[Draft of 16/10/97]
(awaiting comments from Dr Hope on paragraphs 43-45)

SPONGIFORM ENCEPHALOPATHY ADVISORY COMMITTEE

MINUTES OF 44TH MEETING HELD ON 16 SEPTEMBER 1997 AT MAFF, TOLWORTH

Present:

Members:	Professor J R Pattison (Chairman)	
	Professor J Almond	
	Mr R Bradley	
	Professor F Brown	
	Professor J Collinge	
	Professor W D Hueston	
	Dr M Painter	
	Mr D B Pepper	
	Professor P Smith	
	Dr W Watson	
Observers:	Dr A Wight	DH
	Dr D Matthews	MAFF
	Dr L Heppell	BBSRC
	Dr A Coriat	MRC
	Dr M Bale	HSE
Secretariat:	Mr T Eddy	MAFF
	Ms K O'Donoghue	MAFF
	Mr G Austin	DH
	Mrs S Townsend	MAFF
	Dr A Nolan	MAFF
In attendance:	Mr P Comer	DNV (Item 6 only)
	Dr J Hope	IAH (Item 10 only)

ITEM 1 - APOLOGIES FOR ABSENCE

1. Apologies were received from Dr Will and Dr Kimberlin.

ITEM 2 - MINUTES OF PREVIOUS MEETINGS

Minutes of meeting of 7 March 1997.

2. The minutes were agreed.

Minutes of meeting of 15 April 1997

3. The minutes were agreed subject to the incorporation of the sentence "The view was expressed that the literature supported a case for the difference in the efficiency of intracerebral and oral routes being less than 1000." in paragraph 7.

Minutes of meeting of 23 May 1997

4. Members noted extensive amendments to paragraphs 22 and 23 of the draft minutes on the cattle/human species barrier for BSE. The Committee decided to revert to the previous paragraphs 22 and 23 and to include submissions from Dr Kimberlin (received as comments on the minutes)and Professor Collinge (to come) as appendices to the minutes of that meeting.

[Action: Professor Collinge]

5. The Committee asked for clarification of the final sentence of paragraph 17: the Committee was content that SBM controls were adequate in respect of the use of material from bovine tissues in medicines or in ~~as~~ medical devices, provided bovine products used in medicines or medical devices came from outside the UK.

6. Members agreed that the second bullet point of paragraph 11 should be amended to "consumption of spinal cord either directly or in mechanically recovered meat"; add "and pithing" to end of fourth bullet point.

Minutes of meeting of 1 July 1997

7. The Chairman asked for comments on the minutes to be submitted direct to the Department of Health.

8. The Committee requested that paragraph 12 be amended to "looking at the epidemiological evidence, it could be concluded that tallow was not a major factor in the transmission of BSE, however the evidence was not sufficient to exclude all possibility of its being a factor".

ITEM 3 - MATTERS ARISING

Correspondence with Dr Dormont

9. Following the joint SEAC/Dormont Committee meeting in February, the Chairman had written to Dr Dormont requesting, first, information on whether the low incidence of BSE in France was explicable in terms of the likely exposure of French cattle to feed of UK origin, or whether it could be explained by a hypothetical co-factor at work in the UK, and secondly requesting information on rendering standards in France. The Chairman had written again to Dr Dormont on 8 July, referring very briefly to the points made in his earlier letter, and has now received a response from Dr Dormont, addressing only the narrow points made in the Chairman's follow-up letter.

10. The Committee agreed that, at the joint meeting with the Dormont committee, Dr Savey had described with some plausibility the reasons that there had been few BSE cases in France in spite of the importation of substantial amounts of animal feed from the UK, and that SEAC was right to ask for further information on that. The numbers of BSE cases in the UK and in other EU Member States appeared to suggest either that BSE cases were not being recognised in other Member States, or that there was a co-factor at work in the UK. It was accepted that BSE had been caused by

exposure to contaminated feed; however, significant discrepancies between the observed and the expected incidence of BSE in EU countries other than the UK would suggest that this hypothesis should be reviewed.

