9. Bovine eyeball dissection

Introduction

9.1 In this section we look at the way the issue of advice on bovine eyeball dissection, in relation to risks from BSE, was handled by Education Departments in England, Scotland, Wales (and Northern Ireland). This episode is a self-contained part of the BSE story. Our main purpose in presenting it here is to illustrate the systems and processes in place for the development of advice on occupational risks in Government Departments, particularly those where occupational risks are only one of, and usually peripheral to, their core responsibilities. In particular, we look at the lessons to be learned in this regard and return to these in the conclusions of this section.

9.2 Before the emergence of BSE, dissection of bovine eyeballs for educational purposes was carried out in many schools and other places of learning. There was a possibility that schoolchildren might cut themselves while performing dissections, or that they might already have cuts on their hands. Once BSE emerged, did this practice carry with it a risk of transmission of the disease and, if so, how should that risk be addressed?

9.3 The Southwood Working Party’s assessment of the risks of transmission of BSE from cattle to humans was that:

The greatest risk, in theory, would be from parenteral inoculation of material derived from bovine brain or lymphoid tissue.

9.4 Eyeballs are connected to the brain via the optic nerve. Although questions about their use in schools were raised within MAFF during the second half of 1989, they were not included in the ban on specified bovine offal (SBO) which came into force in November 1989, as described in Chapter 3 of this volume. The SBO ban prohibited the use of certain parts of cattle carcasses for human food; as eyeballs were not used for human food, there was no need for them to be included in the ban.

9.5 Nevertheless, eyeballs posed a risk to humans as a result of their use for dissection purposes in schools, and it is this risk and the response to it that is the main focus of this chapter. To some extent it was illogical to question the use of bovine eyeballs for dissection purposes, while at the same time allowing them to be eaten. As we shall see in the account that follows, Mr Raymond Bradley (Head of Pathology, Central Veterinary Laboratory (CVL)) drew attention to this illogicality.

9.6 In March 1990, shortly after the SBO ban came into effect in Scotland, the Scottish Education Department (SED) issued guidance to Directors of Education in Scotland, England, Wales, and Northern Ireland:...
Scot... Scotland advising them to cease all eye dissections. These developments in Scotland prompted Dr Hilary Pickles (DH) to seek advice on the use of bovine eyeballs for dissection from the Spongiform Encephalopathy Advisory Committee (SEAC).

9.7 In July 1990, SEAC advised that the eyes of cattle more than 6 months old should not be dissected in schools. Later that month, SEAC’s advice was sent to the Department of Education and Science (DES) for implementation. It was 2½ years later, in December 1992, that the Department (by now the Department for Education: DfE) issued advice to Chief Education Officers (CEOs) and others to avoid the dissection of bovine eyeballs.

9.8 Following research by the Central Veterinary Laboratory (CVL) in 1995 demonstrating BSE infectivity in the retina of bovine eyeballs, and the decision to ban the removal of brain from bovine heads, the skull, including eyeballs, was designated as SBO in August 1995. This prohibition on the harvesting of eyeballs from bovine skulls put an end to their use in schools.

9.9 Before setting out a chronological account of the development and issue of advice on bovine eyeball dissection, we look briefly at the remit of the Education Department in England and the accommodation of pupil/student safety issues within that remit. We also look briefly at the dynamics of the different groups of players within the Department as well as the key players who feature in the account that follows.

Overview of Education Departments: remit and players

9.10 The main objective of the Education Departments in the UK is the development and promotion of national education policies. While the overall remit of the Education Department in England changed during the period 1986–96, it still retained this core responsibility throughout. In 1992, as the DES, it lost its role of fostering the progress of civil science (now with Department of Trade and Industry (DTI)) and became the DfE; and in 1995 it gained employment activities and became the Department for Education and Employment (DfEE).

9.11 In a memorandum to the Inquiry, DfEE told us that the Department had no statutory responsibilities for pupil health and safety in educational establishments during the period 1986–96. The relevant legislation was the Health and Safety at Work Act 1974 and the Management of Health and Safety at Work Regulations 1992, which are the responsibility of the Health and Safety Executive (HSE). The memorandum continued:

Nevertheless the Department accepts that it has a responsibility to provide guidance to educational establishments on health and safety issues that affect them.
9.12 As we shall see in the account that follows, when advice was given by SEAC on the issue of bovine eyeball dissection in 1990, the Department (DES at the time) – Schools Branch 3 – accepted responsibility for its implementation. This Branch was responsible at that time for, among other things, development and implementation of the national curriculum, including legislation and guidance, curriculum development, resources, school books and libraries. 3612

9.13 In 1995, health and safety in schools became the responsibility of the new Pupils and Parents Branch (Safety and Appeals Division). 3613

Relations between the different groups of players in the Department

9.14 In 1990 staff in DES comprised policy administrators and inspectors of schools; in addition the Department received advice on medical matters from DH medical advisers, one of whom (Dr Ernaelsteen) was based at DES. Each of the three groups of players contributed, in different ways, to the eventual issue of advice on bovine eyeball dissection. In June 1988, Dr Ernaelsteen sought advice from the schools Inspectorate (which at that time was an integral part of the Department and therefore its eyes and ears in schools) about the extent to which bovine eyeballs were used in schools for dissections. Later, following a request for views on this practice from Dr Pickles in early 1990, Dr Ernaelsteen sought further advice from the schools Inspectorate. After advice was received from SEAC, the policy administrators became involved in the development of guidance for schools.

9.15 Scotland and Northern Ireland had their own Education Departments with similar infrastructures to that of England. This was also the case in Wales (although DES also had some limited jurisdiction there).

Key players in the bovine eyeballs story

Mr M B Baker

9.16 Mr M B Baker was a Head of Division (Grade 5 Officer) in Schools Branch 3 during most of the period with which we are concerned. Mr Baker told us that his involvement with guidance on the dissection of bovine eyeballs began in July 1990 and ended in June 1993, when responsibility for the subject was transferred to another Branch of the Department. 3614  From January to July 1992, Mr Baker was in Division B of Schools Branch 3. The main responsibilities of Division B involved the implementation of the National Curriculum and matters relating to it. From August 1992 until 1994 Mr Baker was in Division C of Schools Branch 3, and that Division had responsibility for the school curriculum. Mr Baker retired from DES and the civil service in 1994. 3615

3612 M16B tab 1990–1
3613 M16C 1996 tab 1
3614 SS27 Baker paras 3–4. In 1989 and early 1990, Mr M Baker was a Grade 5 civil servant in Division C of the Further and Higher Education Branch 3. That Division had responsibility for mandatory student awards in England and Wales, postgraduate awards in the humanities and designated professional and vocational subjects, and the coordination of policy on postgraduate awards
3615 In 1995 responsibility for bovine eyeball dissection was assumed by Mr G A Holley, a Grade 6 in the Safety and Appeals Division of the Pupils and Parents Branch. The Safety and Appeals Division had responsibility for health and safety in schools, as well as appeals under the 1981 Education Act; see M16C tab 1
Mr Ron Jacobs

9.17 Mr Ron Jacobs was a Grade 7 administrator in Schools Branch 3 reporting to Mr Baker. Mr Jacobs told us that until 14 February 1992 he was the officer with responsibility on a day-to-day basis for preparing the draft submission to Ministers on the issue of advice to schools on the dissection of bovine eyeballs. After that date, this responsibility fell to Ms Elizabeth Casbon. 3616

Ms Elizabeth Casbon

9.18 Ms Casbon worked in Schools Branch 3 reporting to Mr Baker. Ms Casbon took up responsibility for bovine eyeball dissection in late March 1992. 3617

Dr Diana Ernaelsteen

9.19 Dr Ernaelsteen was employed by DH as a Senior Medical Officer (Grade 5). During the period 1983–95 she had a base with an office and a secretary in both DH and DES. She had a wide range of other responsibilities, including advising at DH and DES on safety, hazards and accident prevention in schools. DES was free to accept, act on or reject her professional advice as it chose. While her medical advice would often inform policy, it was not part of her professional remit to implement DES policy. 3618 In her statement to the BSE Inquiry Dr Ernaelsteen described her role and responsibilities:

2. . . . I was at the relevant time the only medical adviser working in and based in DFE, although until 1974 when the responsibility transferred to DH, DFE had up to 14 full time medical advisers working in its employment.

3. My job title as ‘Adviser’ accurately reflects the nature of the work that I did for DFE. My post as Senior Medical Adviser lay within the Medical Adviser’s branch of the DFE, and the branch also included the post holders of Chief Medical Officer, Deputy Chief Medical Officer and the Senior Principal Medical Officer who were based in DH. This was the arrangement for the duration of my employment, until my retirement in January 1995. My role was to provide consistent, soundly-based professional advice on matters concerning education. My area of specialisation has been community paediatrics and specifically mental and physical impairment, disability and handicap including special educational needs throughout childhood. One of the pressing priorities in my DFE work was the provision of an informed medical opinion and advice on statutory ministerial casework . . .

4. Apart from statutory ministerial casework, I had many other responsibilities. I provided medical advice to DFE and OFSTED (previously HMI) and liaison between DH, DFE and OFSTED. I contributed to Education Policy, Education Acts and Initiatives. At DH and DFE I advised on safety, hazards and accident prevention in schools, and on health education and personal and social education (including sex education) in the

3616 S546 Jacobs paras 2–3
3617 YB92/04.017/1
3618 S539 Ernaelsteen paras 2–5
3619 Office of Standards in Education
National Curriculum. At both DFE and DH I provided paediatric advice on prevention, policy, services and research and casework from infancy for children and young people with learning difficulties and both mental and physical impairments, disabilities, handicaps and illnesses . . .

5. My role as Senior Medical Adviser to DFE in more general terms, was to provide medical advice as required and to liaise across the Government Departments in matters of Health and Education and sometimes in relation to Social Services. I gave advice when requested or when indicated by medical evidence or research, whether from DH or more widely from experts in the profession or from voluntary bodies and DFE was free to accept, act on or reject my professional advice as it chose. I could not force DFE to accept my advice, nor did I have any recourse if they failed to act upon it. I might only reiterate my advice to them or seek further confirmation from the DH special adviser in the subject in the expectation that it would be acted upon; this has been my experience since becoming a civil servant in early 1983. Whilst my medical advice would often inform policy, it was not part of my professional remit to implement DFE policy.

6. I was extremely busy for the whole of my time in the DH/DFE post, my workload was particularly heavy during 1991–1993, because of the volume and breadth of my responsibilities . . .

