessment, in the form of an annex, of *C. botulinum* in vacuum and modified atmosphere packaged chilled foods);
- the information was in a format suitable for target audiences.

Members welcomed the FSA guidance which they felt contributed positively to the sum of technical guidance on the safe production of vacuum packaged and modified atmosphere packaged foods, including in relation to the newer, longer shelf-life products. Members offered some detailed comments on the draft (see ACM/MIN/42), and noted that further guidance on some of the other products of concern, including those in oil, would follow.

## **High pressure processing**

43. The ACMSF is cooperating with the Advisory Committee on Novel Foods and Processes (ACNFP) on the question of high pressure processing (HPP). The ACMSF was informed by the ACNFP at Secretariat level that a number of companies interested in manufacturing high pressure-treated

fruit-based products had sought from ACNFP a scientific opinion indicating that, with the exception of increasing the shelf-life, the process had no effect on the nutritional or organoleptic qualities of the products compared to similar, untreated products. The ACNFP had noted that the applications were not supported by sufficient information in a number of areas, including operating conditions, the effectiveness of bacterial kill, and the acidifier to be used. ACNFP initially suggested to the ACMSF that a joint working group should be set up to consider the generic issues associated with the process and to produce guidelines for the use of HPP. ACNFP proposed that these should include criteria for operating conditions required for the high pressure processing of a range of different foodstuffs and also highlight the problems of microbial contamination. Such guidance would be similar to that previously produced by the ACMSF for vacuum packaged foodstuffs.<sup>10</sup>

44. Having consulted Professor Georgala, the ACMSF Secretariat proposed an alternative way forward to the ACNFP Secretariat. They suggested that an outside body should be commissioned to review the literature and produce headlines, guidance or a full code of practice, as deemed appropriate, for companies wishing to undertake HPP. They pointed out that, in the aftermath of the ACMSF's Vacuum Packaging Report,<sup>10</sup> the Campden and Chorleywood Food Research Association (CCFRA), working with industry, had produced a code of practice<sup>31</sup> for this range of processes and the ACMSF had been afforded the opportunity to comment on pre-publication drafts of the code. CCFRA would be well aware of the research relating to HPP, the general types of products to which it might be applied, and the various HPP technologies available. CCFRA also had extensive experience in producing practical codes and guidelines. If ACNFP were content to engage CCFRA to assist, the procedure could be overseen by ACNFP/ACMSF (perhaps at chair level), and any output could then be considered by both committees prior to publication. The ACNFP Secretariat welcomed this suggestion and CCFRA were approached with a view to their producing a draft document, for consideration by ACNFP/ACMSF in due course, which would embody the basic scientific principles supplemented with detailed technical guidance. CCFRA regarded this as feasible. Further developments are awaited.

## **Ready-to-eat fruit and vegetables**

45. In 2000, as part of the horizon scanning process, the ACMSF identified ready-to-eat fruit and vegetables as a possible subject for future work. To help inform the Committee's consideration of this topic, the Public Health Laboratory Service (PHLS) provided a briefing paper which enabled Members to conclude that, although there had been some outbreaks of foodborne illness associated with the consumption of this type of produce, there was no cause for serious concern over public health. Fuller details are provided in paragraph 56 of the Committee's 2000 Annual Report.<sup>9</sup> The PHLS was invited to keep the matter under review, including in relation to international developments, with a view to providing the Committee with a progress report in 2001.

46. This progress report was considered by Members on 5 December 2001. It provided reassurance that ready-to-eat salad, fruit and vegetables did not normally constitute a serious public health risk. Such produce made up a small proportion (6%) of foods associated with outbreaks of infectious intestinal disease. However, there was no room for complacency as it had been associated with at least 2 large-scale food poisoning outbreaks in the year 2000. It was also clear that traceability of contaminated produce back to the point of production was often very difficult. The ACMSF believes that improving traceability will contribute positively to food safety, as will the recognition by caterers and other suppliers that ready-to-eat salad, fruit and vegetables need to be handled carefully to avoid their becoming vectors for food poisoning.

## Surveillance

### Surveillance Working Group

47. The standing Surveillance Working Group met for the first time in February 2001 to consider a draft protocol for the FSA's chicken survey (see paragraph 31), an FSA paper setting out some initial thoughts on a planned survey of the prevalence of *Salmonella* contamination of UK hens' eggs (being carried out in response to a recommendation from the ACMSF's Second Report on *Salmonella* in Eggs),<sup>18</sup> and a further FSA paper about establishing a baseline in connection with the Agency's foodborne disease target (see paragraphs 26-28). The Working Group provided detailed comments which are recorded in paper ACM/511 (available on the Committee's website) and which were the subject of an oral report to the full ACMSF in March 2001.

48. Following the changes in membership of the ACMSF from 1 April 2001 (see paragraphs 8-16), the Surveillance Working Group was reconstituted in October 2001. The Group's first task was to comment on the draft protocol for the FSA's planned survey of *Salmonella* contamination of UK-produced shell eggs destined for retail sale. A copy of the comments sent to the FSA is at Annex III.

### Ready-to-eat foods with added spices

49. Members were presented with the results of an examination by the PHLS and LACOTS of ready-to-eat foods with added spices.<sup>32</sup> These were not designed to be cooked before or after being added to dishes and before being eaten. The absence of pathogens like *Salmonella* was reassuring, although *Bacillus cereus* featured prominently in the unsatisfactory/unacceptable samples. This highlighted the need for better control in the use of spices and spice ingredients. Given the need for *B. cereus* to grow in order to produce sufficient toxin to cause food poisoning, the Committee emphasised the potential dangers from long-term storage and inappropriate temperature controls.

### **Microbiological Food Surveillance Group**

50. The ACMSF has, over the years, received regular progress reports on the work of the Microbiological Food Surveillance Group (MFSG). The MFSG was set up in 1995 following the demise of the Steering Group on the Microbiological Safety of Food (SGMSF)<sup>33</sup> to help review, recommend, monitor and report on surveillance activity in the food processing, retailing and catering sectors and in the home. In October 2001, Members were informed that, as the Food Standards Agency's future surveillance strategy was intimately linked with the development of the mechanisms required to attain the poultry and foodborne disease targets (see paragraphs 26-32), the FSA had decided in February 2001 to wind up the MFSG. The Committee was told that the need for another body to replace the MFSG would be considered as part of the strategy needed to enhance FSA surveillance of foodborne illness. The Agency has already set up two consultative groups as part of the mechanism for helping it with its poultry and foodborne disease strategies.

### **Epidemiology of Foodborne Infections Group**

51. The Epidemiology of Foodborne Infections Group (EFIG) was set up at the same time as the MFSG, following the merging of the ACMSF with the SGMSF. EFIG's role is to collate and assess available information on animal and human infection, to identify, through the evaluation of that information, the need to ensure the microbiological safety of food, and to advise accordingly. EFIG continues in being and the ACMSF receives regular progress reports on its work. Members received an oral report on EFIG's January 2001 meeting at which consideration had been given to animal and human data, surveillance study results, information about *Campylobacter* sentinel surveillance, and poultry-associated foodborne disease outbreaks. Fuller details are provided in paragraph 7.8 of the minutes of the ACMSF's June 2001 meeting (ACM/MIN/40).

### **Consultation exercises**

52. The Committee participated in a number of public consultation and similar exercises during the course of the year.

### **Food Standards Agency review of the scientific advisory committees**

53. A Review Group has been set up by the Food Standards Agency to examine the role, method of operation, and effectiveness of the independent expert committees (including the ACMSF) in regard to the work that they undertake for the FSA. The overall purpose of the review is to ensure that the FSA has access to the best possible scientific advice and that the committees operate in an effective and transparent manner, in line with recent recommendations from the Phillips Report<sup>34</sup> and other guidelines for the operation of public bodies. The Review Group is due to report to the FSA Board early in 2002. The Group invited chairs of committees to attend its 27 September meeting. Professor Georgala

reported on this to the ACMSF's October meeting. He told Members that the emphasis of the review seemed to be on the ways, means and practices which would produce the best expert advice. The review was addressing a wide range of questions including recruitment; the induction of new members; remuneration, gaps and overlaps; cross-membership; the boundaries between risk assessment and risk management; and the possible impact on the UK committees of the creation of a European Food Authority. It had become clear from the Review Group's meeting on 27 September that there were significant differences in the roles of the various committees advising the FSA. A key area of concern appeared to be how committees reflected the wider, non-mainstream views in framing their advice.

54. Professor Georgala said that it had been stressed that the FSA placed great reliance on the independent advice it received from committees like ACMSF. The review was not, therefore, prompted by any dissatisfaction with the committees. Rather, its overall purpose was to ensure that the Agency had access to the best possible scientific advice and that the committees were operating in an effective and transparent manner, in line with recent recommendations from the Phillips Report<sup>34</sup> and other guidelines for the operation of public bodies. The ACMSF was given an opportunity to comment on a draft of the Review Group's Report in December. A copy of the Committee's comments is at Annex IV.

### **Review of risk procedures**

55. The Chairman wrote to FSA Chairman Sir John Krebs on 15 January in connection with the review, carried out by the Government's (then) Chief Scientific Adviser Sir Robert May, of risk procedures used by the Government's advisory committees dealing with food safety.<sup>35</sup> Professor Georgala's letter reported on the ACMSF's formal consideration of the May Report. It welcomed the broad thrust of the report, and affirmed the ACMSF's intention to continue to seek to operate in accordance with best practice. The full text of Professor Georgala's response is at Annex V.

### ***Listeria monocytogenes* control measures**

56. The Committee was consulted by the FSA on a draft European Commission decision on control of *Listeria monocytogenes* in ready-to-eat foods. In addition to reiterating the broad principles detailed in the Committee's earlier response (see Annual Report 2000 Annex IV),<sup>9</sup> Members offered a number of detailed comments which are reproduced at Annex VI.

### **BSE Inquiry**

57. In February, the ACMSF, amongst others, was invited by the Department for Environment, Food and Rural Affairs (DEFRA) to comment on the proposals contained in the Government's Interim Response to the Report of the BSE Inquiry chaired by Lord Phillips of Matravets.<sup>36</sup> A copy of the

Committee's comments is at Annex VII. The Government's final response,<sup>37</sup> which reflected the comments emanating from the public consultation on the Interim Response, was published on 28 September, 2001.

### **Code of practice for scientific advisory committees**

58. In 2000, the Committee had been invited by the Government's Chief Scientific Adviser to comment on the first draft of a code of practice for scientific advisory committees, as part of a consultation exercise being conducted by the Office of Science and Technology (see Annual Report 2000, Annex IX).<sup>9</sup> In 2001, the ACMSF had the opportunity to comment on a further draft of the code, as part of the second round of consultations. A copy of the Committee's comments is at Annex VIII.

### **Distance selling**

59. The Food Advisory Committee (FAC) has been commissioned by the FSA to examine issues relating to the sale of food and animal feed by mail order or via the Internet. As a first step, the FAC invited comments from interested parties on any problems or potential problems which might be associated with "distance selling". The sale of food by mail order was one of the questions addressed by the ACMSF in its Report on Vacuum Packaging.<sup>10</sup> In its response to the FAC, the Committee drew attention to the importance of effective temperature control in the transport of foods by mail order, and of also having controlling factors in addition to temperature in place to prevent the growth of pathogenic microorganisms, including psychrotrophic *Clostridium botulinum*. A copy of the ACMSF's full comments is at Annex IX.