11. Members noted the publication of an article "Risk of BSE from the import of cattle from UK into countries of the European Union" by Schreuder, Wilesmith, Ryan and Straub in the Veterinary Record on 23 August. It was suggested that the paper made a strong case for raising the issue of BSE incidence in the European Union with the EU and for seeking support from the European Union for a research programme to identify whether there was any epidemiological evidence suggesting that a co-factor was at work in the UK. It was reported that the Scientific Veterinary Committee was of the view that under-reporting or lack of surveillance and detection was a factor. Members noted that for some time at the beginning of the epidemic, a majority of BSE cases had been single cases on farms. Although it would be difficult to hide a full scale epidemic on the scale of the UK's, it would still be relatively straightforward to fail to recognise single cases by sending these straight to the market or to slaughterhouses.

12. The Committee recommended that resources (either national or EU) should be devoted to investigating the anomalies between the occurrence of BSE in the UK and other Member States, bearing in mind exports of live animals and MBM from the UK to other Member States. It was noted that this could be difficult without the authority

of the Commission and that a collaborative study with the Commission's support would be preferable. The Committee also supported a meeting of appropriate EU scientists to discuss this issue.

[Action: Secretariat]

ITEM 4 - NVCJD UPDATE

Strain typing

13. The Committee had before it paper SEAC 44/9, "Transmissions to mice indicate that "new variant" CJD is caused by the BSE agent" by ~~Dr~~ Bruce *et al*. The article had been accepted for publication by *Nature* on 2 October 1997. It would be preceded by a Press Conference, which both the Chairman and Vice-Chairman of SEAC would attend. The Chairman informed the Committee that he and Professor Almond had co-authored a commentary on the article for *Nature*'s News and Views section.

14. The Committee noted that the article reported that the interim results of transmissions of sporadic and nvCJD to mice provided strong evidence that the same agent strain was involved in nvCJD and BSE. Members agreed that these latest findings provided yet more scientific evidence in support of the theory that BSE was the same as nvCJD. They noted, however, that there was still no conclusive evidence

of how the BSE agent had been transmitted to humans, and whether this was through eating beef products contaminated with the BSE agent.

15. Professor Collinge noted that the findings from this research were consistent with what the Committee had been thinking for some time although comparison with other forms of CJD was limited. He then went on to report his work with transgenic mice: six cases of nvCJD had now been transmitted to (a) transgenic mice carrying only human PrP genes, and (b) wild type mice. In the case of the wild type mice, all six cases of nvCJD had been transmitted. The incubation periods were not much longer than those shown by Dr Bruce's studies; the attack rate was high; and efficiency of transmission was high. A comparison showed that clinical symptoms from mice challenged with nvCJD and , BSE were similar. With other forms of CJD transmissions to wild type mice were much more difficult, as observed by other laboratories. In contrast, more than 20 attempted transmissions into transgenic mice had been highly successful. The incubation range for nvCJD in the transgenic mice was within the 160 - 260 day range seen with other forms of CJD. [A second passage had only been done in one case.] Transmissions into the transgenic mice were clearly without a species barrier, though there was one with wild type mice. ~~On pathology, the~~ **The** full lesion profiles had not been constructed but histopathology had shown BSE/nvCJD plaques were distinguishable from CJD profiles. Not all transgenic mice were succumbing to nvCJD. There was pathological and clinical evidence of transmission of BSE with much longer incubation periods than CJD/nvCJD. PrP^{Sc}

could not yet be demonstrated in these mice. All the transgenic mice were homozygous for valine at codon 129. When brain from patients who were homozygous for methionine at codon 129 was inoculated into valine homozygous transgenic mice, there was no significant difference in the incubation period. He would anticipate that heterozygosity would result in longer incubation periods. Professor Collinge added that the starting titres of inocula were not known, and therefore differences in incubation period could be due to variations in titre.