Consideration of the risks associated with bovine eyeball dissection: a chronology

June 1988

Early consideration within the DES

9.20 Dr Ernaelsteen told us that in June 1988, having read articles in medical journals and papers about BSE in cattle, she was concerned about the possible risks posed by the use of bovine tissue in education, particularly in bovine and ovine nervous system dissections. She minuted Staff Inspector (SI) Mr J Ungoed Thomas of Her Majesty’s Inspectorate of Schools (HMI). Her minute did not suggest any immediate action, but rather that they should consider and debate the potential hazards arising from the use of bovine nervous tissue in education. She asked:

Does the education service use sheeps eyeballs to study the eye; or cows or sheeps brains for dissection? Entry of the infectious agent seems through consumption. Advice on the use of plastic gloves and thorough hand washing after dissecting such materials would seem to be sufficient protection.

3620 S539 Ernaelsteen paras 2–6
3621 S539 Ernaelsteen para. 7
3622 YB88/7.14/13.1: The minute was copied widely within the DES
9.21 Having received the minute, on 28 June 1988 Mr Ungoed Thomas, in a handwritten note on it, sought 'advice as requested' from others. We are not aware of the responses this minute prompted, if indeed there were any. It would appear that Dr Ernaelsteen took no further action on this during 1988.

1989

Early consideration within MAFF

9.22 The question of bovine eyeball dissection was raised within MAFF in the context of the forthcoming SBO ban. MAFF was developing policy on which offals to include in this ban during the second half of 1989. 3623

9.23 On 12 July 1989, Mr John Wilesmith (CVL Epidemiology Unit) minuted Mr Alan Lawrence (Animal Health Division) informing him that officials in Guernsey had decided to stop the supply of bovine eyes for the teaching of biology in schools. He queried whether the issue had arisen in the light of the proposed ban on offal for human consumption and whether there was a line on the harvesting of bovine eyes. 3624 The minute was also copied to Mr John Maslin (Head of Animal Health (Disease Control) Division) who, in turn, raised the issue with others in MAFF in the context of the SBO ban. His minute dated 27 July 1989 was copied widely within MAFF and to Territorial Departments. 3625 It discussed issues surrounding sutures, spinal cord, thymus, spleen and mechanically recovered meat (MRM). In relation to bovine eyeballs, Mr Maslin stated:

This raises the question of whether there will continue to be a source of bovine eyes for teaching from the rest of Britain or whether our ban on certain offal will affect this trade.

The UK ban does not of course include eyes but I should be grateful for any information recipients have on this unusual aspect. Are eyes removed at the slaughterhouse or at a specialist company? In the latter, the requirement for staining the head before removal from a slaughterhouse would presumably affect the eyes. Is this an important industry for teaching or are alternative sources (eg sheep eyes) available or suitable?

9.24 Mr Keith Meldrum, referring to Mr Maslin’s query, minuted Mr Robert Lowson, Animal Health Division (MAFF), stating:

These new questions support the view that the ban should be age limited so that bovine eyes, sutures and thymus can still be obtained for the purposes described . . .

I will restrict circulation of these preliminary comments until we hear from the action recipients. 3626

3622 For further details about the introduction of the SBO Regulations see Chapter 3 of this volume
3623 YB89/7 125-1. The minute was also copied to Mr J Maslin
3624 YB89/7 272-1–2.2. Recipients included Mr D Taylor (SVS), Mr D Fry (MHD), Mr R Bradley (CVL), Dr J Wilesmith (CVL), Mr K Meldrum, Mr K Taylor, Mr R Lowson, Mr A Lawrence, Mr A Scott (DAFS), Mr G Shannon (DANI) and Mr D Davies
3625 YB89/7 286-1. (WOAD): 'Territorial Departments' refers to the Welsh and Scottish Offices and the Northern Ireland Departments
9.25 On 1 August, Mr Bradley replied to Mr Maslin. With regard to bovine eyeballs he stated:

We have no knowledge of the BSE infectivity of bovine eyes. Professor Southwood indicates that the risk of transmission of BSE to humans is remote. On that basis they can be regarded as low risk. Furthermore epidemiological evidence connecting the human consumption of sheep eyes (some possibly being derived from scrapie-infected sheep) and the occurrence of spongiform encephalopathy in the consumer is lacking.\(^{3627}\)

9.26 However, he added that it might be advisable as ‘a measure of extreme prudence’ to recommend certain precautions in the selection and collection of bovine eyeballs for dissection. This changed the issue from considering the potential difficulties with supplying bovine eyeballs to considering whether the practice should be continued at all. He concluded:

The Southwood Report is the start point for any decisions. Once MAFF goes beyond that there is no clear dividing line to define what constitutes an unacceptable risk to human health. There is a requirement for more knowledge in some or all of these areas before decisions are made. So far as I am aware the offal ban only relates to human consumption (i.e. eating it). We are now getting into a whole new ball game and the consequences of over – or inappropriate reaction could be very costly and without much benefit. Nevertheless it is right that risks should be examined and actions taken (including no action) based on scientific findings.\(^{3628}\)

9.27 On 7 August, Mr Stephen Hutchins (MAFF) minuted Mr David Taylor (SVS) referring to Mr Maslin’s query of 27 July.\(^{3629}\) On bovine eyeballs he stated:

The procurement of specimens for biology teaching (including bovine eyes) is apparently left to the discretion of the Local Education Authority.

I would imagine that eyes would be harvested to special order either from the abattoir or a specialist head deboner or even obtained from the local butcher, as and when needed. I am not aware of any company that specialises in collecting bovine eyes from heads specially despatched from abattoirs.

I would not have thought that the proposed ban would lead to major problems for schools in obtaining adequate supplies.

9.28 On 27 September 1989, the issue of bovine eyeballs was raised at a meeting discussing the responses of the consultation process regarding the SBO ban. The minutes of the meeting record:

As sheep and pig eyes could provide an alternative source for educational use it was felt that any effects of the ban would be minimal. However if a simple amendment could be made, the Regulations should be changed to allow eyes to be removed before staining.\(^{3630}\)

\(^{3627}\) YB89/8.01/6.1–6.2
\(^{3628}\) Ibid.
\(^{3629}\) YB89/8.07/6.1
\(^{3630}\) YB89/9.28/1.1–1.7. Those present at the meeting included Mr Cruickshank, Mr D Taylor (SVS), Mr K Taylor (SVS), Mr D Fry (MHD), Dr J Wilesmith (CVL), Mr R Lowson, Mr A Lawrence, Mr I Anderson (DAFS), Mr R Martin (DANI) and Mr G Podmore (WOAD)
9.29 In the event, this proposed amendment to the Regulations was not made. Indeed, there was no mention of bovine eyeballs in the submission on the details of proposed offal ban put forward on 2 November 1989 by Mr Lawrence to MAFF Ministers. The SBO ban came into effect on 13 November.

9.30 The subject of bovine eyeballs was raised again on 10 November 1989, when Mr T Jones, Veterinary Investigation Officer (VIO, MAFF) wrote to Dr Danny Matthews, Senior Veterinary Officer (SVO) seeking guidance on whether bovine eyeball dissection in schools should be discouraged because of BSE.3631 This letter was referred to Mr Bradley, who responded to Dr Matthews later that month, identifying a number of relevant factors and possible approaches. He concluded:

Overall I believe the risk of BSE causing disease in man is remote. The risk of exposure of children is small. Professor Southwood made no specific recommendations on this point and indeed had we followed his advice eyes from any age of animal could even have been eaten quite legally (and safely). The advent of the offal ban may suggest to the public a degree of risk exists which did not before. This could be overcome by selecting bovine eyes from calves under 6 months, using disposable dissection instruments, incineration of waste and after HSE advice or other safety rules in schools ensuring the necessary protective clothing and procedures are followed such as washing hands before eating.3632

9.31 Dr Matthews replied to Mr Jones on 24 November 1989, explaining:

. . . retina can become infected in murine experimental scrapie. Given that invasion of the CNS is usually relatively late in development of disease, it may be assumed that only eyes from mature cattle will present a significant risk if BSE agent follows the same pattern of invasion.

Nevertheless given that scalpels will be used for dissection, and the possibility that the children may have pre-existing cuts, we would advise the following for the moment:

(i) If possible use porcine eyes.

(ii) If bovine eyes are essential, use ones from animals under 6 months of age.

(iii) Wear gloves when dissecting, and ensure sterilisation of equipment before further use.3633

9.32 Dr Matthews also said that he suspected that if any advice was to be issued to schools in general it should come from DH or the Health and Safety Executive (HSE).
February 1990

Guidance issued in Scotland

9.33 The SED was the first of the UK Education Departments to issue guidance on bovine eyeball dissection.

9.34 On 19 February 1990, Mr Currie (Scottish Home and Health Department (SHHD)) sent a minute to Dr Thores informing him that Mr Graham Watkin (Professional Adviser on Health and Safety, Tayside Regional Council) had expressed concern about whether bovine eyeball dissection should be forbidden in local schools.\(^{3634}\)

9.35 Dr Thores responded in a minute to Mr Currie on 20 February 1990 agreeing with Mr Watkin’s concern about the safety of the dissection of bulls’ eyes in schools.\(^{3635}\) He reasoned:

In view of the recommendations of the Southwood Committee, and the significant nervous tissue component of the eye from the optic nerve, it would seem desirable to discontinue this practice, since there are alternative possibilities (e.g. anatomical models).

9.36 He also asked that Mr Watkin and Mr N Atkinson (SED2) take this advice into account in any circulars to schools. A handwritten note on the minute, dated 21 February 1990, stated that Mr Atkinson was content with Dr Thores’ advice and wished to see any circular issued as ‘SED may wish to consider a general circular to all schools’.\(^{3636}\)

9.37 On 22 February 1990, Mr Currie wrote to Mr Watkin stating:

The advice of our Departmental Medical Adviser is that in view of the recommendations of the Southwood Committee, and the significant nervous tissue component of the eye from the optic nerve, it would seem desirable to discontinue this practice, particularly since there are alternative possibilities (e.g. anatomical models). Should you decide to pass on this advice to schools in Tayside I would wish to be kept informed of what action you take, including sight of any circulars which issue, so that the Department can alert Health Board staff with a school liaison function.\(^{3637}\)

9.38 On 27 February 1990, Tayside Regional Council sent a minute to all secondary schools and all further education colleges within its municipality advising that all eye dissections cease forthwith.\(^{3638}\) The Scottish Education Department relayed the same message to all Directors of Education in Scotland in March 1990.\(^{3639}\)

9.39 The consultative process involved in producing the guidance (which was issued within one month of the initial concerns) received some criticism. In

\(^{3634}\) YB90/2.19/9.1. The minute was also copied to Dr McIntyre (Principal Medical Officer, SHHD) and Mr N R Atkinson (SED2)

\(^{3635}\) YB90/2.20/6.1

\(^{3636}\) YB90/2.20/6.1. The author of the handwritten note is unclear

\(^{3637}\) YB90/2.22/14.1

\(^{3638}\) YB90/2.27/14.1

\(^{3639}\) YB90/3.00/12.1
response to the decision, on 19 April 1990, Mr K Duncan (Science Adviser, Grampian Regional Council, Department of Education) wrote to SED stating that his authority would certainly implement the advice. However, he also asked for clarification on the use of other biological material and ‘in particular offal in the form of heart and lungs from either sheep or cows’. This request prompted Mr McDonald (SHHD) to write to colleagues stating:

I understand that Mr K Duncan . . . has written to Secretary SED asking if other biological material, including offal in the form of heart and lungs from either sheep or cows should be included in the advice contained in the recent letter to EAs [Education Authorities] on the subject of BSE. My advice is that the Department should consult fairly widely before replying to this letter.