### **Use of human experimental data**

60. The Health and Safety Executive sought the Committee's views on the approach taken by advisory committees on, and issues surrounding, the use of human experimental data in regulatory decision making. In response, it was pointed out that this issue fell outside the ACMSF's remit. The Committee had no regulatory approval powers and, in any event, human volunteer studies were not a normal feature of microbiological food safety.

### **Management of foodborne outbreaks**

61. The Committee's views were sought by the Food Standards Agency (Scotland) on revised guidance being drawn up on the management of foodborne outbreaks. In response, the general point was made that the normal focus of the ACMSF's work was risk assessment rather than risk management. However, a number of detailed comments were offered in relation to the importance to the investigative process of information from *ante-mortem* inspections; the contribution that local veterinary practices were able to make to veterinary investigations; the testing of water; and

the financing of outbreak investigations. Finally, it was pointed out that the Chairman of the group set up to prepare revised guidance on the management of foodborne outbreaks – Professor Cairns Smith – was an ACMSF member and that he was thus well placed to reflect the stance of the Committee in the drafting of the guidelines.

### **Review of research and surveillance**

62. The ACMSF was consulted on a review of the FSA's research portfolio and research management systems.<sup>38</sup> The Committee strongly supported the need for the Agency to adopt a research strategy directed towards its aims and objectives. The Committee affirmed its own direct interest in current research on microbiological food safety, supported the proposed review of these research programmes, and stated its preparedness to contribute to the process. While agreeing that much of the FSA's research should be procured through open competition, the ACMSF also pointed to the need for the Agency to support centres of excellence. The Committee expressed its concern that there should be improvements in collaboration between UK funding bodies and pressed for the wide dissemination of research results. The full text of the response sent by the ACMSF is at Annex X.

### **Foot and Mouth Disease**

63. Members were provided with an FSA press release<sup>39</sup> about the role of the Meat Hygiene Service in uncovering the UK Foot and Mouth Disease (FMD) outbreak. This press release also contained the Agency's confirmation that FMD was essentially an animal disease and had no implications for food safety. Members also received DEFRA's briefing (available on <<http://defraweb/animalh/diseases/fmd/qa1.htm>>) covering frequently asked questions. DEFRA also provided Members with an information paper on numbers of confirmed FMD cases and on the impact which the outbreak had had on livestock disease and infection surveillance in 2001.

### **Agricultural disposal of sewage sludge**

64. As reported in the Committee's Annual Reports for 1997 (paragraph 34),<sup>6</sup> 1998 (paragraph 32)<sup>7</sup> and 2000 (paragraph 59),<sup>9</sup> the ACMSF has for some years now assisted with a Government-funded review of the agricultural use of sewage sludge. An *Ad Hoc* Group has been set up for this specific purpose (see Annex I). In 1998, the Government commissioned research to characterise the risks associated with the agricultural use of sewage sludge. The objectives were to develop analytical procedures for determining human and animal pathogens in such sludge; study the fate of these pathogens during sludge treatment; and establish, by means of a risk assessment methodology, whether current sludge recycling operations had an observable risk with respect to human and animal pathogens. The

ACMSF was asked to undertake an independent peer review of the planned risk assessment.

65. The *Ad Hoc* Group met with representatives from the water industry (acting as contractors for the work) in February to consider a number of papers. The contractors confirmed their intention of codifying the Safe Sludge Matrix<sup>40</sup> in regulations which would be supplemented by a stricter code of practice. The *Ad Hoc* Group was also presented with a preliminary report of a microbiological risk assessment, initially covering *Salmonella* and *Listeria monocytogenes*, in respect of pathogens in biosolids. The *Ad Hoc* Group made clear in discussion that, although it had no objection in principle to the modelling approach adopted for the risk assessment, there was some concern about reliance upon a multiple hurdle approach, particularly when it was based on a set of assumptions with which Group members disagreed, including, for example, that organisms behaved in the same way in all soils. More details of the Group's comments can be found in the minutes of the ACMSF's 40<sup>th</sup> meeting (ACM/MIN/40, paragraph 7.5). The *Ad Hoc* Group is expected to consider a further tranche of risk assessment material from the water industry early in 2002.

## Information papers

66. The Committee is routinely supplied with information papers on topics of interest to Members. Among the documents provided to Members in 2001 were :-

- UK Zoonoses Report 1999;<sup>41</sup>
- Antimicrobial Sensitivity Report 1999;<sup>42</sup>
- the Department of Health's announcement of the creation of a Specialist Advisory Committee on Antimicrobial Resistance;<sup>43</sup>
- *Salmonella* in Livestock Production in Great Britain 2000;<sup>44</sup>
- a report on the Food Advisory Committee's review of the terms "fresh" etc in food labelling;<sup>45</sup>
- Food Advisory Committee Annual Report 2000;<sup>46</sup>
- Advisory Committee on Animal Feedingstuffs. Review of animal feed labelling;<sup>47</sup>
- a DEFRA briefing note on developments in the European Union with regard to the mechanisms for controlling zoonoses;

- The 2000 Annual Report of the Committees on Toxicity, Mutagenicity and Carcinogenicity of Chemicals in Food, Consumer Products and the Environment.<sup>48</sup>

## Chapter 3 : A Forward Look

67. Having completed its work on a Second *Salmonella* in Eggs Report<sup>18</sup> and on *Mycobacterium bovis* in meat,<sup>19</sup> the Committee has identified *Campylobacter* as its next major area of work. A formal Working Group has now been established to take matters forward (see paragraph 33). *Campylobacter* has, for some time, been the single biggest identified cause of bacterial infectious intestinal disease in the UK and this will be the key area of ACMSF work in the immediate future.
68. Following the briefings it has received from the Public Health Laboratory Service (paragraphs 45-46), the Committee will continue to keep under review the potential risks associated with the consumption of fresh fruit and vegetables.
69. The Committee will continue its horizon scanning function, with a view to identifying any emerging issues giving rise to potential concern over the microbiological safety of food.
70. The Committee plans to revisit the subject of foodborne viral infections as part of its future work programme. An important question is whether advances in laboratory techniques can throw new light on the role of food as a vector for the transmission of viral disease.
71. The ACMSF, as ever, stands ready to respond to FSA requests for advice on the microbiological safety of food, in accordance with its terms of reference, and on the results of Government-funded research and surveillance. In this latter connection, the Surveillance Working Group will continue to provide more detailed technical advice, as required.
72. In line with its undertaking to the Food Standards Agency (see Annex V), the Committee will explore available options for the adoption of a more formal structure to assist its risk assessment process.



**ANNEX I : Membership of the  
Advisory Committee on the  
Microbiological Safety of Food,  
its Working Groups  
and its *ad hoc* groups**



## ADVISORY COMMITTEE ON THE MICROBIOLOGICAL SAFETY OF FOOD

### TERMS OF REFERENCE

*To assess the risk to humans from microorganisms which are used, or occur, in or on food, and to advise the Food Standards Agency on any matters relating to the microbiological safety of food*

### MEMBERSHIP

#### Chairman

Professor D L Georgala                      Independent scientific consultant. Retired Director of the Institute of Food Research.

#### Members

Dr G R Andrews                              Head of Technical Services, Northern Foods plc.

Dr D W G Brown                              Director, Enteric, Respiratory and Neurological Virus Laboratory, Central Public Health Laboratory.

Ms S Davies                                      Principal Policy Adviser, Consumers' Association.

Professor M J Gasson                              Head of Food Safety Science Division, Institute of Food Research.

Dr K M Hadley                                      Senior Lecturer, Department of Immunology and Bacteriology, University of Glasgow. Honorary Consultant in Clinical Microbiology, North Glasgow University Hospitals NHS Trust, Western Infirmary, Glasgow.

Professor T J Humphrey                              Professor of Food Safety, University of Bristol.

Professor P R Hunter                              Professor of Health Protection, University of East Anglia.

Mrs P Jefford                                      Environmental Health Services Manager, Gravesham Borough Council.

Professor A M Johnston                              Professor of Veterinary Public Health, Royal Veterinary College, University of London.

Mr A Kyriakides	Head of Product Safety, Sainsbury's Supermarkets Ltd.
Ms E Lewis	Computer consultant. Consumer representative.
Professor P Mensah	Head of the Bacteriology Unit, Noguchi Memorial Institute for Medical Research, University of Ghana. Visiting E P Abraham Research Fellow, St Hilda's College, Oxford.
Dr S J O'Brien	Head of Gastrointestinal Diseases Division, Public Health Laboratory Service Communicable Disease Surveillance Centre.
Mr B J Peirce	Hotel owner. Caterer.
Mr D J T Piccaver	Farmer.
Dr Q D Sandifer	Executive Director of Public Health, Iechyd Morgannwg Health Authority.
Professor W C S Smith	Professor of Public Health, University of Aberdeen. Director of the Institute of Applied Health Sciences.
Dr T D Wyatt	Consultant Clinical Scientist, Mater Hospital Trust, Belfast.

### **Assessors**

Dr L Doherty	Northern Ireland Department of Health, Social Services and Public Safety.
Mr P J R Gayford	Department for Environment, Food and Rural Affairs.
Professor C H McMurray	Northern Ireland Department of Agriculture and Rural Development.
Dr S Pryde	Food Standards Agency, Scotland.
Dr R Skinner	Food Standards Agency.
Mrs J Whinney	Food Standards Agency, Wales.

## Secretariat

### **Medical Secretary**

Dr J Hilton Food Standards Agency.

### **Administrative Secretary**

Mr C R Mylchreest Food Standards Agency.

### **Administrative Secretariat**

Mrs E A Stretton Food Standards Agency.

Miss J Kerr Food Standards Agency.

## WORKING GROUP ON *MYCOBACTERIUM BOVIS*

### TERMS OF REFERENCE

*To review the possible health risks associated with consumption of meat from animals with evidence of Mycobacterium bovis infection, including animals with no post mortem evidence of disease which have reacted positively or inconclusively to the tuberculin test and to advise on the adequacy of current control measures.*

### MEMBERSHIP

#### Chairman

Professor A M Johnston Professor of Veterinary Public Health, Royal Veterinary College, University of London.

#### Members

Mr M Attenborough Technical Director. Meat and Livestock Commission.

Dr J P Gallagher Veterinarian.

Ms E Lewis Computer consultant. Consumer representative.

Dr M J Painter Consultant in Communicable Disease Control, Infection Control and Surveillance Unit, Manchester Health Authority.

Dr N A Simmons	Emeritus Consultant in Microbiology to the Guy's and St Thomas' Hospital Trust. Honorary Senior Lecturer in Microbiology, St Bartholomew's and the Royal London School of Medicine and Dentistry.
Professor W C S Smith	Professor of Public Health, University of Aberdeen. Director of the Institute of Applied Health Sciences.
Dr J Watson	Consultant Epidemiologist and Head of Respiratory Division, Communicable Disease Surveillance Centre, Public Health Laboratory Service.
Professor D B Young	Fleming Professor of Medical Microbiology, Imperial College of Science, Technology and Medicine.