16. The Committee agreed to produce a short statement on the link between BSE and nvCJD summarising the conclusions of the discussion and the view that no further precautions were necessary as the Committee's current advice to Government and the measures in place to protect public and animal health were already based on the assumption that there could be a link.

[Action: Secretariat]

Possible nvCJD in Vegetarian

17. The Committee noted reports of nvCJD in a woman who had been vegetarian since 1985. They noted that the case had been diagnosed on the basis of a tonsillar biopsy, but was not yet confirmed. The case had led to speculation about the cause of nvCJD, and suggestions that either ingestion of beef products was not to blame or that the putative incubation period was at least 12 years.

18. Although this woman had been vegetarian since 1985, it was difficult to draw any conclusions on incubation periods, since these would fall within a range. It was noted that the average incubation period for iatrogenic CJD from human growth hormone was 15 years and for kuru was 12 - 15 years. When crossing the species barrier, it was not uncommon for incubation periods to double. The confirmation of nvCJD in this case could therefore be consistent with exposure to bovine products more than 12 years ago.

19. The case drew attention to the importance of the questionnaire used by the CJD Surveillance Unit to explore the dietary and medical history of cases and any other potential routes of exposure. Members noted that confirmation of nvCJD in vegetarians, particularly those with a long history of avoiding meat, would raise questions about the safety of dairy products. Members asked whether meat and bone meal had ever entered the human food chain, for example through stock cubes, gravy, or crisp flavouring. They also noted the likelihood that some consumption of petfood by humans did take place.

Action: Secretariat

nvCJD Epidemiology

20. The Committee noted that so far the only paper on forecasts of nvCJD was that published by Cousens et al in 1996. The Chairman reported that DH and MAFF

had agreed to establish a new SEAC sub group to monitor cases of nvCJD and to analyse trends in the disease. The sub group would report both to SEAC and to the Chief Medical Officer. He thanked Professor Smith for agreeing to chair the committee.

21. Dr Wight informed the Committee that the review of the CJD Surveillance Unit was now complete, but that, because of recommendations for additional resources, the review was currently with officials in DH's finance section and had not yet been submitted to Ministers.

ITEM 5 - BSE RESEARCH UPDATE

BSE in Chickens

22. Members noted that analysis of the two chicken brains supplied by Dr Narang had not revealed any evidence of spongiform encephalopathies. Dr Matthews said the results had been published in the Veterinary Record in the form of a letter from the Assistant Chief Veterinary Officer, Dr Cawthorne, and that Dr Narang's response had also been published. It was unlikely that Dr Cawthorne would write further.

23. In terms of ongoing research, chickens exposed to tissue sub-passaged from chickens originally exposed were now at 10 months post inoculation and were showing no signs of SEs. Members asked for a full review of the data in relation to SEs in chickens and for further experiments involving sub-passage.

ITEM 6 - PATHOGENESIS

24. The Committee had before it paper SEAC 44/2 which provided an update from Dr Matthews on the pathogenesis experiment. Members noted corrections to Table 1: Kill 8 had taken place at 36 months post inoculation, not 34 months.

25. The Committee also had before it paper SEAC 44/2A, an assessment of risk from possible BSE infectivity in dorsal root ganglia by DNV. Mr Comer of DNV presented the paper, which was a formal risk assessment to determine the level of risk to the human population due to the possibility that there could be infectivity in the dorsal root ganglia from cattle under the age of 31 months. The possibility of infectivity in these tissues had been indicated by results from the pathogenesis experiment.

26. Mr Comer explained that the risk assessment was based on a fairly straightforward model, whose main assumption was the number of infected animals

going to human consumption. Other secondary assumptions were what happened to the meat; how it was sold for food; and the likelihood of any infectivity being consumed. He emphasised that many of the assumptions were his own based on discussions with Dr Matthews and with the Meat and Livestock Commission. The analysis undertaken by DNV examined the global risk to the population, and calculated an individual risk.