. . .

I would also like to take this opportunity to raise some concerns regarding the process leading to the distribution of the letter and its final content . . . My expectation was that such a draft would have been prepared after taking account of HMI advice on the educational implications. I was in the process of consulting with my Science colleagues on the draft when I learned that the letter had been issued. I had expected to be included in the list of copy recipients for correspondence with medical services and that I would be able to provide HMI advice before publication of the letter. In fact I did not see a copy of the letter in its final form either before or after issue to education authorities . . .

9.40 Mr McDonald then listed the ways in which he thought the letter was ‘inadequate’. He noted that the letter referred to bulls’ eyes whereas normally cows’ or bullocks’ eyes were used; that dissection was part of the science course and not the biology course; that anatomical models were no substitute for the real experience; and that there was no mention of other possibilities, for example the use of pigs’ eyes.

9.41 The Schools Equipment Research Centre took the opportunity to comment in July 1990:

Whilst we were disturbed by the manner in which the advice was issued, in that a number of interested parties were never properly consulted before the letter to Scottish EAs was sent out, and that it contained some unfortunate mistakes of wording, we could not seriously quarrel with its substance. The major reasons we have to concur with this advice are:

That it is now too late for us to do otherwise, although we are given to understand that the DES apparently has no intention at the moment of issuing similar advice to LEAs [Local Education Authorities] in England.

The advice is at least consistent with what little real scientific evidence is currently available.

3640 YB90/4.19/4.1
3641 YB90/5.01/9.1–9.2. The letter was copied to Mr Bigwood (Her Majesty’s Chief Inspectorate – HMCI), Mr Maclaren (Staff Inspector – SI) and Dr J Jackson (Her Majesty’s Inspectorate of schools – HMI)
We strongly caution against anyone against being over zealous in these matters. This is especially so when the ground on which to base advice is none too firm and the potential for real educational damage is so obvious.3642

**Dr Pickles raises the issue of bovine eyeballs with MAFF and DES**

**9.42** On 20 February 1990, Dr Pickles, who had been alerted to the practice of bovine eyeball dissection by a Scottish colleague, sent a minute to Mr Maslin.3643 She stated:

The current regulations would permit collection of eyes for such use from abattoirs. The Southwood report in para 5.3.4 accepted a theoretical hazard in accidental inoculation of bovine tissues. As an extension of the brain, perhaps the eye is a suspect tissue. Dissecting school children must surely cut themselves sometimes. Thus on the face of it there is a theoretical hazard from this practice, for which there are safe alternatives e.g. horse/pig eyes.

**9.43** The minute was also copied to Mr J Creedy (HMI) and Dr Ernaelsteen among others.3644 Dr Ernaelsteen responded on 22 February 1990 stating that she had previously taken the view that the matter of dissection in school was one for good practice and basic hygiene rules. However, she pointed out:

There is an inherent difficulty similar to the tension previously with AIDS/HIV. If one points to particular dangers in school, then housewives, butchers, abattoir workers are at equal theoretical risk.

Would it not be valid to take the view that there is no medical evidence to suggest that CJD/BSE/Scrapie has been transmitted by dissection in schools (or butchery and abattoir work?). One certainly would not wish to raise unnecessary anxieties or provoke further media attention.3645

**9.44** She advised that the educational advantage must be measured against theoretical or actual risk to consider whether a school or college practice should take place. She suggested that referring the issue to the new ‘Tyrrell group’ (SEAC) might be helpful. She also asked for advice from HMI about dissection practice in schools.

**9.45** On 7 March 1990, Dr Ernaelsteen minuted Dr Pickles attaching a copy of a response from Mr Creedy. She noted that the educational advantage of the exercise was considerable, but added that the medical and veterinary evidence regarding BSE and bulls’ eyes was less secure than that relating to scrapie.3646 In his response, Mr Creedy pointed out that students were normally expected to wash their hands after any contact with dissection material and that, increasingly, disposable gloves were worn. He added:

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3642 YB90/7.23/18.1–18.5
3643 YB90/2.20/15.1
3644 Recipients included Mr R Brown (DH EHF3), Mrs V Emmett (Staff Inspectorate), Mr Maslin (MAFF), Mr V Green (HMI) and Mr J Bird (DES)
3645 YB90/2.22/15.1–15.2
3646 YB90/3.07/9.1–9.2
Dr Pickles suggestion of horse/pig eyes has a practical drawback – horses are not slaughtered for food in UK and supply would be too limited. Pigs are often slaughtered in specialised ‘bacon factories’ and I have rarely, if ever, seen pigs eyes in schools. 3647

April–August 1990

Advice from SEAC

9.46 In April 1990, Dr Pickles wrote to Mr Lowson regarding the agenda for the forthcoming first meeting of SEAC. She asked whether they were going to raise the ‘relatively minor matter’ of bovine eyeball dissection and offered to put some brief papers together. 3648 On 12 April 1990, Dr Pickles faxed Mr Lowson a draft paper entitled ‘Routes of possible transmission of BSE to man’ stating that this would ‘. . . challenge the committee about possible routes of transmission to man that may have been overlooked’. 3649 The paper asked SEAC to advise on, among other things, the practice of dissecting bovine eyeballs and stated:

Dissection of bulls’ eyes still takes place in some schools and it is now being questioned whether this might present a hazard from BSE. Can the committee advise whether the eye is likely to be infected in BSE cases, and if so whether the chance of a schoolchild inadvertently inoculating themselves with such material is great enough for us to advise against this practice? If the worry is injuries with contaminated sharps, gloves may be no protection. Horse/pig eyes could be alternatives, but supplies of the former are too limited and of the latter not readily available.

In conclusion, the committee is asked to consider whether additional advice is needed to guard against the remote chance that exposure to certain bovine tissues by certain routes could present a hazard to man. 3650

9.47 On 23 April 1990, Mr Meldrum commented on Dr Pickles’s paper:

Unfortunately I do not agree with the thrust of the paper . . .

. . . Bearing in mind that these eyes are derived from perfectly healthy animals which do not show evidence of BSE it would be illogical to take the action that she describes. If such eyeballs were a human health hazard then they should be included in the definition of specified offals and be destroyed at source. I have no objection to the issue being raised with the Committee but not in this blank and unhelpful way.

. . . The whole paper needs far more detail and background before it can be put to the Tyrrell Committee, with particular reference to the general background of our control measures and the offal ban. I suggest it be drafted and expanded and cleared with us before submission to a later meeting . . . 3651
On receipt of the Mr Meldrum’s comments, Dr Pickles faxed Mr Lowson stating that there was no alternative but to withdraw the paper from the agenda of the first SEAC meeting pending a more detailed version. Dr Pickles also referred to a point she had discovered at a recent (unspecified) ‘lunch’ meeting:

... eyes are infected in spongiform encephalopathies and indeed are used in some experimental models. Like placentae, they did not need to be included in the offal ban since this only concerned human consumption in this country. There is no illogicality in what I was proposing. The speculated route of transmission during eyeball dissection, whilst having no relevance to the offal ban, might of course be relevant to advice given by HSE to abattoir workers and indeed seems consistent with it. I regard the eye as an extension of the brain. Whilst abattoir workers have no alternative but safe handling, there is a real alternative for schools. The question for the group was whether they agreed there was a theoretical hazard. And if so, whether the level of risk was such, when weighed up against the educational benefit of using bovine eyes rather than eyes from alternative species, they advised against this practice.

Maybe on further reflection, CVO will not be so negative about my paper. Of course I can add further detail about the infection in the eye in the established spongiform encephalopathies. But the simple question to the committee remains the same.

We discuss these events in further detail in vol. 7: Medicines and Cosmetics. (Further details of SEAC’s deliberations on bovine eyeballs are given in vol. 11: Scientists after Southwood.)

On 23 May 1990, Dr Ernaelsteen wrote to Mr Creedy. The letter was copied to Mr T P Melia (Chief Inspector, whose responsibilities included safety in schools) and Mr Tomlinson (Chief Inspector, whose responsibilities included schools and sixth form colleges – ages 16–19). Dr Ernaelsteen told Mr Creedy that the position with bull and ox eyes was not certain and that Dr Pickles had put a submission to SEAC to consider the position and advise. She said that for the time being she believed the issue to be a matter of balancing risk against educational benefit and continued:

The scientific facts must be carefully considered to avoid any alarmist reaction and loss of what is a very valuable biological dissection learning exercise. Should this be withdrawn I believe we would be into substantial media argument and a not insignificant problem as well as educational loss.

A revised paper entitled ‘Route of Possible Transmission of Bovine Spongiform Encephalopathy to Man via the Practice of Eyeball Dissection’ was prepared by Ms A McGinty at Dr Pickles’ request. This was submitted to SEAC in June 1990 and discussed at SEAC’s fourth meeting held on 2 July 1990. The paper considered the theoretical route of transmission of BSE to man via the practice of eyeball dissection and asked what action, if any, needed to be taken. It
set out what was known about infectivity in the eye in experimental rodent scrapie and CJD and reached the following conclusions:

i. It seems likely from scrapie models that the retina of eyes from cattle with clinical BSE will contain the BSE agent.

ii. It is feasible that some sub-clinical cases of BSE may be slaughtered in abattoirs, and therefore it is possible eyes infected with the BSE agent may be amongst those used for dissection.

iii. Dissection involves the use of instruments capable of causing deep penetrating wounds, and the possibility of parenteral inoculation of the BSE agent therefore exists.

iv. Sterilisation of eyeballs prior to dissection is not an option, and disposable instruments do not remove the risk of penetrating injuries occurring during the dissection procedure.

v. Viable educative alternatives are available in the form of anatomical models, videos and other teaching aids. Ovine and pig eyes may be available but are less suitable on a size basis. With other types of bovine dissection carrying similar risks of inoculation injury such as veterinary studies or abattoir practices, unlike eyeball dissection in schools, there may be no acceptable alternative.

vi. The Scottish Education Department has already recommended that the practice of bovine eye dissection be discontinued (March 1990). Inevitably pressure will be brought to bear for a similar recommendation in England.

vii. The eyeball is not included in the 'offal ban' since like the placenta it is a tissue not usually chosen for human consumption. Thus there should be no particular presentational issues with any new advice concerning eyeballs.