**Assessors**

Miss A Conroy	Food Standards Agency.
Ms J M Downes	Meat Hygiene Service, Food Standards Agency.
Dr R de la Rua	State Veterinary Service, Department for Environment, Food and Rural Affairs.

**Secretariat**

***Medical Secretary***

Dr J Hilton	Food Standards Agency.
-------------	------------------------

***Administrative Secretary***

Mr C R Mylchreest	Food Standards Agency.
-------------------	------------------------

***Administrative Secretariat***

Miss J Kerr	Food Standards Agency.
-------------	------------------------

## **CAMPYLOBACTER WORKING GROUP**

### **TERMS OF REFERENCE**

*To identify any important gaps and omissions in action taken to reduce Campylobacter in food and food sources and in the knowledge base; and to develop advice which will assist the Food Standards Agency in evolving its strategy for reducing the incidence of foodborne Campylobacter infection in humans.*

### **MEMBERSHIP**

#### **Chairman**

Professor D L Georgala                      Independent scientific consultant. Retired Director of the Institute of Food Research.

#### **Members**

Mr M Attenborough                      Technical Director. Meat and Livestock Commission.

Dr E Berndtson                              Svenska Kläckeribolaget AB, Sweden.

Ms S Davies                                  Principal Policy Adviser, Consumers' Association.

Professor M J Gasson                      Head of Food Safety Science Division, Institute of Food Research.

Professor T J Humphrey                      Professor of Food Safety, University of Bristol.

Professor P R Hunter                      Professor of Health Protection, University of East Anglia.

Professor A M Johnston                      Professor of Veterinary Public Health, Royal Veterinary College, University of London.

Mr A Kyriakides                              Head of Product Safety, Sainsbury's Supermarkets Ltd.

Ms E Lewis                                      Computer consultant. Consumer representative.

Dr S J O'Brien                              Head of Gastrointestinal Diseases Division, Public Health Laboratory Service Communicable Disease Surveillance Centre.





Dr E Mitchell Northern Ireland Department of Health,  
Social Services and Public Safety.

### **Secretariat**

#### **Administrative Secretary**

Mr C R Mylchreest Food Standards Agency.

#### **Scientific Secretary**

Dr P E Cook Food Standards Agency

#### **Administrative Secretariat**

Mrs E A Stretton Food Standards Agency.

## **SURVEILLANCE WORKING GROUP**

### **TERMS OF REFERENCE**

*To facilitate the provision of ACMSF advice to government in connection with its microbiological food surveillance programme and other surveillance relevant to foodborne disease, particularly in relation to the design, methodology, sampling and statistical aspects; and to report back regularly to the ACMSF.*

### **MEMBERSHIP**

#### **Chairman**

Mr D Clarke\* Chief Executive, Assured Food Standards.

Professor T J Humphrey# Professor of Food Safety, University of Bristol

#### **Members**

Professor M J Gasson# Head of Food Safety Science Division.  
Institute of Food Research

Mrs P Jefford\*# Environmental Health Services Manager,  
Gravesham Borough Council.

Mr D Kilsby\* Head of Food Microbiology Research,  
Unilever plc, Colworth Laboratory.

Mr A Kyriakides# Head of Product Safety, Sainsbury's  
Supermarkets Ltd

Dr S J O'Brien#	Head of Gastrointestinal Diseases Division, Public Health Laboratory Service Communicable Disease Surveillance Centre
Professor S R Palmer*	Head of Department of Epidemiology and Public Health, University of Wales College of Medicine.
Dr T A Roberts*	Retired Head of Microbiology, Institute of Food Research.

\* Prior to 1 April 2001

# From 1 April 2001

### **Secretariat**

#### ***Administrative Secretary***

Mr C R Mylchreest                      Food Standards Agency.

#### ***Scientific Secretary***

Ms G V Hoad                              Food Standards Agency.

#### ***Administrative Secretariat***

Mrs E A Stretton                      Food Standards Agency.

Miss J Kerr                              Food Standards Agency.

## **AD HOC GROUP ON SEWAGE SLUDGE**

### **TERMS OF REFERENCE**

*To assist with the peer review of a microbiological risk assessment to determine whether the application of sewage sludge to agricultural land poses a significant, incremental pathogen risk to foods produced in/on such land.*

### **MEMBERSHIP**

#### **Chairman**

Dr N A Simmons*	Emeritus Consultant in Microbiology to the Guy's and St Thomas' Hospital Trust. Honorary Senior Lecturer in Microbiology, St Bartholomew's and the Royal London School of Medicine and Dentistry.
Dr T D Wyatt#	Consultant Clinical Scientist, Mater Hospital Trust, Belfast.

#### **Members**

Dr G R Andrews#	Head of Technical Services, Northern Foods plc.
Professor J Banatvala*	Emeritus Professor of Clinical Virology, Guy's, King's and St Thomas' School of Medicine.
Dr D W G Brown#	Director, Enteric, Respiratory and Neurological Virus Laboratory, Central Public Health Laboratory.
Mr D Clarke*	Chief Executive, Assured Food Standards.
Dr T Clayton*	Retired Head of Technology, Marks and Spencer plc.
Professor P R Hunter#	Professor of Health Protection, University of East Anglia.
Mr A Kyriakides#	Head of Product Safety, Sainsbury's Supermarkets Ltd.
Mr D J T Piccaver#	Farmer

Dr T A Roberts\* Retired Head of Microbiology, Institute of Food Research.

Dr Q D Sandifer# Executive Director of Public Health, Iechyd Morgannwg Health Authority.

**Assessors**

Dr J Hilton Food Standards Agency.

**Secretariat**

***Administrative Secretary***

Mr C R Mylchreest Food Standards Agency.

***Scientific Secretary***

Dr P E Cook\* Food Standards Agency.

Ms G V Hoad# Food Standards Agency.

***Administrative Secretariat***

Mrs E A Stretton Food Standards Agency.

\* Prior to 1 April 2001

# From 1 April 2001



**ANNEX II : Advisory Committee on the  
Microbiological Safety of Food  
Register of Members' Interests**

<sup>1</sup> Member	Personal interests		Non-personal interests	
	Name of company	Nature of interest	Name of company	Nature of interest
Professor D L Georgala	Centre for Environment, Fisheries and Aquaculture Science <sup>2</sup> Express Dairies <sup>3</sup> Marks and Spencer plc Northern Foods plc <sup>4</sup> Unilever plc	Ownership Board member  Consultant Consultant Scientific adviser Shareholder	None	
Dr G R Andrews	None		None	
Dr D W G Brown	None		Various	PHLS industry-funded research and laboratory investigations
Ms S Davies	None <sup>5</sup>		None	
Professor M J Gasson	None		Various	IFR Food Safety Science Division industry-funded research projects
Dr K M Hadley	None		None	
Professor T J Humphrey	J S Sainsbury's  British Egg Industry Council	<i>Ad hoc</i> consultancy work <i>Ad hoc</i> consultancy work	Various	Funding for research projects

<sup>1</sup> Until 10 October 2001

<sup>2</sup> Until 31 March 2001

<sup>3</sup> Until 31 December 2001.

<sup>4</sup> Ms Davies has no interests of her own to declare but has declared shares held by her father in Marks and Spencer, Budgens and Albert Fisher.

Member	Personal interests		Non-personal interests	
	Name of company	Nature of interest	Name of company	Nature of interest
Professor P R Hunter	Buxton Mineral Water Company Zenith International Manchester Port Health Authority	Consultant  Consultant Port Medical Officer	Drinking Water Inspectorate and United Utilities plc	<i>Cryptosporidium</i> research
Mrs P Jefford	None		None	
Professor A M Johnston	Humane Slaughter Association Tesco Stores Ltd	Veterinary Adviser  Consultant	Specific projects undertaken by the Royal Veterinary College	Independent adviser and liaison on behalf of the Royal Veterinary College
Mr A Kyriakides	J Sainsbury plc	Shareholder	None	
Ms E Lewis	None		None	
Professor P Mensah	None		None	
Dr S J O'Brien	None		None	
Mr B J Peirce	None		None	
Mr D J T Piccaver	JE Piccaver & Co (Gedney Marsh) Piccaver Farms Ltd QV Foods Ltd Lingarden Ltd Lingarden Flowers Ltd Horticulture Research International	Managing Director  Managing Director Non Executive Director Non Executive Director Non Executive Director Non Executive Director	British Potato Council	Council member
Dr Q D Sandifer	None		None	
Professor W C S Smith	None		None	
Dr T D Wyatt	None		None	

<b>Working Group on <i>Mycobacterium bovis</i></b>				
Mr M Attenborough	None		None	
Dr J P Gallagher	None		None	
Dr J Watson	None		None	
Professor D B Young	None		None	

## ANNEX III

---

### Advisory Committee on the Microbiological Safety of Food

---

Administrative Secretary, Room 813C, Aviation House  
125 Kingsway, London WC2B 6NH  
Telephone : 0207-276-8951 Fax : 0207-276-8907  
E-mail : colin.mylchreest@foodstandards.gsi.gov.uk

Dr Sonia Molnar  
Microbiological Safety Division  
Food Standards Agency  
Room 816C  
Aviation House  
125 Kingsway  
London  
WC2B 6NH

16 November 2001

#### **FSA SURVEY OF *SALMONELLA* CONTAMINATING UK-PRODUCED SHELL EGGS DESTINED FOR RETAIL SALE : DRAFT PROTOCOL**

1. Thank you for giving the ACMSF an opportunity to comment on the draft protocol for the proposed FSA *Salmonella* in eggs prevalence survey.
2. The Committee's Surveillance Working Group, Chaired by Professor Tom Humphrey and comprising Mrs Patricia Jefford, Professor Mike Gasson, Mr Alec Kyriakides and Dr Sarah O'Brien, have considered the draft protocol. Their comments are at Annex I.

**COLIN MYLCHREEST**

(cm6577)

## TITLE AND OUTLINE

1. The intention to sample at packing houses, means that some of the eggs sampled will be destined not only for retail outlets but for wholesale/catering use too. It may therefore be more accurate either to extend the title and objectives of the survey to refer to either 'shell eggs destined for retail and catering' or, 'UK produced shell eggs'.

## OBJECTIVES OF THE SURVEY

2. When the Agency presented its preliminary ideas on the survey to the ACMSF Surveillance Working Group in February 2001, the Group noted that it was not proposed to try to differentiate between surface and internal contamination. Examination of a combined sample will, of course, provide incomplete information. This may be particularly limiting if the FSA intends to use the data for risk assessment purposes, as clearly the risk to human health of contamination from the outside of an egg is significantly different to that from the egg contents. Indeed, in public health terms, the most important site of egg contamination is the egg contents. The Agency will need to be clear about the use to which the survey data will be put before deciding on whether to sample the egg as a combined sample. Depending upon the final decision taken, the limitations of the survey need to be clearly identified from the outset.
3. If there are significant quantities of imported eggs entering retail or catering outlets, then there are strong grounds for assessing the microbiological status of such eggs. This could be important both in terms of consumer safety and in deciding upon appropriate control measures. From a public health standpoint, this is particularly important this year. Whilst the incidence of *Salmonella enteritidis* PT4 is still falling, the incidence of other phage types is rising and this may be due, at least in part, to imports. Information on the microbiological status of imported eggs may be very useful to the FSA if it becomes necessary to explain why *Salmonella* is on the increase despite low levels of contamination in UK-produced shell eggs.
4. It is noted that "the survey has not been specifically designed to compare differences in production types" but that "these will be sampled in relation to their market share and subjected to statistical analysis to see whether any comments can be made on the *Salmonella* contamination rate for different production types". The Working Group has drawn attention to the potential dangers of this type of analytical approach. Either "production type" is a primary hypothesis, or it is not.