27. Mr Comer confirmed that for the purposes of this assessment, all cattle were treated as the same in terms of consumption, and no difference had been drawn between beef and dairy cattle. The survival rates of cattle had been drawn from the paper by Dr Donnelly et al "The epidemiology of BSE in cattle herds in Great Britain. I. Epidemiological processes, demography of cattle and approaches to control by culling", which in turn were based on data supplied by National Milk Records.

28. Mr Comer noted that the assumption used in the assessment of 19 cases of BSE in cattle aged under 38 months was pessimistic. Dr Matthews commented that there were other bases for more favourable assumptions. However, the worst assumption had been used to err on the side of caution. Mr Comer acknowledged that a factor had not been built into the assessment for under-reporting. Mr Eddy commented that there was still no firm evidence of under-reporting. In fact, there

were still reports of first cases in many herds. Nonetheless it was recognised that under-reporting (or non-recognition) was possible.

29. The paper concluded that the median value of the total ingestion of infectivity due to infectivity in dorsal root ganglia of cattle with infectivity in the CNS at less than 31 months of age, was 0.2 ID50 units over the whole UK population in 1997. The 95% range was from 0 to 43 ID50 units, and the probability of the total ingestion being less than 1 was 70%. The Chairman commented that the probability of total ingestion being less than 1 of 70% was uncomfortably high. If even one case of nvCJD was caused by ingestion of dorsal root ganglia, this would be cause for concern.

30. Dr Matthews reported that in any one T-bone steak, there might be from 0.5 grammes to 0.7 grammes of dorsal root ganglia. The Committee noted that one practical option might be to recommend that beef was boned-out. However this would have little effect given the current estimate that only 3% of meat was sold bone-in. In any case, boning out could not guarantee removal of the dorsal root ganglia although practical demonstrations at the MLC suggested that it would remain with the bone. Mr Comer explained that the assessment was based on the assumption that 1% of dorsal root ganglia would be left in meat following deboning. The risk from ingesting dorsal root ganglia had to be set in the context of other risks, both now

and in the past, and against the risk of meat imported from other Member States which did not, for example, have an Over 30 Month Scheme.

31. The Committee noted that it might be possible that cattle were carrying the disease without displaying clinical symptoms. Current statutes related to EU export rules prevented the use of vertebral column for tallow or gelatin production for human use, even **though** ~~those~~ these were permitted in the Specified Bovine Material Order. There was a potential, theoretical use, where fat was produced without rendering, though information from the industry was that fat melters did not use vertebral column. The Committee agreed that it was nevertheless prudent to remove this theoretical outlet by amending the Specified Bovine Material Order to end the exemption for gelatin and fat manufacture from vertebral column. It was noted that any risk of exposure via fat melters had not been assessed as yet.

32. It was agreed that further risk assessments were required and that the risk from dorsal root ganglia would be evaluated in the context of other risks. It was essential that the work was carried out quickly, preferably by the same analysts to ensure a consistent approach. The Committee recommended a risk analysis of procedures in slaughterhouses, butchery processes and material, including imported material, which entered the food chain. The results should be prepared for the December meeting.

ITEM 7 - AUDIT OF USAGE OF BOVINE AND OVINE PRODUCTS

33. An audit report for MAFF by the Leatherhead Food Research Association of the bovine and ovine slaughter and by-products sector (1980 - 1985) was submitted to SEAC as paper SEAC 42/1 earlier in 1997. A list of statements from the report requiring further validation as well as questions for further investigation were drawn up as paper SEAC 43/2 for consideration by members at its meeting in July. Paper 44/3, before the Committee, was a revised version of paper 43/2.

34. Members of the Committee agreed that, although answers to the questions identified in paper 44/3 were likely to be based largely on anecdotal evidence, it was essential to try to find out more information. Dr Matthews reported that the CVO had asked current and existing staff whether they could provide any insight into the questions posed in the paper. It was suggested that the Scottish Meat Hygiene Service might be able to provide information since it had been set up before the England and Wales MHS.

35. The Committee noted again that papers had been made available from Australia and New Zealand which shed some light on comparative practices in those countries.

36. The Committee noted that the paper had been sent to the MRC Epidemiology Group for comments by the beginning of October.