9.52 The paper also concluded that:

If the rodent scrapie model is accepted as a reasonable parallel for BSE, it is likely that the BSE agent is present in the eyes of BSE cattle, and it may be present before the clinical symptoms of the disease are apparent. \[3656\]

9.53 The document asked SEAC whether the balance between educational value of eyeball dissection, and the potential risk of exposure to the BSE agent was such that the practice of bovine eyeball dissection in classrooms should be discontinued.

9.54 The minutes of SEAC’s meeting recorded:

[The paper] was discussed and its findings accepted. The Committee agreed to advise that the use of the eyes of cattle more than six months old should not be used for dissection in schools. \[3657\]

9.55 Dr Pickles sent a minute to Dr Ernaelsteen to inform her of SEAC’s advice. \[3658\]

She referred to the SED’s advice against bovine eyeball dissection and stated:
I believe MAFF have been offering similar advice informally for some time.
I have responded to a specific request from Kent County Council.

9.56 She indicated that she would leave it to Dr Ernaelsteen to discuss within DES whether there was a need for promulgation of general advice within England.

**DES guidance**

9.57 On 24 July 1990 Dr Jacobs (Welsh Office) wrote to Dr Pickles about BSE and bovine eyeballs. She referred to SEAC’s meeting on 2 July 1990, and its decision to discourage the practice of dissecting bovine eyeballs in schools, and asked whether any guidance had been issued to schools or was planned.\(^{3659}\) Dr Pickles referred her to Dr Ernaelsteen.\(^{3660}\)

9.58 On the same day, Dr Ernaelsteen initiated the task of issuing guidance on bovine eyeball dissection within the DES. She sent a minute to Ms J Cramphorn (Head of Division C, Schools Branch 2).\(^{3661}\) The minute was copied to Mr J Creedy, Dr Pickles and Ms McGinty.\(^{3662}\) She attached to her minute the paper that SEAC had considered and said:

> Attached for DES and HMI information and action is the definitive scientific advice on eyeball dissection in education from the expert Tyrrell Committee. DES guidance will need to be provided and the Inspectorate informed.

9.59 Dr Ernaelsteen told us in a written statement that she did indeed regard the SEAC advice as definitive, and that she was personally convinced of the need for DES to issue guidance to schools.\(^{3663}\)

9.60 Although Dr Ernaelsteen had sent SEAC’s advice to Schools Branch 2 to take forward the development of guidance, it was Branch 3, headed by Mr Baker, which took it forward. On 26 July, Mr Baker wrote to Mr Jacobs, with copies to others in DES, including Mr Creedy of HMI, accepting that the need for guidance on bovine eyeball dissection was a matter for their division of Schools Branch 3:

> I think that I accept that the need for advice on eyeball dissection is a matter for us rather than Miss Cramphorn’s Division. I am not sure I understand the status of the advice from this particular SEAC . . . The paper Dr Ernaelsteen refers to as the definitive advice actually ends with a request for advice. Perhaps you would sort this out. Presumably the answer is that the Committee met and returned the answer ‘yes’ to the question in the paper. But there is a prior question whether bovine eyeball dissection is actually practised in the classrooms. The author says ‘we do not know how widespread the practice . . . is?’ Perhaps it does not exist.

\(^{3659}\) YB90/7.24/17.1

\(^{3660}\) YB90/7.27/11.1

\(^{3661}\) YB90/7.24/18.1

\(^{3662}\) Other recipients included Mrs V Emmett (SI), Mr B Norbury (Head of Schools Branch 2, DES), Miss A Millett (CI), Mr T P Melia (CI), Mr B Short (CI), Mr V Green (SI) and Ms C West

\(^{3663}\) S539 Ernaelsteen para. 13
Would HMI addressees please advise on the need for advice. I find it difficult to decide whether this would be a suitable addendum to the ‘Animals’ AM, if we do need to give advice . . .

9.61 Mr Creedy replied to Mr Baker on 1 August 1990:

It is very difficult to place an accurate figure on the amount of eyeball dissection in schools. Ten years ago I would have estimated that 80% of schools would have carried out this dissection. In recent years I have seen less eye dissection but would guess that it occurs in 30–50% of schools.

Ox eye is the usual material but the sheep eyes and probably pig eyes are also used. The dissection is usually carried out in year 9 or 10 with pupils working in pairs or groups and the instruments usually are sharp pointed dissection scissors or a scalpel. The material usually used is fresh or freshly thawed from a freezer. In school dissection work, gloves are rarely worn and I have never seen instruments sterilised.

. . .

It is unfortunate that the Tyrrell Committee has no evidence on bovine eye material, but the evidence that the retina of rodents is infected in experimental scrapie, and that sub clinical BSE material could reach schools seems to call for a very careful review of our current advice.

. . .

I feel that it should be a medical decision to balance the medical and educational considerations and if the DES comes down on the side of caution perhaps it would be wise to write to LEAs pointing out that the evidence is not direct but that a temporary suspension of this dissection until the evidence is much clearer would be a wise precaution.

Draft submission to Minister of State and consultation process

August 1990: first draft

9.62 Following receipt of this advice from Mr Creedy, on 28 August 1990 a draft submission to the Minister recommending the discontinuance of eyeball dissection was prepared. Mr Jacobs sent it to Mr Baker for comment:

Recommendation

2. The Minister of State is recommended to approve the issue of advice to Local Education Authorities saying that there is no proven risk of transmission to humans or of bovine eyeball dissection as a possible route of transmission but it is recommended that eyeball dissection should not be carried out until the evidence is clearer . . .
Presentation

3. BSE transmission is a complex and sensitive issue. As the evidence is indirect and inconclusive it is considered that no useful purpose would be served by giving any general publicity to the proposed advice. It would be appropriate, however, to inform the association for Science Education and the Institute of Biology in advance of the advice being sent to LEAs, and copies of the advice would be sent to Grant Maintained secondary schools and to other interested parties.

Timing

4. The advice to LEAs should be sent as early as possible in the new school year.

9.63 The draft submission then gave some background on bovine eyeball dissection in schools, based on the information from Mr Creedy (see paragraph 9.62).

9.64 The draft submission continued:

Argument

9. The Spongiform Encephalopathy Advisory Committee . . . has examined bovine eyeball dissection as a route of possible transmission of BSE to humans . . . The Committee recommended that the practice of bovine eye dissection in schools should be discontinued.

10. It is not in fact known whether the BSE agent is found in the eyes of clinically infected or sub-clinically infected cattle, but in experimental rodent scrapie, which may be a reasonable parallel for BSE, it has been shown that the eye and in particular the retina can become infected, with a progressive retinal degeneration. Identical retinal damage has also been seen in mice after experimental infection with Creutzfeldt-Jakob Disease (CJD). Experiments have indicated that the scrapie agent can spread from the eye to the brain, probably along the optic nerve.

11. If the rodent scrapie model is accepted as a reasonable parallel for BSE, it is likely that the BSE agent is present in the eyes of BSE cattle, and it may be present before the clinical symptoms of the disease are apparent. Hence there is a risk that some sub-clinical cases of BSE may be slaughtered in abattoirs and that there is a possibility that an eye infected with the BSE agent may enter the classroom.

12. It is thought that the greatest risk to humans is most likely to be from parenteral injection of the agent. The use of sharp instruments for dissection carries the risk of such injection following injury. Normal hygiene measures such as wearing gloves and covering cuts would not necessarily be effective against a scalpel injury and, as has been said, gloves are not often worn in school dissections.
13. There is no evidence of BSE transmission to humans, but it cannot be said that there is no possibility of such transmission.\textsuperscript{3666}

\textbf{9.65} The draft letter to the CEOs, attached to the draft submission, said:

Bovine eyeball dissection is a procedure carried out in science lessons in many secondary schools. There has been some concern as to whether injury during such a dissection could result in the transmission of Bovine Spongiform Encephalopathy (BSE) to the person suffering the injury.

The Spongiform Encephalopathy Advisory Committee, an expert Committee set up by the Department of Health and the Ministry of Agriculture Fisheries and Food, has examined bovine eyeball dissection as a route of possible transmission of BSE to humans.

I should emphasise that there is no evidence of BSE transmission to humans and there is no direct evidence that eyeball dissection would be a possible route of such transmission. It cannot be said, however, that there is absolutely no possibility of BSE transmission to humans. If it is possible, there is indirect evidence that the injury during dissection could provide a means of transmission of the BSE agent.

Since models can be used to teach the structure of the eye (it is estimated that a majority of schools already use models rather than dissection), it is recommended that bovine eyeball dissection in schools should be discontinued until the evidence of the possibility of any risk is clearer.\textsuperscript{3667}

\textbf{9.66} Mr Baker told us:

The advice we had been given was that infection by the BSE agent through accidental inoculation in the course of dissecting bovine eyeballs was a remote theoretical risk. There was no epidemiological evidence of the transmission of the disease to humans, and the scientific literature seemed to suggest that transmission was highly unlikely…I never believed in any real risk to pupils and saw the issue of advice in schools as an ultra-precautionary measure.\textsuperscript{3668}

\ldots

It seemed to us, or at least to me, that there was an initial issue whether it was necessary and appropriate to give advice to schools at all, and we consulted HMI in accordance with established Departmental practice. As to the nature of the advice, there was much discussion with officials of DH and MAFF, and a certain amount of vacillation and indecision.\textsuperscript{3669}

\textbf{9.67} The submission was not put forward to Ministers at that stage.

\textsuperscript{3666} YB90/8.28/5.2–5.4
\textsuperscript{3667} YB90/8.28/5.5
\textsuperscript{3668} SS27 Baker para. 7
\textsuperscript{3669} SS27 Baker para. 9
Officials within DES were keen to find alternatives to bovine eyeball dissection by pupils, for instance use of ovine or porcine eyeballs, or use of teacher demonstration instead. On 21 September 1990, Mr Jacobs minuted Dr Ernaelsteen about the submission to Ministers on bovine eyeball dissection. He stated that they were reluctant to advise against all bovine eyeball dissection in schools but did not wish to go against medical advice. He also said that they were not clear about the medical advice in relation to ovine and pig eyeball dissection, and that they wanted to suggest those as alternatives for use in schools. He asked for Dr Ernaelsteen’s views on whether it would be reasonable to modify the proposed advice to say that pupils should no longer carry out bovine eyeball dissection but that it should be left to the individual teacher’s discretion as to whether to demonstrate such dissection to pupils.