## SURVEY DESIGN

5. It appears from the information provided that the intention is to sample a total of 75,000 eggs in batches of 6. The Working Group questions whether this sample size is sufficiently large. Increasing the pool of eggs to be tested as an individual sample to 20-30, whilst presenting some (not

insurmountable) technical difficulties for testing laboratories, would enable a significantly larger number of eggs to be tested in total. (It is noted that the latest version of the industry publication “Eggs and *Salmonella* : The Facts” claims that 80,000 eggs were tested for the presence of *Salmonella* spp. in 2000 and all were negative.) Alternatively, perhaps the FSA ought to be targeting a prevalence of, say, <1 in 10,000 rather than <1 in 5,000.

## **SAMPLING INFORMATION:**

### **Type of sample**

6. To minimise cross-contamination, samplers should be required to wear sterile disposable gloves when eggs are collected in packing stations. Gloves could be changed between each 6 eggs (ie. each egg box rather than between individual eggs) as each box is being regarded as one sample.
7. While the difficulties of sampling after grading are recognised, the Working Group raised some concern about bias being introduced by sampling prior to grading. For example, grading results in eggs that have invisible cracks and dirt being rejected – these would not get to the market as Grade A eggs. Such defective eggs are likely to have a greater chance of harbouring contaminants given their condition. Despite the best efforts of the EMIs, a proportion of eggs will be of lower grade and, as such, a slight bias may be introduced. Given that there is little option but to test before grading, the importance of sampling to the ‘Grade A standard’ MUST be strictly enforced.

### **Sample information**

8. A second and critical point relates to the nature of the sample information. Will the EMIs be asked to ensure eggs from different flocks are sampled or will there be a maximum number of samples per flock? This clearly also has the potential to introduce bias, and some further thought needs to be given to this matter.
9. One of the most important factors in the reduction in the incidence of *Salmonella* spp. appears to have been the use of vaccination and the adoption of good practices stipulated in industry registration schemes such as the Lion code. The vaccination status of the flock and the nature of the registration scheme therefore need to be recorded. This will allow the FSA to determine whether adherence to such schemes or use of vaccination is the main element affecting the *Salmonella* spp. status of the eggs. In many cases, this will be very straightforward to record as Lion code eggs, for example, can only be packed in Lion registered packing houses.

## Sample preparation

10. When the Working Group considered the Agency's preliminary ideas for a survey in February 2001, it was thought that eggs would be tested between 5 and 12 days from lay, thus mirroring the spread of ages of eggs from the previous survey, where eggs were sampled at retail. The current proposal, to store the eggs for 14 days from the date of sampling, before testing, in addition to making the results less directly comparable with those from previous surveys, is likely to have two other effects. It could increase the number of *Salmonella* cells in egg contents; and it will cause a reduction in the number of *Salmonella* spp. on egg shells.

## QUALITY ASSURANCE

11. As it is anticipated that the incidence of *Salmonella* spp. in these eggs will be exceptionally low, there is concern about the prospect of false positives occurring in addition to false negatives. Consideration should be given to requesting that eggs be sampled in separate areas to highly contaminated materials such as chicken and meat, and that the laboratory control strain (used for media quality control) must be a rare *Salmonella* spp. (ie. not *S. typhimurium*, *S. enteritidis*, etc.) so that it can be readily differentiated from egg isolates.

## APPENDIX 3

12. It is not necessary to add sufficient buffered peptone water to make a 1 in 10 dilution. The addition of 1,350ml of BPW will create a total volume of around 1,700ml which could create difficulties in autoclaving before disposal. Many autoclaves are licensed to only receive particular volumes either in unit or total form. It is important that some BPW is added, as research in the US has shown that this can accelerate the growth of some of the slower growing strains of *Salmonella enteritidis*. Consideration should be given to making a 50:50 dilution. This should counteract any inhibitory properties of egg albumen and will also ensure that the egg mix does not partially cook during incubation.
13. Stomacher bags are likely to puncture if egg shells are included in the sample prior to stomaching. Even when eggs are cracked directly into a stomacher bag it can be difficult to avoid the inclusion of small shell fragments. One possible way forward is to adopt a technique where eggs are cracked and contents placed into a stomacher bag, with the shells being placed in a separate sterile container. Once contents homogenization has been completed, the egg shells could be added to the homogenate and then incubation continued.
14. It is likely, whatever degree of egg homogenate dilution is chosen, that the sample size will be large. It is also likely that only few *Salmonella* cells will be present and, if these come from egg shells, then they are likely to be sub-lethally injured as a consequence of starvation and desiccation. Sub-lethally injured bacteria can have long lag phases. The question arises

whether an incubation period of 18-20 hours is long enough, or whether a period of 48 hours would be preferable.



## ANNEX IV

### Advisory Committee on the Microbiological Safety of Food

---

Administrative Secretary, Room 813C, Aviation House  
125 Kingsway, London WC2B 6NH  
Telephone : 0207-276-8951 Fax : 0207-276-8907  
E-mail : colin.mylchreest@foodstandards.gsi.gov.uk

John Caseley Esq  
SAC Review Group Secretariat  
Room 515B  
Aviation House  
125 Kingsway  
London  
WC2B 6NH

18 December 2001

Dear Mr Caseley

#### **FSA REVIEW OF THE SCIENTIFIC ADVISORY COMMITTEES**

1. The Chairman of the ACMSF has asked me to thank you for the opportunity to comment on the Review Group's draft report, and to let you have the Committee's views.
2. The ACMSF is broadly supportive of both the stance taken and the recommendations made by the Review Group. Indeed, the ACMSF is already implementing those recommendations relating to :-
  - the inclusion of relevant scientific/technical expertise in the Secretariat – the ACMSF has a Medical Secretary as well as an Administrative Secretary and its Working Groups are supported by Scientific Secretaries;
  - the minimum number of lay/consumer members – ACMSF currently has 2;
  - cross-membership with other committees – there is currently cross membership with ACNFP;
  - the publication of agendas, papers and minutes and the holding of public meetings – the ACMSF does all these things;
  - guidance on declarable interests – the code of practice under which the ACMSF operates contains this;
  - explaining differences of opinion over the Committee's advice and the co-option of additional expertise when appropriate – the ACMSF

works on the basis of consensus but divergent views are recorded where these arise. External expertise is routinely co-opted where in-house expertise in specialist areas is not available;

- handling uncertainty – the ACMSF endeavours to place its advice in a proper context; and
  - briefing the FSA Board – the ACMSF's chairman has participated in this kind of briefing exercise.
3. The ACMSF welcomes the recommendations directed towards FSA action to facilitate the operation of the committees, particularly in relation to better defining the role of members, induction and other training, and the monitoring of implementation of research recommendations.
4. There are one or two areas where the ACMSF has specific comments which I have been asked to draw to your attention :-
- **paragraphs 20 and 24** : the Review Group recommends that, to avoid undue influence being exercised by any one member, committee papers should be drafted by the Secretariat, drawing on the expertise of members, as appropriate. The ACMSF believes that the spread of interests and expertise of its membership, taken together with the arrangements for registering commercial and other interests, already provides sufficient safeguards against the introduction of bias based on vested interest. Moreover, outputs of the Committee must be approved in advance of promulgation by the full Committee, and it is not possible for an individual member to issue a paper in the name of the ACMSF. You should also be aware that a substantial part of the ACMSF's work consists of providing advice on issues referred to the Committee by the FSA in papers drafted by FSA officials;
  - **paragraphs 50-51** : in relation to levels of remuneration, it would be helpful to have a consistent approach across all of the scientific advisory committees;
  - **paragraphs 60, 61 and 65** : in relation to the suggestions that committees should publish applications for public comment prior to any substantive discussion in-committee, and draft opinions on a similar basis, it should not be overlooked that there are marked differences in the work content of the various advisory committees, and the way they have to operate. For example, the ACMSF does not operate an approvals process, unlike the ACNFP, and therefore does not receive applications as such. The ACMSF does take written and oral evidence as part of its detailed consideration of particular issues, although it does not issue its advice in draft prior to submitting it to the FSA. Where it is asked to consider specific topics by the FSA, it would not seem appropriate to seek public comment on the Agency's request prior to considering it in-committee. Leaving aside questions of

confidentiality, issuing advice in draft for public consultation before tendering final advice to the Agency would be likely to add appreciably to the length of time the process would take. This could be crucially important where the Committee's advice was being sought in relation to a food poisoning hazard requiring a priority response; and even the delivery of the more routine (ie. non-emergency) outputs could be delayed beyond what was reasonable. Overall, the ACMSF hopes that sufficient flexibility is established in this area to take account of differences between the roles and work content of the various advisory committees. Consultation could also have significant resource implications. If the FSA is committed to this system of working, it would surely be better for the Agency itself to undertake any public consultation deemed necessary or desirable before seeking a committee's advice, and again once it had received that advice from the committee concerned;

- **paragraph 66** : addressing issues referred to it by the FSA and other Departments is clearly an important element of any committee's remit; but committees should not feel inhibited in deciding on their own initiative that particular issues need to be explored. This is an essential element of the horizon scanning process.

5. I should like to add one "Secretariat" comment of my own in relation to paragraph 27. The FSA has decided that appointments to the ACMSF should follow Nolan principles. The Committee supports this approach. However, the formal position, as guidance from the Office of the Commissioner for Public Appointments makes clear, (see paragraph 1.3 of the Code of Practice for Ministerial Appointments to Public Bodies) is that the Commissioner's remit is restricted to Ministerial appointments. Appointments to the ACMSF are made by the FSA, not by Ministers, and as such are not subject to OCPA guidance (although, as I have said, in practice such guidance is applied).
6. I hope you will find these comments helpful. Please let me know if you require any further information.

Yours sincerely

**COLIN MYLCHREEST**  
**ACMSF Administrative Secretary**

cc : Professor Georgala  
ACMSF members  
Dr Hilton (ACMSF Medical Secretary)  
(cm6605)



## ANNEX V

---

### Advisory Committee on the Microbiological Safety of Food

---

Administrative Secretary, Room 425, PO Box 31037, Ergon House, 17 Smith Square,  
London SW1P 3WG  
Telephone : 0207-238-6451 Fax : 0207-238-6745  
E-mail : colin.mylchreest@foodstandards.gsi.gov.uk

Sir John Krebs  
Chairman  
Food Standards Agency  
PO Box 30080  
Hannibal House  
Elephant & Castle  
London  
SE1 6YA

Your ref: PRO/21/7

15 January 2001

#### REVIEW OF RISK PROCEDURES USED BY THE GOVERNMENT'S ADVISORY COMMITTEES DEALING WITH FOOD SAFETY

You wrote to me on 13 September drawing attention to the outcome of the review of risk procedures carried out by the May Group of which you and the Chief Medical Officer, Professor Liam Donaldson, were members. I sent you an interim reply on 19 September confirming that the ACMSF was already implementing best practice in many of the areas identified in the report of the May Group, for example, in offering policy makers a range of risk management options, and in opening up the Committee's work to greater public scrutiny. I also indicated my Committee's support for the introduction of appropriate training for members of committees and their secretariats. I also undertook to include discussion of the report on a future ACMSF agenda. We were able to do this for the Committee's first open meeting on 5 December. I am writing to let you know the outcome.