37. The Committee concluded that there was a case of further research into use of brains and spinal cord and that paper SEAC 44/3 provided the basis for the next steps. The Chairman suggested that the epidemiology sub-group should consider the priority questions and how answers to these might be found, and whether the work should be undertaken by MAFF or a different party.

ITEM 8 - INTRA-SPECIES RECYCLING OF PIG AND POULTRY ISSUES

38. Discussion of this item was deferred to the next meeting.

ITEM 9 - SEAC REVIEW

39. Members noted that the report of the SEAC review had now been approved by MAFF and DH Ministers and had been published on 15 September. Comments on the review from members could be made to the Chairman for submission to Sir Robin Butler's high level committee on research into TSEs, or through the Committee Secretariat.

40. Members noted that the report made no assessment of the demands membership placed indirectly on employing institutions, and whether there was a case for compensating those institutions, or providing secretarial support. It was suggested that budgetary provision should be provided to enable SEAC members to attend relevant conferences as members of SEAC. Members noted the recommendation in the report that all members should be appointed on fixed terms, and agreed that there was a very long learning curve associated with membership of SEAC. They welcomed the proposal for inducting new members.

ITEM 10 - WESTERN BLOTTING OF SHEEP BRAINS

41. The Chairman welcomed Dr James Hope from the Institute of Animal Health who had worked on a collaborative study with the VLA and with Professor Collinge on western blotting of sheep brains.

42. Professor Collinge made a presentation to the Committee on the western blotting technique. A paper on the technique had been published in October 1996, showing that sporadic and iatrogenic CJD generated Types 1-3 on Western blotting and that nvCJD generated type 4. All nvCJD cases had this pattern including the French case. Professor Collinge noted that type 4 could not be distinguished from type 3 by molecular weight but could be by glycosylation pattern. Professor Collinge

had said that the western blot technique might be applicable to sheep, and might therefore help to identify whether BSE had been transmitted back into sheep. Samples from sheep brains had been provided by the Neuropathogenesis Unit dating back to the 1960s, and from the Central Veterinary Laboratory. A collaborative project had been taken forward with the IAH and CVL. Preliminary results from a less than ideal sample (because of the age of the specimens) showed that a significant proportion of sheep samples could be distinguished on a western blot from BSE samples. This method was much quicker and cheaper than conventional methods of strain typing.

43. Dr Hope gave a presentation to the Committee. From the same samples used by Professor Collinge, only 15 out of 28 samples could be classified in terms of glycosylation pattern. The 15 samples had fallen into 3 groups: natural scrapie; CH1641 and BSE; natural scrapie and SSBP1. The samples had not yet been subjected to conventional strain typing. Each sample had been run several times. Dr Hope explained that this was not an easy technique, and suggested that using the technique for routine diagnosis would therefore need careful consideration.

44. He continued that with all 28 samples, a positive result had been obtained. Some samples were putative controls *i.e.* they had no clinical or pathological scrapie, but nonetheless they scored positive in that there was some staining of gels. Professor Collinge's sampling had not obtained the same results. This might be due

to **different sensitivities** ~~**the sensitivity**~~ of the two versions of the test. The NPU had only been able to achieve results with 2 out of 5 BSE samples. CH1641 looked similar to, but not identical to, BSE (the diglycosylated form was most abundant but the molecular weight was different).

45. Dr Hope concluded that the collaborative exercise had been useful, illustrating both the power and drawbacks of the technique. He said there was still a lot about the technique that was not understood. **Dr Hope** ~~**The NPU**~~ had been unable to control for **the effect**~~**ive**~~ **of sheep** genotype from the NPU samples. They would also like to know about the influence of the **agent** strain on the western blot pattern. He had reservations about assuming what BSE and CH1641 looked like in sheep on this basis. Ideally the results should be written up. Professor Collinge noted that the molecular basis of BSE passaged in sheep was the same as that passaged in other species.