On 4 October 1990, Dr Ernaelsteen responded. She agreed that there was ‘considerable educational advantage to eyeball dissection’ and advised that while ovine dissection would not be a suitable alternative, porcine or equine (pig or horse) eyeball dissection would be acceptable, as would using bovine eyeballs from calves under 6 months of age. However, she added:

Teachers should not have the discretion whether or not to demonstrate ovine or bovine eyeball dissection. It is not medically tenable for teachers to be at potential risk.

On 5 October 1990, Mr Jacobs informed Mr Baker that he would revise the submission and draft letter to include the option of pig or horse eyeball dissection. He also explained why he would not bring calves into the advice:

Apart from possible practical problems in relation to the age of the animal, it does not seem logical to me to build a case around guarding against (supposedly) remote possibilities and then to say that the remote possibilities of maternal transmission and ‘detectable infection’ below the age of six months can be disregarded.

In early January 1991, Dr Ernaelsteen contacted Mr Jacobs with concerns about whether the guidance had been issued or not. She told us that on being told that in fact the guidance had not yet been issued, she was most concerned and she stressed to Mr Jacobs that DES had to progress the matter as a matter of priority.

Mr Jacobs then prepared a revised draft submission and draft guidance. Since the draft (produced in August 1990) the text regarding bovine eyeball dissection had not undergone substantial change. However, the issue of ‘Timing’ had changed. Where the earlier draft had specified that the advice to LEAs be sent ‘as early as possible’ the revised draft now read:

9.71 In January and February 1991: consultation with DH and MAFF: second draft

9.72 Mr Jacobs then prepared a revised draft submission and draft guidance. Since the draft (produced in August 1990) the text regarding bovine eyeball dissection had not undergone substantial change. However, the issue of ‘Timing’ had changed. Where the earlier draft had specified that the advice to LEAs be sent ‘as early as possible’ the revised draft now read:
There is no particular timing consideration, but it would be appropriate to send advice to LEAs as soon as Ministerial approval is given.\textsuperscript{3675}

\textbf{9.73} On 16 January 1991, Mr Jacobs wrote to Mr Lowson enclosing a copy of the revised draft advice and submission to Ministers.\textsuperscript{3676} Mr Jacobs asked Mr Lowson to give clearance from MAFF for DES to proceed to issue advice along those lines. The attached draft letter to CEOs read:

Bovine eyeball dissection is a procedure carried out in science lessons in many secondary schools. There has been some concern as to whether injury during such a dissection could result in the transmission of Bovine Spongiform Encephalopathy (BSE) to the person suffering the injury.

The Spongiform Encephalopathy Advisory Committee, an expert Committee set up by the Department of Health and the Ministry of Agriculture, Fisheries and Food, has examined bovine eyeball dissection as a route of possible transmission of BSE to humans.

I should emphasise that there is no evidence of BSE transmission to humans and there is no direct evidence that eyeball dissection would be a possible route of such transmission. It cannot be said, however, that there is absolutely no possibility of BSE transmission to humans. To the extent that such a possibility exists, there is indirect evidence that injury during dissection could provide a means of transmission of the BSE agent. Similar considerations apply to dissection of ovine eyeballs.

It is recommended that bovine and ovine eyeball dissection by pupils in schools should be discontinued until the evidence of the possibility of any risk is clearer.

If a teacher decides to demonstrate dissection using bovine or ovine eyeballs, precautions should be taken to ensure that no fluid from the dissection is ingested (eg by licking fingers) or gets into the bloodstream (eg as a result of a cut). There is no medical advice against porcine or equine eyeball dissection and, as an alternative, models can be used to teach the structure of the eye. It is estimated that a majority of schools already use models rather than dissection.

\textbf{9.74} The suggestions that similar considerations applied to dissection of ovine eyeballs and that there was a need to avoid licking fingers during dissection gave rise to exchanges of correspondence between those in DES, DH and MAFF to whom the draft was circulated; the consultation process continued into February 1991.\textsuperscript{3677} Mr Bradley expressed concern about presentation and consistency stating:

Our policy until now has been that anything that has been passed for human consumption in a British abattoir and is not a specified offal is actually or potentially available to the public to eat. That would under current legislation include bovine eyes. Thus, is this not saying it’s OK to eat the eye but do not lick your fingers if you cut into an eye?
There is no known danger from sheep scrapie at all and no restriction even on eating a brain from a scrapied animal so long as it has passed meat inspection. The statements are suggesting steps should be taken against sheep eyeballs because of scrapie too. There is a need for caution and consistency or the media could have a field day . . .

What about bovine eyeball dissections in veterinary schools – is this going to apply to them too? I regret bringing this up at a late stage but we must be consistent. 3678

9.75 It was now seven months since SEAC had advised that the eyes of cattle more than 6 months old should not be used for dissection in schools. Worried by what she perceived to be excessive complication of the issues, resulting in delay in getting the guidance out to schools, Dr Ernaelsteen sent a minute to Mr Jacobs on 25 February 1991. 3679 She suggested that they follow the clarity, brevity, and simplicity of the Scottish Office model. 3680

April and May 1991: third draft

9.76 In the following weeks no revised draft was produced. On 19 April 1991, Mr Creedy sent a minute to others in the Department drawing attention to two articles about BSE that had appeared in *The Biologist* and *Chemistry and Industry*, which he described as being ‘excellent distillations of the current state of knowledge and worth filing for information’. 3681 He noted:

The ‘Chemistry and Industry’ article implies a genetic predisposition to be an essential factor and suggests that all susceptible individuals can be traced back to one individual in 1794. The ability to trace suggests to me that a very small number of humans are susceptible.

. . .

If I am interpreting the facts correctly, two events – each with a one in millions likelihood, need to coincide – are we going over the top in our concern?

9.77 He also queried what had happened ‘to the advice on BSE/eyeball dissection which months ago was ready to go to Ministers for approval’.

9.78 Six days later, on 25 April 1991, Mr Jacobs circulated a revised version of the proposed advice, stating that this followed the pattern of advice already issued by the Scottish Office. 3682 The draft letter to CEOs had changed, now omitting the points relating to ovine eyeballs and ‘licking fingers’ after dissection. However, it now incorrectly stated that the Southwood Working Party (as opposed to SEAC) had examined bovine eyeball dissection. 3683
9.79 On 9 May 1991, MAFF told Mr Jacobs that Mr Lowson was happy with the proposed advice, subject to correction of the Committee’s name, and on 29 May Dr Pickles wrote with her minor comments.

9.80 The submission was not put forward to Ministers at that stage.

**November 1991: a reminder from DH**

9.81 Kent County Council reminded DH about bovine eyeball dissection and this prompted Mrs D M Whyte (Environmental Health and Food Safety, DH) to contact Mr Jacobs on 4 November 1991, querying where the advice stood. Later that month Mr Jacobs responded stating that the issue was still under consideration and that he hoped that a decision would be made soon. He confirmed that he would send copies of any revised draft to MAFF and DH. Mrs Whyte forwarded this reply to Dr Ernaelsteen, Dr Wight and Mr Lowson, promising to keep them informed of progress.

**February – May 1992: final third draft**

9.82 Mr Jacobs was preparing to leave his position in early 1992. His post was to be taken up by Ms Casbon. On 20 February, he e-mailed Mr Baker with a further revised draft submission on bovine eyeball dissection:

> At last I return to the subject of BSE and bovine eyeball dissection. My parting gift. There has been a development in that one LEA (Kent) asked if there was any advice on the subject. We said that there was not but that the possibility of giving advice was being considered.

> I think that LEA interest is a useful hat to hang the submission on and I now mention this in the opening paragraph of the draft submission attached.

9.83 He added that, once Mr Baker was content with the draft, it should go for final clearance to Dr Pickles and Mrs Whyte at DH, Mr Lowson at MAFF, as well as Dr Ernaelsteen and Mr Creedy.

9.84 On 10 March 1992, Mr Baker, in a note to Ms Casbon, stated:

> I do not know quite why this has hung fire for so long, though there may have been arguments between the medics.

> I am ready to go through with this if you can provide drafts asking for final clearance (with presumably some rehearsal of the background and reference to previous drafts).
Consultation letters from Ms Casbon

9.85 On 27 March 1992, Ms Casbon sought the views of Mr G Lawrence (Teachers’ Pay and General Branch - TPG) explaining that she had recently taken over responsibility for Science in the National Curriculum and had inherited work on bovine eyeball dissection. She also stated:

This is a long running saga and I hope that we are nearing the end. I apologise that TPG, with its responsibility for Health and Safety matters, was not consulted before; this may have been something on which TPG would have wished to take the lead.

9.86 Ms Casbon gave a brief background of the issue and concluded:

I should be grateful for any comments on the subject matter, but more importantly on handling. In particular, in your experience, would this material constitute a quota communication?

9.87 Mr Lawrence, having checked the matter within his Department, responded stating that TPG were content for Schools 3 to ‘continue in the lead on this curriculum related [health and safety] matter’ and requested a copy of the submission when it was issued. On the matter of ‘quota communication’, his minute attached correspondence with Mr R Chattaway (Private Secretary), in which Mr Lawrence had explained:

. . . Schools 3, in consultation with HMI and Dr Ernaelsteen appear to have handled it all very satisfactorily from our general standpoint and, from memory, it appears to broadly follow the same pattern as the giant African Land Snails of some years ago, in which Schools 3 took the lead as for a specific curriculum health and safety matter.

At that time, as I recall, it was only felt necessary for DES to write to CEOs and draw the matter to the attention of their individual schools. No doubt copies were also sent to D/Health and certain other bodies as is proposed here . . .

9.88 Mr Chattaway had responded: ‘This all looks possible to me. Please advise Ms Casbon as you suggest . . .’ Ms Casbon minuted Miss E M Branton (Schools 3) with the clearance stating:

. . . It appears that the letter will not constitute a quota communication, which is good news . . .

I am anxious to get this matter finalised before schools and colleges break up for the summer holidays and I have therefore decided to write to DH and MAFF myself, rather than wait for Mr Baker’s return from leave . . .

3692 YB92/3.27/3.1
3693 At the time, the DES had a policy of imposing a quota on the number of documents that should be sent to schools, to prevent them from being overwhelmed by the amount of material they received
3694 YB92/3.27/3.2
3695 YB92/3.27/4.1
3696 YB92/3.27/4.1. See handwritten note on minute
This has turned out to be a messy and protracted case, we must ensure that it ends on a smooth note. Let’s have a word if you foresee problems.  