On a general point, I can confirm that the ACMSF welcomes the broad thrust of the report and that we shall continue to seek to operate in accordance with best practice. In that context, we find the report's conclusions on the desirable relationship between the Government and the committees particularly helpful. With regard to the conclusions on best practice for committees :-

- we recognise the potential advantages which might flow from the adoption of a more formal structure for the process of risk assessment. We already have some experience of using risk assessment in our work but we shall be carefully exploring additional options;

- we shall continue to be as open as we can at all stages of the risk assessment process. We already make clear to authors that the Committee operates on the presumption that papers it considers will be made publicly-available. We publish detailed minutes of our proceedings and, subject to the Agency itself (to whom we report) being content, always look to publish our advice and other outputs;
- I have already indicated our support for appropriate training initiatives;
- we support the suggestion that there should be better links between the various advisory committees. There is already some cross-membership, ACMSF members having been members of eg. the Food Advisory Committee and the Advisory Committee on Novel Foods and Processes. We also took steps recently to acquaint the Advisory Committee on Dangerous Pathogens of our work on *Mycobacterium avium* subsp. *paratuberculosis*, given the possible importance of the organism in the aetiology of Crohn's disease. As a new development, I have asked the ACMSF secretariat to explore the possibility of compiling a regular summary of the current work of other committees – we already contribute to a similar document compiled by the Advisory Committee on Animal Feedingstuffs and there is informal on-going liaison at secretariat level which may benefit from being placed on a more formal footing;
- we shall continue to seek to offer policy makers a range of risk management options.

I hope you find this summary helpful. If you need anything more, please do not hesitate to get in touch.

I am copying this letter to Professor Donaldson who wrote to me on 16 October in terms similar to your own letter.

**Professor Douglas L Georgala**  
**Chairman : ACMSF**  
(cm6178)

---

## ANNEX VI

---

### Advisory Committee on the Microbiological Safety of Food

---

Administrative Secretary, Room 425, PO Box 31037, Ergon House, 17 Smith Square,  
London SW1P 3WG  
Telephone : 0207-238-6451 Fax : 0207-238-6745  
E-mail : colin.mylchreest@foodstandards.gsi.gov.uk

Kieran Power Esq  
Microbiological Safety Division  
Food Standards Agency  
PO Box 30077  
Room 501A  
Skipton House  
80 London Road  
London  
**SE1 6XZ**

16 January 2001

Dear Kieran

#### **DRAFT COMMISSION DECISION ON CONTROL OF *LISTERIA MONOCYTOGENES* IN READY-TO-EAT FOODS**

1. Thank you for your e-mail of 3 January requesting the views of the ACMSF on the latest draft Commission Decision on Lm.
2. The broad principles detailed in my letter to Rosalind Glover of 7 September 2000 remain relevant. In addition, ACMSF members have offered a number of detailed comments and these are summarised in the Annex to this letter.

Yours sincerely

***By E-mail***

**COLIN MYLCHREEST**

(cm6199)

**DRAFT COMMISSION DECISION ON CONTROL OF *LISTERIA MONOCYTOGENES* (Lm) IN READY-TO-EAT FOOD : DRAFT 3**

**COMMENTS OF THE ADVISORY COMMITTEE ON THE MICROBIOLOGICAL SAFETY OF FOOD**

1. The Whereas clauses (pages 3-5) are regarded as a very good summary of the situation and provide a balanced view. You have no doubt picked up the typographical error in clause 12 line 2 (processing factory). There is also something missing from the end of the first paragraph of Article 3(2) (“.....any step in their activities to ensure that the hazard of Lm” is eliminated/controlled ?)
2. The objective of delivering food to the general consumer carrying less than 100 Lm/g is sensible, based on a huge amount of epidemiological and survey data.
3. There are concerns about setting microbiological standards for Lm, as so little is known about the dose response.
4. HACCP remains the key, with environmental and product testing useful as part of HACCP verification. It is particularly important that the debate about sampling and testing does not serve to divert attention from the overriding importance of HACCP.
5. The definitions (page 5) of RTE food and food business open the door to testing of an enormous range of products, including cheeses, salads, meat products, smoked fish, etc. Some testing is bound to be problematical. For example, every fishmonger or restaurant selling bivalve molluscs (for consumption raw ?) will be required to test for Lm. How are different consumption habits within the EU to be accommodated (eg. mussels eaten raw in France but cooked in UK) ? Bearing in mind the wet environment of fish counters, it is easy to imagine widespread failures of Lm tests.
6. There is also the wider point that short-shelf life products may have already been consumed by the time test results are available.
7. The third bullet point of Article 4(2) places a considerable burden on the competent authorities in establishing, perhaps ultimately to the satisfaction of the courts, that a particular product will not contain >100 cfu/g at the end of its shelf-life. In relation to the final bullet point, it is noted that the origin of Lm is very often the production plant. Product checking is not an effective way of checking that there is not a problem in the plant environment.
8. In relation to environmental sampling, it is essential that this takes place at the most appropriate point. This may not be at the end of the production line. It will be important, for example, to sample where there are chilled, moist areas where Lm is likely to persist.

9. As regards Annex I, care will be required to ensure that this is not reproduced as a standalone document without reference to the proper context. The promotion of HACCP should not be lost.

10. It may be argued that, for the sample criteria stipulated for category 1 foods (intended for infants and special medical purposes), absence in a much larger sample (say 500g) would be preferable to absence in the 25g sample stipulated. There is, in any event, a wider point here, that the statistics for bulk food production are such that it is simply not practicable to obtain the number of samples which would be required in order to demonstrate a safe product. Incidentally, does "special medical purposes" cover consumers who are pregnant or immunocompromised or is it intended for consumers undergoing certain medical treatments ?

11. For category 2 foods, it would be helpful to have the relevant additional notes in the body of the table as, if a manufacturer has designed a process to reduce numbers of Lm by eg 5 decimals, and applied that process to food in its final packaging (assuming GHP/HACCP is in place for handling processed foods) it would be a waste of time and resources to test the product for Lm.

12. Similar comments apply in relation to Category 3 products. Low numbers of Lm are achieved through HACCP, product design etc and the organism cannot multiply due to low pH or low aw. There is thus no point in testing. As regards 'Additional notes II', although some products are defined, the requirement for testing appears to remain. It would make sense not to have to test for II (a) products. Similarly, note II (b) products might not need testing. In relation to note II (c), there is a need to define "Records concerning the characteristics". Is the phrase intended to cover pH, aw, fat content etc ?

13. For category 4 products, if the producer is able to demonstrate compliance, there is no reason to test. That is the whole point of HACCP and food safety management systems.

14. The amount of microbiological testing generated by the provision for category 5 products is potentially enormous and is regarded as totally impracticable.

15. In relation to Annex II, the general principle needs to be borne in mind that sampling is not an effective way of ensuring food safety, for the reasons given at paragraph 10. Control should be through HACCP, supplemented by appropriate monitoring and verification, not by end-product testing.

16. With regard to methodologies, UKAS-accepted methods may be more relevant in a UK context and it might be worth checking whether these are also ISO-approved. It is noted, in the context of the final sentence on page 12 ("For epidemio-surveillance purposes, the use of further methods.....is recommended"), that such methods are not readily available or accredited.

17. Finally, the statements about the frequency of product sampling would be open to considerable differences of interpretation which could create significant practical problems and differences in enforcement practices.

## ANNEX VII

---

### Advisory Committee on the Microbiological Safety of Food

---

Administrative Secretary, Room 813C, Aviation House  
125 Kingsway, London WC2B 6NH  
Telephone : 0207-276-8951 Fax : 0207-276-8907  
E-mail : colin.mylchreest@foodstandards.gsi.gov.uk

**Mark Filley Esq**  
**Ministry of Agriculture, Fisheries and Food**  
**BSE Inquiry Liaison Unit**  
**1A Page Street**  
**London**  
**SW1P 4PQ**

27 April 2001

#### **PUBLIC CONSULTATION ON THE GOVERNMENT'S INTERIM RESPONSE TO THE BSE INQUIRY**

Jenny Bacon's letter of 9 February invited comments on the proposals contained in the Government's Interim Response to the Report of the BSE Inquiry chaired by Lord Phillips of Worth Matravers. I have been asked by the Chairman of the ACMSF to let you know the Committee's stance on these matters.

Clearly, responsibility for advising Government on the food safety implications of BSE does not rest with the ACMSF. However, there are aspects of the Phillips Report and, consequently, the Government's response, which are of relevance to the Committee. The parts of the response document which are particularly relevant to the ACMSF are :-

- Chapter 4 on science and Government;
- Chapter 5 on openness;
- Chapter 6 on risk; and
- Chapter 7 on good government.

The comments annexed to this letter concentrate on these aspects of the Government's response.

(cm6336)

I am copying this letter to Professor Georgala, the ACMSF's Chairman, and to its Medical Secretary, Dr Judith Hilton.

**C R MYLCHREEST**  
**Administrative Secretary**

## GOVERNMENT'S INTERIM RESPONSE TO THE REPORT OF THE BSE INQUIRY

### COMMENTS BY THE ADVISORY COMMITTEE ON THE MICROBIOLOGICAL SAFETY OF FOOD (ACMSF)

#### Chapter 4 : Science and Government

1. The ACMSF fully recognises the need for Departments to ensure that appropriate members are appointed to the scientific advisory committees. Whilst appointments to the ACMSF fall outside the ambit of the Commissioner for Public Appointments, the Committee supports the decision of its parent body (the Food Standards Agency (FSA)) that such appointments should be made in accordance with Nolan principles and in compliance with the guidance issued by the Office of the Commissioner for Public Appointments. In practice, this means that vacancies are publicly advertised and a formal panel is constituted to sift applications, prepare short lists of the most suitable candidates, and interview those short listed. Before final decisions on appointments are taken, the Secretary of State for Health and those Ministers with responsibility for health in the devolved administrations are consulted on the FSA's proposals (as required under the Food Standards Act 1999).

2. The ACMSF also supports the view that Departments should identify clearly and precisely the role of Committee members and the scope of their advice, and should ensure that they properly and fully understand advice proffered by the committees. In the case of the ACMSF, the Committee's terms of reference have recently been reviewed and revised by the FSA, in order to clarify the Committee's role. Relevant guidance is provided to members through the Chair and the Secretariat. Members are encouraged to participate fully in the Committee's business (often through "tours de table"). The proposal by Government to provide appropriate training to members is welcome.