46. Dr Matthews said that the publication of **these** ~~**this**~~ data would be welcomed. The Government was under pressure to use the technique as a routine screening tool. Further research was necessary as the CVL work had also shown variations in results according to the brain sites tested. In the meantime, brain samples were being collected. ~~**, and to**~~ **To** take on this technique would involve scaling up resources at CVL which were already overstretched. The CVL could reproduce the technique now, but was having some difficulties in obtaining adequate signals from all samples

as both NPU and Professor Collinge had done. Before the technique could be routinely applied, it was essential that it was running efficiently **and consistently** in laboratories.

47. Members concluded that there was sufficient promise in this technique of comparing scrapie isolates with BSE to recommend additional resources to develop the technique.

ITEM 11 - SCRAPIE

48. Dr Nolan gave an oral report to the Committee on developments relating to scrapie. The abattoir survey had been designed and had started in August. Northern Ireland was considered to be a separate population and was not included. Within Great Britain, two populations were being surveyed: sheep with a permanent incisor, and those without. 1,500 brains from each population would be looked at over the year, and examined in terms of histopathology and SAF detection. The first 600 brains would also be examined using immunocytochemistry. A decision would then be taken on the screening method for further samples. To date 109 brains have been examined; no positive results had been obtained. Professor Hueston added that results from the US survey would be available soon.

49. Dr Nolan continued that the postal survey had not yet been commissioned but would be prepared later in the year. It was hoped to lay orders for the compulsory slaughter and compensation scheme later this year. On notification, there was nothing unusual to report.

50. Dr Matthews informed the Committee that the first meeting of the Scrapie Advisory Group had taken place last week. At the meeting, Dr Dawson from the CVL had reported a significant increase in interest in genotyping this year from farmers: this had increased from approximately 100 analyses per month to over 6000 in a six week period. Members were informed that genotypes were being announced at auctions, and were attracting premiums. The Committee noted that the conclusions of the Scrapie Advisory Group might be put to SEAC, and welcomed that suggestion.

51. The Committee noted that currently there were no legal requirements for the disposal of sheep with scrapie, or scrapie suspects. Dr Nolan pointed out that under the current legislation, the Government did not own scrapie-affected carcases and that was one reason why a compulsory slaughter scheme with compensation was sought. Carcases were only incinerated if they were volunteered.

52. Professor Hueston noted some interest in the United States in the possibility of composting disease-affected animals, but thought this technique would not have

features which would inactivate the agent. Dr Matthews reported that suggestions on composting had been received by MAFF, but had not been taken forward once those putting forward the suggestions were told they would need to prove the method inactivated the infective agent. Members noted that composting animals with transmissible diseases would pose risks **from ~~of~~** vermin and of infecting nearby water supplies.

ITEM 12 - USE OF DEDICATED VEHICLES FOR TRANSPORT OF MBM

53. Mr Eddy reported concern from NABIM and GAFTA about vehicles used for transporting MBM. Currently there was nothing to stop such vehicles after cleaning being used to carry grain for bread or animal feed. The two organisations had said they would prefer that dedicated transport should be used for MBM. The Committee's advice so far had been that cleaning by dilution before vehicles were used to transport alternative cargoes was sufficient. Disinfectants **effective against BSE agent** were highly corrosive to the fabric of the vehicles.

54. Dr Matthews reported on work which had been commissioned to find out how much meat and bone meal might be left behind in a vehicle. Legally, vehicles were required to be cleaned and disinfected before being used for alternative use. If vehicles were only being used for MBM there was no need to clean between voyages.

Following tests at a site where vehicles had not been able to tip out properly, 27 to 96 kilograms of MBM had been left behind in each vehicle, obtained by brushing out. After brushing out, it was estimated that a further 120 grammes remained in the vehicle. The danger was that if the rule on cleansing and disinfecting was not policed properly, vehicles might go straight on to another job from an MBM store. Because of that, the Intervention Board was paying for vehicles to return to a cleaning point.

55. Mr Eddy pointed out that it would be possible to introduce legislation that vehicles used for MBM transportation should not be used for anything else. In that case the industry estimated that it would take two years to re-equip vehicles.