9.89 Ms Casbon also minuted many others with requests for final clearance of the draft. In a minute to Dr Ernaelsteen on 1 April 1992, Ms Casbon wrote:

This has been a long running saga and I hope that we are nearing the end. The Department is now in a position to issue advice to LEAs and others, including students in colleges.

...I am concerned that the Department will attract justified criticism for having taken so long to make a pronouncement on this issue. I shall therefore consider this as the final consultation and aim to issue the letter (to an ever increasing list of recipients) before the end of term. I should be grateful for your early reply.

9.90 However, Ms Casbon was soon informed that Dr Ernaelsteen had seen the attachments and needed to look at them with the file information, but that she would be away from DES until 28 April 1992 and would reply on return from leave. Ms Casbon forwarded a printed copy of this e-mail to Miss Branton with a handwritten note:

Our first set back! Could you draw up a timetable so that we don’t miss the end of term please.

9.91 On 3 April 1992, Ms Casbon wrote letters to Dr Pickles, Mrs Whyte, Mr Lowson, Mrs L Chang Kee (Welsh Office Education Department) and Mr David Morris of HSE informing them that she had recently taken over the topic of bovine eyeball dissection from Mr Jacobs. She said that DES was in a position to proceed with the advice to LEAs and other interested parties. She enclosed a copy of the proposed letter and asked for final clearance.

Responses to Ms Casbon’s letter

9.92 Ms Casbon received replies to her letter throughout April and May 1992.

Welsh Office

9.93 On 10 April 1992, Mr P Rae (Schools Curriculum 2, Welsh Office (WO)), wrote in response to Ms Casbon’s letter to Mrs Chang Kee at WO. He said that WO were grateful for the update and would want to advise LEAs in Wales. He said that he had asked WO’s Medical Branch for their advice and comments on the draft letter and also for a copy of the final letter as cleared by DH. On 22 April 1992, Ms
Casbon sent a note to Miss Branton informing her that WO had just confirmed by telephone that they were content with the proposed wording of the draft letter to CEOs. 3707 Ms Casbon said that she had promised WO a copy of the submission to Ministers in due course and advised them to take no further action on circulating the proposed text until they heard from DES.

MAFF

9.94 Mr Lowson circulated Ms Casbon’s letter to Mr Taylor and Mr Maslin with the comment that, subject to the amendment (removing the words ‘more commonly known as Mad Cow Disease’ in the first paragraph of the advice), he was content with the draft. 3708 Mr Taylor replied (in manuscript on the letter) expressing concern that such advice was ‘likely to attract adverse publicity’ and Mr Maslin commented that in relation to publicity ‘The obvious question is why it taken so long to issue the advice’. 3709

9.95 Mr Lowson replied to Ms Casbon on 14 April:

. . . We at MAFF are content with your proposed advice, subject to the removal of the words ‘more commonly known as Mad Cow Disease’ in the first paragraph. This misnomer is one of the factors that led to unjustified public concern about this disease and we would like to avoid stirring it up unnecessarily.

We can I think expect some public comment when this advice is circulated, so I would appreciate being warned in advance of its release. If we get any press queries I will be advising our Press Office to refer them to DoH. 3710

HSE

9.96 On 16 April 1992, Mr Morris (Education National Interest Group (NIG), HSE) replied to Ms Casbon’s letter. 3711 He said that, although he doubted whether any colleagues at HSE would have any difficulties with her proposals, he had sent her draft letter to HSE specialists in microbiological issues and that he would contact her in due course.

DH

9.97 On 13 May 1992, Mrs Whyte informed Ms Casbon that DH were content with the proposed advice on bovine eyeball dissection. 3712 She said DH had seen Mr Lowson’s reply and agreed with the additional comments he made. On 14 May 1992, Mrs Whyte wrote a submission to Ministers stating that DES would shortly be writing to CEOs advising them to discontinue the practice of dissecting bovine eyeballs. She explained that DES, DH and MAFF had been liaising on the advice, and that there were minimal health risks. 3713

3707 YB92/4.22/3.1
3708 YB92/4.03/8.1
3709 YB92/4.03/8.1. See handwritten comments on minute
3710 YB92/4.14/3.1–3.2
3711 YB92/4.16/2.1
3712 YB92/5.13/4.1
3713 YB92/5.14/6.1. The submission was addressed to Miss Burnett (PS) and copied to Dr Nicholas, Dr Metters, Mr Heppell, Miss Pease, Dr Steadman, Ms Lockyer, Dr Skinner, Mr Murray, Dr Wight, Ms Kinghorn and Mr Lowson
Mr Creedy (HMI) and Dr Ernaelsteen: doubts arise

9.98 On 16 April 1992, Mr Creedy minuted Ms Casbon referring to his previous correspondence a year earlier (see paragraphs 9.76–9.77) and again enclosed the two articles on BSE he had enclosed then. He stated that Dr Ernaelsteen had the papers in her files and would be able to give Ms Casbon a medical assessment of the weight that should be given to them. He added:

If they are medically sound, the proposed DES advice might be better not issued as the risks appear to be minuscule. Any ban on bovine material will raise questions on home economics and school meals and will almost certainly create a major row with the NFU and the farming lobby which could make Edwina Currie’s eggs seem like a storm in a teacup. Perhaps SOS should be made aware of the potential political dimension if a draft goes forward.

9.99 Ms Casbon wrote by hand a note to Miss Branton at the bottom of this minute, dated 28 April 1992:

I am getting more and more dubious about this course of action. Could you chase up Dr Ernaelsteen if necessary.

9.100 On 18 May 1992, Ms Casbon wrote to Dr Ernaelsteen that she had received confirmation from MAFF and DH that they were generally content with the advice. However, Ms Casbon also referred to Mr Creedy’s minute:

. . . HMI Mr Creedy has drawn my attention to articles which appeared last year in ‘The Biologist’ and ‘Chemistry and Industry’; I believe that you were sent copies at the same time. I should be grateful for your medical assessment of the weight which should be given to them. If they are medically sound, might the proposed DES advice be better not issued? The risks appear to be minuscule. HMI Mr Creedy has also raised the point that a ban on bovine material in the science lab might raise questions about home economics and school meals. That might lead to a row with the farming lobby and the NFU. If your advice is to proceed we shall have to consider amending the draft submission to alert Ministers to the potential political dimension.

As you know I am keen to issue this advice (if that is what we decide) before the end of term. I should be grateful for your response by close on 27 May.

9.101 Dr Ernaelsteen replied on 21 May 1992. Her reply seems to us to have been a significant document, and we set it out in full:

1. Thank you for your queries of the 1 April and 18 May which we have discussed in some depth today.

2. I am content with your draft but agree that deletion of ‘mad cow disease’ would now be appropriate.
3. On balance I am of the view that there is wisdom at this late stage to avoid the risk of raising media publicity, with the attendant considerable parental and educational anxieties, which may be aroused unnecessarily.

4. There are potential negative knock on effects in a variety of areas including those of human growth hormone treatment which carries a risk of CJD.

5. There remains no epidemiological evidence of transmission to humans, with the risk remaining theoretical.

6. Two years ago it was a hot issue and my professional advice balancing the risk: benefit equation judged health caution to be paramount in the light of the anxiety then prevailing.

7. At the present time Ministers could be open to criticism for not issuing advice earlier. If the advice were issued it might lead the public and others to conclude that additional facts have emerged which have in some way been hidden.

8. Should new evidence emerge, questions be asked or anxiety over the issue be demonstrated then I suggest the Department stands ready to issue the appropriate advice promptly as currently drafted.

9. In summary I believe the advice is not now timely and the disadvantages outweigh the advantages in an educational exercise which is positive, enjoyable and has educational benefit. I shall be happy to discuss if colleagues have any reservations over my present judgement.  

9.102 Dr Ernaelsteen sent a further minute to Ms Casbon on 1 June 1992, to which she attached a copy of a recent article from the British Medical Journal entitled ‘How Now Mad Cow?’ She suggested that it was of relevance to the decision regarding the Department’s advice, and highlighted the following two passages:

Other considerations, however, imply that the risks of bovine spongiform encephalopathy cannot be ruled out. These diseases are transmissible orally, conjunctivally, and iatrogenically – evidence of the causative agent’s extreme resistance to inactivation.

...  

Certainly no conclusive evidence exists to revise the consensus view that the chances of bovine spongiform encephalopathy causing human disease are extremely small; but neither can the possibility be dismissed.
June 1992

A change of heart

9.103 In the light of this correspondence, Ms Casbon prepared a draft submission advising the Minister that for the time being it would be wiser not to take the matter further. On 8 June 1992, she sent it to Mr Baker, asking him to release to copy recipients if he was content. The draft stated:

Issue

1. Whether, in the light of current medical advice on the risk of transmission of Bovine Spongiform Encephalopathy (BSE) to humans, the Department should issue guidance to local education authorities and others on the practice of bovine eyeball dissection.

Recommendation

2. The issue of unsolicited guidance to LEAs and others now would be ill-timed and potentially awkward for Ministers both here and at MAFF and DH.

... 

Argument

9. A draft submission recommending the issue of advice to LEAs to discontinue eyeball dissections was prepared in August 1990. Since then Schools 3 has been trying to gather a consensus view before submitting to Ministers . . .

10. In April this year general agreement appeared to have been reached. However, the Department’s Medical Adviser now counsels against issuing the proposed directive. Current medical opinion is that the risk of BSE transmission to humans, or of bovine eyeball dissection as a possible route of transmission, remains theoretical; there is no epidemiological evidence. This latest advice, together with a change in the political climate and revitalised public and media interest in BSE, persuade me that the issue of advice now would risk exposing Ministers to unwarranted criticism.

11. Any ban on bovine material in the present climate might raise questions about Home Economics and school meals and will almost certainly create a row with the farming lobby. MAFF is currently the centre of attention over the rise this year in the number of new BSE cases being identified each week. To issue advice to cease bovine eyeball dissections at this stage would risk raising parental anxieties and considerable media publicity not only for this Department but also for MAFF and DH . . .

9.104 The draft submission remained with Mr Baker and was not passed to copy recipients.

3720 YB92/6.08/3.2–3.3. Among others, the draft was copied to Dr Ernaelsteen, Mr Creedy, Miss Branton and Mrs Chang Kee

3721 YB92/6.08/3.2–3.3
9.105 DH was unaware of the proposed change in stance and during June Mrs Whyte contacted Ms Casbon enquiring about the DES advice. The WO also remained unaware of the changes and contacted Ms Casbon in August for progress reports. Ms Casbon minuted Mr Baker stating:

Just a quick reminder about bovine eyeballs! DH contacted me and WO phoned . . . today, both asking for progress reports. We assured them that they hadn’t missed anything and gave no hint of a possible change of heart. DH are still keen for us to issue advice, but then they have linked items on the agenda.