3. In reporting to Government, the ACMSF seeks to ensure that its advice is properly and fully understood. This process is assisted by the attendance at its meetings of Departmental Assessors (routinely), and Departmental officials (where this is appropriate for particular issues). Where there is a need for the ACMSF to undertake in-depth studies of microbiological food safety issues (the ACMSF has published detailed reports on vacuum packaging and associated processes; *Salmonella* in eggs; *Campylobacter*, VTEC; poultry meat; foodborne viral infections; and microbial antibiotic resistance), the comprehensive reports produced are so structured as to be intelligible on three different levels (ie. to the lay, informed and expert readers). The Committee recognises the potential advantages which might flow from the adoption of a more formal structure for the process of risk assessment. Members already have some experience of using risk assessment in the Committee's work and will be carefully exploring additional options. The

ACMSF's Second Report on *Salmonella* in eggs, which will be published shortly, contains a detailed risk assessment supplement. The ACMSF is also fully committed to being as open as possible at all stages of the risk assessment process. It is already made clear to authors of papers being considered by the Committee that it operates on the presumption that papers it considers will be made publicly-available. The Committee also publishes detailed minutes of its proceedings and, subject to the FSA (to whom it reports) being content, always looks to publish its advice and other outputs.

4. The ACMSF fully recognises the need to declare potential conflicts of interest. The Committee operates under a code of practice reflecting the Seven Principles of Public Life. Declarations of interest in any items to be discussed are called for at the beginning of all of the Committee's meetings. Individuals declaring particularly important interests may, if deemed appropriate, be required to leave the room during discussion of relevant issues, such interests and actions being recorded in the minutes of the meeting concerned. The Committee publishes annual reports on its work. The code of practice is publicly-available through the annual reports, each of which contains a Register of Members' Interests.

5. The ACMSF supports the Government's proposal to draw up a Code of Practice for the scientific advisory committees and participated fully in the first round of consultations. The Committee also intends to participate in the second round. The Committee is content with the proposal that the Government's Chief Scientific Adviser should adopt the practice of writing to Permanent Secretaries setting out good practice on handling scientific advice, managing research within their Departments, and addressing other issues such as ways of identifying emerging issues, coordination and communication within Government, and evaluation and review of research proposals. A number of points occur to the ACMSF in this connection, namely :-

- the Government spends many millions of pounds annually on research. If full value is to be achieved from this, it is essential that research projects commence quickly and that the outputs from such research are made publicly-available fully and expeditiously;
- foodborne infections do not respect geographical boundaries. It is thus essential that the Government has in place arrangements to enable necessary action to be taken and essential advice to be provided rapidly and consistently across the UK. This has become particularly important in view of devolution initiatives;
- CSA guidance should stress the importance of Departments defining unequivocally the respective roles of Government and the scientific advisory committees. The ACMSF's essential role is to provide advice on the microbiological safety of food to the FSA. It's responsibilities are thus essentially in the area of risk assessment. CSA should be clear that responsibility for risk management lies principally with Government, although the scientific advisory committees may legitimately endeavour to provide a suite of risk management options for Government consideration.

Risk communication may fall to be shared more equally between Government and its advisory committees in future, so clear guidance is needed on the "senior partner" status of Government, and the way in which the committees will operate in support of Government.

6. The ACMSF recognises the value of policy makers within Government having access to the widest possible range of scientific opinion. The Committee already publishes its agenda and papers, and its subject-specific reports, in addition to being fully argued, contain extensive references to supporting literature. ACMSF membership is drawn from a wide range of relevant disciplines and interests, and there are two lay members. In addition, external expertise is co-opted as and when necessary to supplement "in house" expertise. When undertaking in-depth studies of specific issues, it is the Committee's practice to trawl widely for written evidence and to hold oral evidence sessions too. There would be benefits were the Government to encourage other scientific advisory committees who do not yet follow these practices to do so in the future.
7. The Committee's comments on certain aspects of the Government's policy for research are given above. The ACMSF considers that a workshop approach, involving key stakeholders with a direct interest and relevant expertise in the subjects concerned, will often be advantageous in developing research strategies, auditing the extent to which research meets the objectives set, identifying gaps and avoiding overlaps, and in horizon scanning.

## **Chapter 5 : Openness**

8. The ACMSF is fully committed to the principle of openness. It publishes its agendas, papers, minutes and press releases, all of which are available on the Committee's website. Its annual reports, which are also published, will in future be posted on its website. ACMSF subject-specific reports are also published, and a media briefing session is held to launch new reports. The Committee has also introduced arrangements for public access to one of its routine quarterly meetings each year.
9. The ACMSF supports the Government's initiatives to extend the boundaries of openness and is keen to reflect this commitment in its own practices. However, it is important to recognise that a proportion of the information which the Committee needs to obtain in order to be able to frame its advice to Government may be subject to commercial or other sensitivities and may be made available to the ACMSF subject to this confidentiality being respected. The ACMSF fully accepts that, before information is withheld on grounds of confidentiality, the need for such protection should be rigorously tested. By the same token, it needs to be recognised that, in certain circumstances, particular information has to be protected in order to avoid compromising the quality of the advice the Government receives.

## **Chapter 6 : Risk and uncertainty**

10. The ACMSF's views on some aspects of risk analysis are given above. The Committee supports the principle that the consumer should receive clear advice on risk, making clear any limitations on current knowledge, so that they can make informed choices. The Committee also believes that Government should stand ready to protect consumers through interdiction, to the extent that consumers are unable to protect themselves. In judging when and where to intervene, Government should operate in accordance with the precautionary principle, affording the benefit of any doubt to the consumer.

## **Chapter 7 : Good government**

11. As already noted, it is extremely difficult to contain microbiological illness and foodborne disease within geographical boundaries. The current foot and mouth disease crisis provides clear evidence of the way in which viral infection can spread and the speed with which the spread can take place. Coordination across boundaries, be they geographical, Departmental or inter-Departmental, is essential. Clear arrangements need to be made to ensure that the Government's external sources of advice, like the ACMSF and the other scientific advisory committees, are fully integrated into the emergency response machinery. Horizon scanning, and early gearing up of response machinery on a contingency basis are likely to enhance the Government's ability to mount effective countermeasures when these are required.
12. The effectiveness of any measures aimed at protecting the food chain will depend in large measure on the public's confidence in available sources of advice. The perception of a political dimension may detract from the public's confidence in the way a particular event is being handled. In this context, the independence of the CMOs and CVOs is an important asset in securing, maintaining or restoring public confidence. The contribution that the ACMSF and the other scientific advisory committees can make, in terms of public confidence, through the provision of independent expert advice should not be overlooked.

## ANNEX VIII

---

### Advisory Committee on the Microbiological Safety of Food

---

Administrative Secretary, Room 813C, Aviation House  
125 Kingsway, London WC2B 6NH  
Telephone : 0207-276-8951 Fax : 0207-276-8907  
E-mail : colin.mylchreest@foodstandards.gsi.gov.uk

Dr D Coles  
Office of Science and Technology  
Room 1/7  
Albany House  
94-98 Petty France  
London  
SW1H 9ST

9 May 2001

Dear Dr Coles

#### **OST CONSULTATION ON THE PROPOSED CODE OF PRACTICE FOR SCIENTIFIC ADVISORY COMMITTEES**

1. The Advisory Committee on the Microbiological Safety of Food (ACMSF) is grateful for the opportunity to comment on the draft for the second round of consultations on the code of practice for scientific advisory committees, which accompanied Professor David King's letter of 30 March 2001. The ACMSF's Chairman, Professor Georgala, has asked me to let you know the Committee's stance on the various issues covered by the draft code.
2. As a general observation, whilst the ACMSF can properly be regarded as a "scientific advisory committee", its range of expertise (and the areas on which its advice is sought by Government) extends beyond the exclusively scientific. Microbiological food safety also encompasses problems arising from human activity and diverse industrial and agricultural events. In addition to medicine, veterinary medicine and microbiology, the Committee therefore draws on a wide spectrum of expertise in areas such as environmental health, food retailing, food processing, catering, consumer/lay interests, etc. It would therefore be helpful if it could be made clear that the proposed code of practice applies to expert advisory committees which may have other than simply scientific expertise. This could, to advantage, be explained in the '**introduction**' section on page

**1.**

(cm6378)

3. This point is also relevant in relation to **the context in which scientific advisory committees work (paragraph 6)**. The ACMSF gives advice on a very wide range of issues because food poisoning can arise in a number of different ways. While much of the expertise needed will be scientific, there will be other, non-scientific, elements covered too (eg. what engineering, processing or handling solutions might be available for excluding a particular microorganism from a particular foodstuff).
4. The ACMSF accepts the analysis in **paragraph 8** that the task of policy making is essentially for government, but that it has a legitimate role in providing policy options for Government to consider. Indeed, the Committee has, on a number of occasions, provided such policy options. It is also accepted that a committee would not normally be expected to fulfil a stakeholder role.
5. In relation to **the role and remit of committees (paras. 9-11)**, the ACMSF's terms of reference have recently been reviewed and redrafted, both to avoid constraining its consideration of relevant questions and to obviate the need for frequent further reviews and adjustments of its terms of reference. It is agreed that reporting lines need to be clear. It is also agreed that committees need to make clear any limitations in their expertise to address any social, ethical and economic aspects.
6. In this connection, it may be from time to time that, even when a committee is addressing an issue which clearly falls within its terms of reference, available in-house expertise may need to be supplemented by reference to additional, specific expertise. The ACMSF has undertaken in-depth studies of specific issues (eg. vacuum packaging, two reports on *Salmonella* in eggs, *Campylobacter*, verocytotoxin-producing *Escherichia coli*, poultry meat, foodborne viral infections, microbial antibiotic resistance) and has co-opted external expertise on an *ad hoc* basis to supplement in-house expertise. The Committee has also trawled widely for written evidence, and has conducted oral evidence sessions too. There would be benefits if other advisory committees who do not yet follow these practices could be encouraged to do so in the future. The ACMSF therefore welcomes the **balance of expertise** section of the draft code, in particular the advice in **paragraph 15** on the co-option of expertise.
7. The ACMSF supports the principles embodied in **paragraph 16** of the draft code. ACMSF appointments are made in accordance with Nolan principles and in compliance with the guidance issued by the Office of the Commissioner for Public Appointments (OCPA).
8. The Chairman of the ACMSF already operates within, and fully supports, the provisions in **paragraph 17** of the draft code on **responsibilities of chairs**.
9. The section of the draft code (**paragraphs 18-27**) relating to **members' rights and responsibilities** reflects the ACMSF's own views and

philosophies. The Committee's practices already reflect many of these provisions. Paragraph 27 in particular is seen as providing a very useful check list and *aide-memoire* for ensuring proper attention is given to the rights of committee members.