56. The Committee noted that there were no legal restrictions on the use to which vehicles transporting specified bovine material could be put, although there were cleansing requirements. They were also informed that tallow lorries transported other liquids, including milk. The Committee concluded that proper enforcement of the current rules would address the concerns.

ITEM 13 - ACDP TSE WORKING GROUP

57. A report on the ACDP TSE Working Group meeting on 21 August 1997 was deferred.

ITEM 14 - TALLOW

58. The Committee had before it paper 44/6. A full discussion on tallow and gelatin would take place at the next meeting.

ITEM 15 - IMPLEMENTATION OF SRM CONTROLS IN EUROPE

59. The Committee had before it paper 44/5 on progress on implementing its advice on imported cattle and sheep offals and paper 44/11 explaining that the application of the EU-wide ban on Specified Risk Material to imports from ~~all non-EU sources~~ **3rd countries** and to tallow and gelatin would give rise to difficulties in the supply of pharmaceuticals. 80% of pharmaceuticals contained either tallow or gelatin, much of which came from third country sources or from EU sources, and would not meet the standards set out in the EU's Decision by the implementation date of 1 January 1998. Unless the Commission derogated from its Decision for some countries or for some products, imports from third countries could be disrupted after 1 January 1998. Mr Eddy explained that the EU was seeking specific advice on implications of the ban from both the Scientific Veterinary Committee and the Scientific Steering Committee. The Scientific Steering Committee (SSC) had

produced advice on tallow on 8 September. The Commission was seeking clarification from the SSC on the extent to which the measures set out in its advice for the safe production of tallow were all necessary or could be regarded as alternatives. SEAC's advice was sought on the same point, and in addition on:

> **an effective and practical** ~~**a reasonable**~~ set of precautions to ensure the safety of tallow for human food, animal feed, pharmaceutical **and** cosmetic purposes, and whether **or not** chemical processing of tallow would ~~**not**~~ require the same rigorous production **and** ~~**or**~~ sourcing criteria for the tallow;
>
> whether there was a case for similar criteria for gelatin, particularly in relation to pharmaceutical production;
>
> whether there was any risk in relation to the imports of bone, which could include skull, from third countries for use in production of bone china or other processed products such as activated charcoal. Some activated charcoal could be used for food processing.

60. Members agreed that safety assessment should consider three factors: the source, the production process and the use of any particular product. Any one of these could offer sufficient guarantees in certain circumstances. For instance, the

processing involved in the production of activated charcoal was so extreme that use and source did not need to be considered. In other cases a low risk source (a country with no BSE **or scrapie (OIE animal TSE-free countries) might also be sufficient. For other countries without BSE,** SRM removal combined with a rigorous processing such as saponification or tallow cracking could be sufficient.

61. The Committee concluded that it could not endorse the blanket application of the advice from the SSC, and that the risk had to be assessed on the basis of the source, process and use, and pragmatic solutions found, particularly in relation to medicinal products.

ITEM 16 - ANY OTHER BUSINESS

62. The next meeting would be held on Friday 24 October 1997 at 10.30 a.m. at MAFF, Tolworth.

SEAC Secretariat

September 1997

SEAC 45/1

(FOR INFORMATION)

PROPOSED COMPULSORY SLAUGHTER SCHEME FOR OFFSPRING BORN AFTER 1 AUGUST 1996 TO CONFIRMED BSE DAMS

I enclose for your information a copy of a letter from Dr Cunningham to Professor Pattison, advising him that proposals were submitted to the EU Commission on 2 October for a proposed compulsory slaughter scheme for offspring born after 1 August 1996 to confirmed BSE dams. This proposal is part of a wider proposal for a UK export scheme based on the premise that since 1 August 1996, there has been no possibility of feed borne infection and the only known route of infection after that date is by maternal transmission. The enclosures with the letter detail both proposals and include the scientific rationale for the date-based export scheme.

MAFF
10/10/97