September–December 1992

9.106 Mrs Whyte wrote to Ms Casbon again on 7 September 1992 asking about progress on the advice. She stated:

As you know DES, DH and MAFF have been working on this advice since early 1990 and now that we have all agreed a text we are anxious to see it issued.

I understand a decision has not yet been taken on whether or when the advice is to be issued, but as we are starting another new school year presumably this will be resolved fairly soon . . . I alerted our Minister in May to the publication of the DES advice and promised to keep her informed. A copy of my submission is enclosed for your information. MAFF have similarly alerted their Press Office.

9.107 The following day, Ms Casbon forwarded the minute to Mr Baker. In a handwritten note on the minute she asked:

Are you ready to submit to Mr Saville? My excuses are wearing thin – and DH & MAFF are ahead of us in having gone to Ministers.

9.108 Mr Baker replied:

Sorry to have sat on this – but why should we need excuses. We are not doing anything because the CMA advised us in May that it would not be timely to issue guidance. Tell her that.

9.109 Mr Baker exchanged views with Ms Casbon again on 30 September 1992:

The point is rather that the Chief Medical Adviser (who has a foot in their Department as well as ours, doesn’t she?) has had second thoughts, and advised us that the time is not right to issue advice. Doesn’t DH know that, and if they do why did they bother their Ministers and why are they pressing us?

3722 YB92/6.11/4.1; YB92/8.11/4.1
3723 YB92/8.11/4.1
3724 YB92/8.11/4.1
3725 YB92/9.07/1.1
3726 YB92/9.07/1.1–1.2
3727 YB92/9.07/1.2
3728 YB92/9.30/5.1
Ms Casbon replied:

. . . neither DH – who alerted their Ministers in May – nor the others know that Dr Ernaelsteen has changed her mind and that we have accepted her advice. We had planned to write round again with that news but you wanted first to clear the line with Mr Saville; my submission of 8 June was intended to secure HoB clearance before we told DH et al that we had decided against telling LEAs to stop bovine eyeball dissection.3729

Later that day, Ms Casbon e-mailed Mr Baker after having ‘lengthy discussions with DH’.3730 She explained that they, together with their BSE expert medical adviser ‘Dr White’ (we assume Dr Wight), remained keen for the advice to be issued. She added:

It occurs to me that some (if not all) of the sensitivities outlined in my submission of 8 June are no longer current and it may be worth issuing the circular letter after all. We could even expand the advice to make clear that non-bovine eyeballs are completely risk free, as are those from calves under 6 months. But in practice the arrangements at an abattoir for segregating eyeballs from a variety of sources may not be that refined.

She asked whether Mr Baker still wanted to suggest dropping the issue. Mr Baker responded:

Yes I do. And I cannot give this high priority.3731

Pressure from DH

DH pursued the matter further. On 14 October 1992, Mr T W S Murray (Head of Environmental Health and Food Safety Division, DH) wrote to Mr Baker setting out the position from DH’s point of view following a telephone conversation that had taken place between them.3732 Mr Murray stated:

Since July 1990 DH, MAFF and DES have been liaising to agree final wording for advice to be issued to schools. For a variety of reasons this took much longer than any of us would have wished but in May 1992 my Department and MAFF agreed the terms of the advice. My Ministers were accordingly advised of this progress and that promulgation of the advice was imminent . . .

Since May 1992 my people have been in touch with yours a number of times about when the advice would be issued . . . I now understand your Department may have made a decision to reject SEAC advice and allow bovine eyeball dissection to continue.

Mr Murray stressed that DES’s decision to reject SEAC advice and allow bovine eyeball dissection to continue had two important implications:
Firstly, it is the first time Government has rejected SEAC advice and as such goes directly against all assurances Mr Gummer (MAFF) gave Parliament (attached at D)\textsuperscript{3733} that all SEAC advice would be acted upon. Secondly, your Department seems prepared to allow school children to work with bovine material which experts tell us carries a theoretical risk of exposure to BSE.

\textbf{9.115} In conclusion, Mr Murray stated:

I would be grateful if you would confirm your Department’s formal position on this matter. I will obviously need to make sure DH Ministers, the Government’s Chief Medical Officer (Dr Calman) and SEAC are suitably advised if SEAC advice is not to be followed. In the process I would of course explain the eminent expert medical/scientific opinion on which you base this decision.

I am copying this letter to Robert Lowson (MAFF) as his Ministers also have a strong interest.

\textbf{Draft submission to Ministers}

\textbf{9.116} This letter brought about a change in DfE’s position. Mr Baker replied to Mr Murray two weeks later:

Let me reassure you that we have taken no decision to reject SEAC advice. The question has been in suspense since May partly because of other preoccupations, but more particularly because I had formed the impression that both your department and MAFF had become less convinced that the evidence pointed to the need to advise LEAs against bovine eyeball dissection.

Your letter corrects that impression so far as DH is concerned. Unless MAFF have any reservations we shall now move rapidly to put a submission to Ministers.\textsuperscript{3734}

\textbf{9.117} It appears that DfE had misinterpreted the feedback from both MAFF and DH. Although requesting advance warning of timing, Mr Lowson had agreed to the advice being issued (see paragraph 9.95). Mrs Whyte had stated that DH agreed with MAFF’s additional comments; she had nevertheless informed Ms Casbon that DH was content with the proposed advice (see paragraph 9.97).

\textbf{9.118} The following day, Mr Baker prepared a draft submission to Ministers giving a candid account of what had happened.\textsuperscript{3735} A revised version was then sent to Mr Brian Mawhinney (Minister of State) on the same day.\textsuperscript{3736} It included the following:

\textsuperscript{3732} YB92/10.14/7.9
\textsuperscript{3734} YB92/10.28/6.1
\textsuperscript{3735} YB92/10.29/6.1–6.5
\textsuperscript{3736} YB92/10.29/6.1–8.3. This was copied to PS/Secretary of State, PS/Mr Forman, PS/Mr Forth, PS/Permanent Secretary, Mr Vereker, Mr Richardson, Mr Norbury, Dr Ernaelsteen, Mr Coe, Mr Davey, Miss Casbon, Mr Grantham, Mr Dando, Mr Mitchell, Mr Creedy, Mr Gould and Mr Tomlinson
10. The risk of BSE transmission to school pupils – or teachers – through the dissection of bovine eyeballs is no more than a theoretical possibility. There is no known example of the infection of any human by the BSE agent. It cannot, however, be said that infection is impossible, and the Advisory Committee [SEAC] clearly took the view that the educational benefits of eyeball dissection in the classroom did not justify even the theoretical risk. There would need to be strong grounds for going against the advice of an expert Committee on matters of health and safety, – the more so since Mr Gummer gave a clear commitment in the House in May 1990 to implement expert advice on BSE.

11. Officials have unduly delayed the handling of this question. There was excessive debate over minor points of interpretation and emphasis between HMI, Department of Health and MAFF, and our medical advisers. We have been distracted by articles in the medical and scientific press, which seemed to promise reassurance that the trans-species barrier would not be broken, but always ended by conceding that the theoretical possibility could not be ruled out.

12. It took until April of this year to reach agreement with the other Government Departments on the terms of a submission to Ministers and a letter to Chief Education Officers. Before we had acted, however, HMI expressed further doubts about the risk, supported by more learned articles, and emphasised the possibility of triggering yet another health scare, like the great egg panic. The Senior Medical Officer also advised against, at that stage, taking the risk of stimulating media interest and causing needless parental anxiety.

13. On the basis of these reservations, and with the launch in prospect of a Sunday serial expected to treat ‘mad cow disease’ in a sensational way, we shelved this project. Our main mistake was to interpret the advice from Medical Advisers Branch as representing a new Department of Health attitude towards the issue. We also misread MAFF’s likely position. We have now been emphatically corrected by the Department of Health, which expects us to write to schools as soon as possible, to give effect to the advice of the expert committee, which they regard as correct and authoritative.

9.119 The following day, Mr Baker wrote to the Minister further to this submission, stating that Dr Ernaelsteen had objected to paragraphs 12 and 13 as these ‘could give the impression that she had given advice at odds with the official medical advice of the Department of Health’. He said:

I am glad to emphasise that the impression that the attitude of the Department of Health had changed was a misinterpretation by the Branch. Dr Ernaelsteen’s medical advice has always been entirely consistent with that of the Department of Health. For the record, Dr Ernaelsteen merely responded in May of this year to a request for advice on the timeliness of proceeding with the issue of advice, bearing in mind the delay that had already occurred, the forthcoming TV serial, and our worries about causing unnecessary alarm. Her reply recognised that such concerns might lead the

3737 YB92/10.304.1. This was copied to PS/Permanent Secretary, Mr Vereker, Mr Richardson, Mr Norbury, Dr Ernaelsteen, Miss Casbon, Mr Grantham, HMI Mr Tomlinson and Mr Murray
Department to take the view that the issue of advice was not then timely, while stressing that the Department should stand ready to issue advice if any new evidence emerged. She was not asked for, and did not offer, new advice on the medical aspects of the issue. I am sorry if the reference in my submission yesterday could be read in any other sense.

9.120 On 30 October 1992, Christina Bienkowska (Private Secretary to the Secretary of State) informed Mr Forth (the Parliamentary Under-Secretary of State) that the Secretary of State, having discussed the handling of Mr Baker’s submission of 29 October 1992 with other Ministers, considered the issue to be difficult and sensitive.\(^{3738}\) He therefore asked Mr Forth to convene an urgent meeting with his opposite numbers from the other interested Departments to consider the substance and handling of any announcement and to make recommendations.

9.121 On 3 November 1992, Mr Forth wrote to the Secretary of State referring to the request for an urgent meeting.\(^{3739}\) He stated that as the issue had been discussed only in the margin of other meetings he wanted to be clearer about where they stood before entering into wider discussion. He attached a copy of Mr Murray’s letter of October 1992 and stated:

> I suggest this letter places the ball firmly in our court. As it says, if we do not issue advice we shall be accountable for permitting the continuance of a practice that the Government’s expert advisors have advised carries a theoretical risk of exposure to BSE.

9.122 He said that in his view officials should be instructed to proceed with the issue of advice to LEAs and schools, in the low-key way proposed by Mr Baker’s submission of 29 October 1992. He said that the quickest way to deal with this would be for him to write to his opposite numbers in DH (Baroness Cumberlege) and MAFF (Mr Nicholas Soames), with a copy to Mr Wyn Roberts at the Welsh Office, seeking their urgent agreement to DES proceeding to issue advice.