10. The provisions of the draft code on **the role of the secretariat (paragraphs 28-33)** reflect the ACMSF's own views and accord with the Committee's own working practices.
11. The ACMSF supports the provisions of **paragraph 34** of the draft code on **the role of Departmental assessors and other officials** having contact with the advisory committees and/or attending their meetings.
12. In relation to **the committees' working practices**, the ACMSF fully supports the draft code as it relates to openness (**paragraph 35**) and itself operates in an open manner. The Committee also supports the provision relating to **the need for a rapid response procedure (paragraph 36)**. Here again, the ACMSF has this type of procedure in place. By way of example, advice was provided at very short notice to the Minister of Agriculture by the Chairman on the potential microbiological risks to consumer safety of the contamination of French animal feed with sewage sludge. On another occasion, the Secretariat was asked by ACMSF members to seek a formal view from orthomyxovirus specialists about the possible risk of the Infectious Salmon Anaemia virus for humans through non-food chain exposure pathways and the likelihood of any combination with other orthomyxoviruses, such as the influenza virus, to form reassortments. The need for **access to relevant research (paragraph 37)** is recognised, as is the need to **commission new research** to meet perceived shortfalls in required information (**paragraph 38**). The ACMSF has regularly promoted new research where gaps in existing information have been identified. Important examples include work on verocytotoxin-producing *Escherichia coli*, microbial antibiotic resistance, *Campylobacter*, and *Mycobacterium avium* subsp. *paratuberculosis*. The ACMSF regards **paragraphs 39-40** of the draft code as particularly important. There is an additional point here that the code could helpfully reflect. The Government invests many millions of pounds each year on research. If full value is to be derived from this, it is essential that research projects are commissioned, and then commence, quickly and that the outputs are made publicly-available fully and expeditiously.
13. The provisions incorporated into **paragraphs 39-44** are supported by the ACMSF and reflect its own working practices. However, it should be noted that the ACMSF, while it is able to include in its advice to its 'sponsoring Department' (the Food Standards Agency), recommendations for new research, is not in a position to commission such research on its own behalf. The ACMSF has no direct access to research funding and it seems likely that other advisory committees will be in a similar position. You may wish to consider, therefore, whether the draft code needs to reflect this situation.

14. Continuing with the research theme, the ACMSF considers that a workshop approach, involving key stakeholders with a direct interest and relevant expertise in the subjects concerned, will often be advantageous in developing research strategies, auditing the extent to which research meets the objectives set for it, identifying gaps and avoiding overlaps, and in horizon scanning. The ACMSF has direct experience of this approach - for example, a workshop held to discuss the current state of knowledge on foodborne viral infections, to identify gaps in knowledge and to consider opportunities and priorities for research. This attracted leading UK experts as well as international representation, including a speaker from the Centers for Disease Control and Prevention, Atlanta, USA. You may consider it worthwhile pointing to the benefits to be derived from the workshop approach in the draft code.
15. In relation to **the reporting of risk and uncertainty (paragraphs 45-48)**, there may be advantage in including in the code a statement to the effect that committees should operate in accordance with the principle that consumers should receive clear advice on risk, making clear any limitations on current knowledge so that they are able to make informed choices. The ACMSF also believes that Government, for its part, should stand ready to protect consumers through interdiction, to the extent that consumers are unable to protect themselves; and that, in judging when and where to intervene, Government should operate in accordance with the precautionary principle, affording the benefit of any doubt to the consumer.
16. The ACMSF fully supports the principles embodied in those sections of the code dealing with **procedures for arriving at conclusions (paragraphs 49-51)**, **dealing with dissenting views (paragraph 52)**, **publication of documents-general (paragraphs 53-55)** and **submitting and publishing a committee's advice (paragraphs 56-61)**. The ACMSF is firmly committed to the principles of openness and of increasing public access to its work. It operates on the basis that papers it considers, as well as its own outputs, are made publicly-available. However, it is important to recognise that a proportion of the information that the ACMSF needs to obtain in order to be able to frame its advice to Government may be subject to commercial or other sensitivities and may be made available to the ACMSF subject to this confidentiality being respected. The ACMSF fully accepts that, before such information is withheld on grounds of confidentiality, the need for such protection should be rigorously tested. Equally, it needs to be recognised that, in certain circumstances, particular information has to be protected in order to avoid compromising the quality of the advice the Government receives.
17. In relation to **paragraphs 60-61** on the release of information, as explained earlier, the ACMSF is charged with advising the Food Standards Agency. Whilst there is a presumption that its advice would always be published, the decision rests ultimately with the FSA, and the Committee is not free to unilaterally make public its advice. The code needs to reflect

this situation which may equally obtain in the case of some or all of the other advisory committees.

18. The ACMSF concurs with the section of the code dealing with **frequency of publication and content of regular reports (paragraphs 62-63)** and already operates on the basis set out in the draft. It also agrees with **paragraph 64** on the publication of stand-alone reports on specific issues. As explained in paragraph 6 above, the ACMSF has already published a range of subject-specific reports.
19. The **publication of agendas** in advance of its meetings (**paragraph 65**) is a practice already followed by the ACMSF, as are the procedures in **paragraphs 66-68** on the **publication of minutes**. Subject to the caveats contained in paragraphs 16 and 17 above, the ACMSF operates on the presumption that its **background documentation, working papers and unpublished research (paragraphs 69-73)** are either made available through its website or are suitably referenced in its outputs.
20. The ACMSF has no role as an approvals body and **paragraph 74** of the draft code on **publication of applications** does not therefore apply and will equally not apply to many of the other advisory committees.
21. The ACMSF agrees in principle with the provisions in **paragraphs 75-78** of the draft code for **dealing with confidential information**, subject to the practical considerations detailed in paragraph 16 above. Similarly, in relation to **paragraph 79** on **communication with the public**, the ACMSF is supportive of this stance, subject only to its responsibility to advise the FSA and thus be guided by the Agency on the extent of direct ACMSF contact with the public.
22. The ACMSF is wedded to the inclusion of appropriate **public consultation (paragraphs 80-84)** as part of the process of developing its advice. As regards open meetings, the ACMSF held its first in 2000 and plans for the future to hold at least one of its routine quarterly meetings in public each year.
23. The benefits of **peer review (paragraph 85)** are accepted, as is the need for clear guidance on **communication with the media (paragraph 86)**. The ACMSF Chairman is the Committee's principal spokesman but he may also involve Committee members as appropriate.
24. The ACMSF agrees on the benefits of **early identification of issues (paragraphs 87-88)**. The Committee holds horizon scanning sessions from time-to-time and ACMSF annual reports contain a 'Forward Look' section. The Committee also conducts regular reviews of its published subject-specific reports and other advice, to test its continued relevance, to map progress in implementing any recommendations, and to take stock of pertinent developments.

25. The need for procedural rules for the **handling of conflicts of interest (paragraph 89)** is recognised. The ACMSF operates under a code of practice which contains guidance on handling conflicts of interest. In addition, ACMSF appointments are made in accordance with Nolan principles and the Commissioner for Public Appointments' guidance on appointments to public bodies.
26. The focus provided by the draft code in relation to **training for the chairs and members of committees (paragraph 90)** is welcomed. The importance of **exchanging information with other committees (paragraphs 91-92)** is accepted. The ACMSF ensures that, when its work overlaps with areas of work where other committees have responsibilities, those committees are consulted on planned ACMSF involvement and are kept informed of developments. In this connection, there has been recent liaison with the Advisory Committee on Animal Feedingstuffs (ACAF), on *Salmonella* contamination of animal feed, and with the Advisory Committee on Dangerous Pathogens (ACDP), about the possible role of *Mycobacterium avium* subsp. *paratuberculosis* in the aetiology of Crohn's disease. In addition, the ACMSF has instituted a system whereby an information paper on the work of the other advisory committees is presented to members at the Committee's routine quarterly meetings. Such papers are also posted on the Committee's website.
27. **Paragraph 93** of the draft code on the **handling of expenses** is noted, as is **paragraph 94** on the **liabilities of members**. The terms of the indemnity given by the Secretary of State for Health to members of the ACMSF is reprinted in the Committee's 1999 Annual Report for ease of reference.
28. I hope that you will find the above comments helpful. Should you need any further information, please do not hesitate to get in touch.

Yours sincerely

**COLIN MYLCHREEST**  
**ACMSF Administrative Secretary**

## ANNEX IX

---

### Advisory Committee on the Microbiological Safety of Food

---

Administrative Secretary, Room 813C, Aviation House  
125 Kingsway, London WC2B 6NH  
Telephone : 0207-276-8951 Fax : 0207-276-8907  
E-mail : colin.mylchreest@foodstandards.gsi.gov.uk

J Caseley Esq  
FAC Secretariat  
Room 515C Aviation House  
125 Kingsway  
London  
WC2B 6NH

21 May 2001

Dear Mr Caseley

#### **DISTANCE SELLING : SALES OF FOOD AND ANIMAL FEED VIA THE INTERNET OR BY MAIL ORDER**

1. Sandy Lawrie's letter of 1 May invited views on potential problems associated with distance selling of food and animal feed. I have been asked by the Chairman of the Advisory Committee on the Microbiological Safety of Food (ACMSF), Professor Douglas Georgala, to let you know the Committee's stance on the question of the sale of food by mail order.
2. The sale of food by mail order was one of the questions addressed by the ACMSF in its Report on Vacuum Packaging published in 1992<sup>1</sup>. The practice of selling pre-packaged smoked fish by mail order was highlighted in the Richmond Report<sup>2</sup> as being of particular concern, in relation to the potential botulism hazard. At that time, there was a derogation from statutory temperature controls covering mail order foods sent to consumers, in order to allow industry time to investigate practical means of compliance.
3. As part of its work for the Vacuum Packaging Report, the ACMSF examined results from a small-scale scientific study<sup>3</sup> designed to assess the public safety hazard from mail order foods. The study emphasised

---

<sup>1</sup> ACMSF. Report on Vacuum Packaging and Associated Processes. 1992. HMSO, London.

<sup>2</sup> The Microbiological Safety of Food. Report of the Committee on the Microbiological Safety of Food (Chairman Sir Mark Richmond). Part II. 1991. HMSO, London.

<sup>3</sup> MAFF. The microbiological status of some mail order foods. 1991. MAFF Publications, London (PB0707).  
(cm6386A)

the need for effective temperature control for products such as smoked fish unless they had been rendered ambient stable. The ACMSF noted that many such products were vacuum packaged and that the mail order food industry were reported to have formed a trade association which was working on a code of practice for its members and was undertaking research into coolant gels and other packaging aids. Use of delivery or courier services which were able to guarantee arrival of the product within 24-48 hours were also reported to be under investigation. The idea was to combine the use of packaging aids and time-limited delivery services to enable vacuum packaged mail order foods to be delivered to consumers under controlled conditions.

4. The ACMSF regards effective temperature control as being as important in the transport of foods by mail order as in the transport of conventionally retailed foods. The ACMSF recommended in its Report on Vacuum Packaging that foods sent by mail order should comply with the statutory temperature requirements in place for foods delivered by other means. In addition, the Committee recommended that those involved in sending food by mail order should ensure that controlling factors, in addition to temperature, are present to prevent the growth of pathogenic microorganisms, including psychrotrophic *Clostridium botulinum*.
5. While all foods supplied to consumers by mail order are exempt from the 8°C requirement of the Food Safety (Temperature Controls) Regulations 1995, it is essential that relevant foods are conveyed at a temperature which does not give rise to a risk to health, and this is now required by the Regulations. However, it is not clear what progress was made with respect to the planned industry code of practice or with the other initiatives mentioned above.
6. At the ACMSF's request, the Food Standards Agency is engaging the industry in a review of the existing industry code of practice for the manufacture of vacuum and modified atmosphere packaged chilled foods. The aim of that review is to simplify and update the code and to make it more accessible and relevant to target audiences. As part of this exercise, the FSA is also considering what other work on *C. botulinum* the Agency needs to undertake. This work is being taken forward within the Agency by Dr Kathryn Callaghan, to whom I am copying this letter. The need for further guidance on the potential risk of botulism arising from mail order foods should now be included in that exercise.

Yours sincerely

**COLIN MYLCHREEST**  
**Administrative Secretary/ACMSF**

## ANNEX X

---

### Advisory Committee on the Microbiological Safety of Food

---

Secretariat : Room 808C, Aviation House,  
125 Kingsway, London WC2B 6NH  
Telephone : 020 7276 8946 Fax : 020 7276 8907  
E-mail : liz.stretton@foodstandards.gsi.gov.uk

Mr F Aziz  
Food Standards Agency  
Room 211B  
Aviation House  
125 Kingsway  
London  
WC2B 6NH

26 September 2001

Dear Mr Aziz

#### **CONSULTATION ON THE REPORT OF THE REVIEW OF THE FOOD STANDARDS AGENCY'S RESEARCH AND SURVEILLANCE**

Dr Dunn's letter of 25 July requested comments from Advisory Committees on the recommendations that were made in the above report. The ACMSF Secretariat sought the views of members and this letter is a summary of comments received.

#### ***A research strategy***

The ACMSF strongly agrees the need to adopt a research strategy directed towards the aims and objectives of the Agency.

#### ***Proposal for a Research Advisory Committee***

It should be noted that current research on 'Microbiological food safety' is of direct interest to the ACMSF. The Committee would support the review of these research programmes and is ready to contribute to the process, particularly in assessing relevance to practical food safety measures and the policy advice it gives to the Agency.

The creation of a Research Advisory Committee seems a useful step. However, the Agency's existing Advisory Committees will often put forward

important proposals for research. It is essential that these continue to be given full weight, and that any new Research Committee is able to absorb these proposals in an open and creative way. The Agency will have to be careful to avoid adding an additional bureaucratic process which could hinder the development of sound policies. The ACMSF has, on a number of occasions, given advice concerning specific research and surveillance needs arising from its independent advisory role for the Agency.

### **Research procurement**

The ACMSF also agrees that much of the Agency research should be procured through an open and competitive process. That said, the Committee also agrees that there may be a need to support centres of excellence, where special facilities or skills may be needed on a longer term basis. Examples relevant to the ACMSF would be research on food pathogens such as *C. botulinum*, food viruses and studies involving 'difficult' microorganisms such as *Mycobacterium avium* subsp. *paratuberculosis*.

### **Collaboration with other UK funders and other countries**

The ACMSF is particularly concerned that there should be improvements in the collaboration with other UK funders. Of specific importance to the ACMSF is the coordination of surveillance activities with the PHLS. Recommendation 23 makes no mention of DEFRA which the committee think is an omission. The committee is aware that DEFRA is proposing funding of research on food pathogens such as *Campylobacter*, *Salmonella* and *verocytotoxigenic E. coli*. DEFRA research is directed at the origin of these organisms in livestock, in relation to the human food chain. Research of this nature would be of direct importance to the Agency's objectives and there is potential for overlap with Agency sponsored work. Hence, collaboration with DEFRA should feature in recommendation 23.

### **Dissemination of research**

The ACMSF feels that wide dissemination of results is essential. Special arrangements should also be put in place to ensure that results of research are made available to relevant Advisory Committees at the earliest possible opportunity.

In general terms, the ACMSF agrees with the operational recommendations which are contained in the review.

**Liz Stretton**  
**Secretariat**  
(cm6503)

## Annex XI

### REFERENCES

1. Advisory Committee on the Microbiological Safety of Food (1993). Report of Progress 1990-92. HMSO, London. ISBN 0-11-321664-5.
2. Advisory Committee on the Microbiological Safety of Food (1994). Annual Report 1993. HMSO, London. ISBN 0-11-321816-8.
3. Advisory Committee on the Microbiological Safety of Food (1995). Annual Report 1994. HMSO, London. ISBN 0-11-321921-0.
4. Advisory Committee on the Microbiological Safety of Food. Annual Report 1995. Department of Health, Wetherby. ISBN 1 85839 5763.
5. Advisory Committee on the Microbiological Safety of Food (1997). Annual Report 1996. Department of Health. ISBN 85839 7243.
6. Advisory Committee on the Microbiological Safety of Food (1998). Annual Report 1997. Department of Health.
7. Advisory Committee on the Microbiological Safety of Food (1999). Annual Report 1998. Department of Health.
8. Advisory Committee on the Microbiological Safety of Food (2000). Annual Report 1999. Department of Health.
9. Advisory Committee on the Microbiological Safety of Food (2001). Annual Report 2000. Food Standards Agency.
10. Advisory Committee on the Microbiological Safety of Food (1992). Report on Vacuum Packaging and Associated Processes. HMSO, London. ISBN 0-11-321558-4.
11. Advisory Committee on the Microbiological Safety of Food (1993). Report on *Salmonella* in Eggs. HMSO, London. ISBN 0-11-321568-1.
12. Advisory Committee on the Microbiological Safety of Food (1993). Interim Report on *Campylobacter*. HMSO, London. ISBN 0-11-321662-9.
13. Advisory Committee on the Microbiological Safety of Food (1995). Report on Verocytotoxin-Producing *Escherichia coli*. HMSO, London. ISBN 0-11-321909-1.
14. Advisory Committee on the Microbiological Safety of Food (1996). Report on Poultry Meat. HMSO, London. ISBN 0-11-321969-5.

15. Advisory Committee on the Microbiological Safety of Food (1998). Report on Foodborne Viral Infections. The Stationery Office, London. ISBN 0-11-322254-8.
16. Advisory Committee on the Microbiological Safety of Food (1999). Report on Microbial Antibiotic Resistance in Relation to Food Safety. The Stationery Office, London. ISBN 0-11-322283-1.
17. Advisory Committee on the Microbiological Safety of Food (1999). Report on Microbial Antibiotic Resistance in Relation to Food Safety. Synopsis. The Stationery Office, London. ISBN 0-11-322295-5.
18. Advisory Committee on the Microbiological Safety of Food (2001). Second Report on *Salmonella* in Eggs. The Stationery Office, London. ISBN 0-11-322466-4.
19. Advisory Committee on the Microbiological Safety of Food (2001). Report on *Mycobacterium bovis*. A review of the possible health risks to consumers of meat from cattle with evidence of *Mycobacterium bovis* infection. Food Standards Agency; January 2002. FSA/0400/2002.
20. Committee on Standards in Public Life (Nolan : First Report). May 1995.
21. The Commissioner for Public Appointments. Office of the Commissioner for Public Appointments. Code of Practice for Ministerial Appointments to Public Bodies. July 2001.
22. Food Standards Agency press release 2001/0097 of 21 March 2001. Re-appointment of Chairman of the Advisory Committee on the Microbiological Safety of Food.
23. Food Standards Agency press release of 24 October 2001. Appointments to the Advisory Committee on the Microbiological Safety of Food.
24. Food Standards Agency news release 2001/0110 of 9 May 2001. Nationwide survey planned to look at *Salmonella* levels in eggs.
25. Advisory Committee on the Microbiological Safety of Food press release of 9 May 2001. Second Report on *Salmonella* in Eggs.
26. Food Standards Agency press release of 23 August 2001. Food Standards Agency announces UK benchmark for food poisoning reduction target.
27. Food Standards Agency press release 2001/0140 of 16 August 2001. *Salmonella* in retail chicken drops to all time low but the battle with *Campylobacter* continues.
28. Advisory Committee on the Microbiological Safety of Food press release of 29 September 2000. Meeting of the Advisory Committee on the Microbiological Safety of Food.

29. Food Standards Agency press release 2000/0044 of 29 September 2000. Agency plans action on milk bug.
30. Scottish Agriculture College Veterinary Science Division. Assessment of surveillance and control of Johne's disease in farm animals in GB. (Available on <http://www.defra.gov.uk/animalh/diseases/sac2.pdf>).
31. Campden and Chorleywood Food Research Association. Guideline No. 11. A code of practice for the manufacture of vacuum and modified atmosphere packaged chilled foods (Ed) Betts G D; May 1996.
32. Little C L, Omotoye R, Mitchell R T. LACOTS/PHLS Coordinated Food Liaison Group Studies : The microbiological examination of ready-to-eat foods to which spices have been added.
33. Department of Health. Press release 95\217 of 3 May 1995. Advisory Committee and Steering Group on the Microbiological Safety of Food to merge, and appointments to the new Committee announced.
34. Anon (2000). Report of the BSE Inquiry (Chairman : Lord Phillips of Worth Matravers). The Stationery Office.
35. Department of Trade and Industry. Review of risk procedures used by the Government's advisory committees dealing with food safety. Report of the group led by Sir Robert May, Chief Scientific Adviser. July 2000. DTI, UK. August 2000.
36. Anon (2001). The interim response to the Report of the BSE Inquiry. By H M Government in consultation with the devolved administrations. CM 5049. The Stationery Office.
37. Anon (2001). Response to the Report of the BSE Inquiry. By H M Government in consultation with the devolved administrations. Cm 5263. The Stationery Office.
38. Food Standards Agency (2001). A review of the Food Standards Agency's research portfolio and research management systems. Food Standards Agency. July 2001. ISBN 1 904026 04 4.
39. Food Standards Agency press releases. No. 2001/0089 of 23 February 2001. Vigilance of Meat Hygiene Service led to discovery of Foot and Mouth Disease.
40. British Retail Consortium. Water UK. ADAS (2000). The Safe Sludge Matrix. Guidelines for the application of sewage sludge to agricultural land. ADAS. April 2000. AMPU 1234/B/1.

41. Ministry of Agriculture, Fisheries and Food. Scottish Executive Rural Affairs Department. National Assembly for Wales Agriculture Department. Department of Agriculture and Rural Development, Northern Ireland. Zoonoses Report UK 1999. MAFF 2001. PB 5577.
42. Department for Environment, Food and Rural Affairs. National Assembly for Wales. Antimicrobial Sensitivity Report 1999. DEFRA 2001. PB 5996.
43. Department of Health. Press release 2001/0338 of 23 July 2001. Health Minister Lord Philip Hunt announces new Advisory Committee on Antibiotic Resistance.
44. Department for Environment, Food and Rural Affairs. National Assembly for Wales Agriculture Department. Scottish Executive Environment and Rural Affairs Department. *Salmonella* in Livestock Production in Great Britain, 2000. Veterinary Laboratories Agency 2001. ISBN 1 8995 1314 0.
45. Food Advisory Committee. Review of the use of the terms 'fresh', 'pure', 'natural', etc in food labelling. Food Standards Agency; 2001. FSA/0334/0701.
46. Food Advisory Committee. Annual Report 2000. Food Standards Agency. 2001. FSA/0011/0301.
47. Advisory Committee on Animal Feedingstuffs. Review of animal feed labelling. Food Standards Agency. 2001. FSA0045/0601.
48. Department of Health. Food Standards Agency. Committees on Toxicity, Mutagenicity and Carcinogenicity of Chemicals in Food, Consumer Products and the Environment. Annual Report 2000. Dept of Health/FSA; September 2001.

cmr018-0110