9.123 On 10 November 1992, Mr Forth did so. He attached drafts of the proposed advice and asked for confirmation that they were content with them.\(^{3740}\)

9.124 On 20 November 1992, Mr Lowson minuted the Private Secretary to the Minister attaching a draft reply to Mr Forth for Mr Soames’s signature. He recommended that MAFF should agree to DfE going ahead and issuing the advice. He added:

> The delay itself is quite inexplicable. I know that colleagues in DOH, who were taking the lead in ensuring that the relevant Tyrrell recommendation was implemented, have prodded DfE on a number of occasions. I can only conclude that in spite of this the DfE did not realise the sensitivity of the issue or the status of the Tyrrell Committee.\(^{3741}\)
9.125 Mr Soames subsequently replied to Mr Forth on 27 November, and agreed to the proposal to issue the advice.3742 Baroness Cumberlege responded on 24 November 1992 confirming that she was content with Mr Forth’s proposal to issue the advice.3743 On 9 December 1992, Miss Casbon minuted Ms J Clarke (Information Branch) regarding the response from WO.3744 She said:

I have today explained to Welsh Office colleagues that the Secretary of State wants the letter to issue to CEOs on Monday 14 December, to accompany a routine mailing from Schools 1. As they do not now expect to get the Ministerial response to Mr Forth’s letter of 10 November to us before then, I have told them that we cannot wait and we have agreed that the DFE distribution will cover England only. They are content to proceed on that basis and will handle the distribution to Welsh LEAs and GM schools themselves. There are no CTCs in Wales.

9.126 She stated that one letter would be sent to CEOs and another sent to grant-maintained (GM) schools and City Technology Colleges (CTCs) in England, which would also be copied to the Independent Schools Joint Council (ISJC). She recorded that Ms Clarke would arrange despatch of both letters.

Guidance issued

9.127 On 14 December 1992, Ms Clarke informed Ms Casbon that the letters to CEOs would be sent on 15 December 1992.3745 She said that the letters to Heads of GM Schools and CTCs as well as the ISJC were being mailed on the same day. On 21 December 1992 the last batch left the DfE.3746 The letter read:

1. We understand that a number of authorities and schools have sought advice from the Department of Health about the practice of bovine eyeball dissection in the class or lecture room. After discussion with that Department, we thought it might be helpful to anticipate any further enquiries by making the advice of the Department of Health more widely known.

2. There is no evidence that bovine spongiform encephalopathy (BSE) can be transmitted to humans. Nevertheless, in view of the significant nervous tissue component of the eye from the optic nerve, the expert opinion is that there is a remote theoretical risk from the dissection of bovine eyeballs which is best avoided, particularly since the alternative of using anatomical models is available.

3. Nobody who has been in contact with this kind of material in the past has any reason to feel concerned. This advice is in line with that being offered in many other areas as an ultra-precautionary measure.

I should be grateful if you would pass this advice on to your secondary schools and colleges . . . 3747
Guidance in Wales

9.128 On 16 December 1992, Mr Roberts wrote to Mr Forth informing him that he was content with his proposals and had asked his officials to write in similar terms to Welsh LEAs and GM schools.

9.129 On 7 January 1993, Mr B J Mitchell (Schools Curriculum Division, WO) wrote to Mr McDonogh (Director of Education, Clwyd County Council) advising that the practice of dissecting bovine eyeballs was best avoided and asking him to pass this advice on to all secondary schools and colleges within his remit. Mr Mitchell stated that he would be writing to GM schools in similar terms. The wording of the letter was exactly the same as the letter sent out to English CEOs in December 1992.

Distribution of the guidance

9.130 Evidently DH sought clarification some months later about the distribution of the guidance: on 28 May 1993, Mr T K Hepburn (DH HEF(A)2D) minuted Dr Wight stating that Mr Mullen (DH) had contacted DfE and its counterparts in the other ‘home countries’ and found that the guidance had been distributed as follows:

England

Chief Education Officers to send on to secondary schools and colleges (including Colleges of Further Education and Teacher Training Colleges);

Head Teachers of grant-maintained schools and the Grant Maintained Schools Centre;

Principals of City Technology Colleges;

- Independent Schools Joint Council (representing the private sector)

The guidance was not sent to universities.

Wales

- Directors of Education to send on to secondary schools and colleges (including Colleges of Further Education and Teacher Training Colleges);

- Head Teachers of grant-maintained schools

The guidance was not sent to private schools or to universities.

Scotland

- Directors of Education to send on to all secondary schools, Colleges of Further Education and private schools (in Scotland, Directors of Education have responsibility for the private schools in their area).
SED cannot confirm the arrangements made for universities yet. John Mullen will follow this up.

N. Ireland

The Education Dept. have no record of having received a copy of the guidance from DfE. Nothing has been sent out to schools and colleges in N. Ireland.\footnote{YB93/5.28/1.1–1.2. The minute was copied to Mr C Lister (HEF(A)2D) and Mr Mullen (DH)}

**Implementation**

9.131 On 8 February 1993, Dr P Burrows (Chairman, Association for Science Education) wrote to Mr Baker regarding the letter issued to all CEOs in December 1992.\footnote{YB93/2.08/5.1} He stated:

Whilst the letter in itself constitutes advice to CEOs, there is a clear implication that you would wish LEAs to exercise their function as employers under the Management of Health and Safety at Work Regulations 1992, and ban the practice of bovine eyeball dissection in their schools and colleges.

9.132 He noted that as there was no evidence that BSE could be transmitted to humans and there was only a remote theoretical risk from the practice, it was questionable whether a ban could be justified. He added:

There are clear, known risks (of serious injury or even death) from such activities as rugby, football or various athletic events, but these are not forbidden. They are not forbidden because the educational advantage is perceived to outweigh the small risk involved. The risk of BSE is far smaller, and thus a ban cannot be justified, when there are clear educational advantages . . .

We urge you to withdraw this recommendation.

9.133 On 9 March 1993, Mr Baker replied emphasising that the advice had come from SEAC, a very authoritative source, and added:

If you said that that advice mounts to a strong steer to discontinue the dissection of bovine eyeballs in the classroom I would certainly not disagree. But it is not a ban. It is entirely up to schools and LEAs to decide how to proceed in the light of the advice contained in my letter.\footnote{YB93/03.09/4.1}

9.134 In relation to implementation of the guidance DfEE told us:

The decision as to how to proceed was left within the informed discretion of schools and LEAs, as is usual practice. Under the Health & Safety at Work etc. Act 1974, and associated regulations, it is the LEAs or school governors as employers who have the ultimate responsibility to ensure pupils’ health and safety.
The DfE did not ask LEAs to confirm whether schools had complied with the December 1992 guidance. It was also not possible to identify the scale of bovine eyeball dissection in schools from Ofsted reports or any other source. Such information as was received by July 1995 indicated that although the practice was much less widespread, some schools and LEAs (including the independent sector) still allowed the dissection of bulls’ eyeballs under strictly controlled and aseptic conditions. We understand that, at the time, the Association for Science Education, an independent organisation of scientific experts with links to HSE, received three to four phone calls per week on the relevant hygiene conditions for such dissections. They advised schools that dissection could take place if proper safeguards were taken, but that schools wishing to be prudent should find alternatives. The exact extent of bovine eyeball dissection in schools between December 1992 and July 1995 is not known.  

1995

An end to bovine eyeball dissection in schools

9.135 Research by CVL in 1995 demonstrated BSE infectivity in the retina of bovine eyeballs. The minutes of a SEAC meeting held on 21 June 1995 record:

Dr Bradley informed the Committee that, following incorrect claims made by Professor Lacey about the use of bovine eyes in human food, retina and optic nerve from clinically affected cattle had been tested by bioassay in mice. Some of the mice inoculated with retina had now come down with a scrapie-like disease demonstrating that retina showed signs of infectivity.

9.136 The SBO Order 1995, which came into force on 15 August 1985, prohibited among other things the removal of the brain or eyes from the head of the bovine animal, and treated bovine eyeballs as SBO. The effect of this was to prohibit the use of bovine eyeballs in schools, thus putting a final end to the practice of dissecting them there. On 25 July 1995, DfEE sent a letter to educational establishments informing them that dissection of bovine eyeballs must stop.

HSE guidance on handling bovine eyeballs

9.137 Following the discovery of infection in the retina of bovine eyeballs, HSE produced guidance entitled: ‘Bovine Spongiform Encephalopathy (BSE); recommendations for safe working practices’ in February 1996. This was aimed at those carrying out research work with bovine eyeballs and stated:

The agents causing transmissible spongiform encephalopathy in animals, including BSE, are not classified as human pathogens but given the uncertainty still surrounding BSE, it is prudent to take precautions against

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3752 DO01 tab 21
3754 See Chapter 4 of this volume
3755 YB95/6.26/6.5
3756 L2 tab 13
3757 YB95/7.25/9.1–9.2
3758 YB96/02.00/6.1–6.3
any possibility of transmissibility infection when handling eyes from apparently healthy bovines.

. . .

Despite rigorous examination of many types of tissue and body fluid, only the brain and the spinal cord of cattle with BSE (and Peyer’s patches in the intestine of experimentally infected calves) had been shown to transmit the infection when inoculated into mice. Now, however, infectivity has been detected in the retina taken from animals clinically affected with BSE.

9.138 The guidance went on to state that eyes from healthy animals were subject to the Specified Bovine Offal Order 1995 and thus removed from the food chain, but that laboratory researchers could obtain whole heads, remove the eyes and dispose of the head as an SBO. It pointed out that there was no way of detecting the presence of BSE in live cattle until they displayed clinical signs and therefore that there was a potential risk that researchers working with bovine eyes would be handling material containing BSE infectivity. The guidance advocated that employers carry out a ‘suitable and sufficient’ risk assessment under the Control of Substances Hazardous to Health Regulations (COSHH) 1994 and the following basic precautions be taken:

1. cover breaks in exposed skin with waterproof dressings;
2. wear gloves when handling eyes;
3. wear eye protection and protective clothing where splashing may occur;
4. use disposable items wherever practicable;
5. avoid the use of sharps (knives, needles, glassware);
6. consider ways in which work practices can be modified to minimise the risk of penetrating injuries;
7. dispose of sharps and other contaminated waste safely (preferably by incineration);
8. avoid the contamination of working surfaces (e.g. use of plastic backed absorbent paper) and of equipment.

Discussion

Early consideration of bovine eyeball dissection

9.139 We have considered whether officials in DES, DH or MAFF should have pursued further the question whether action was needed in relation to the dissection of bovine eyeballs when it was raised in 1988 and 1989.
9.140 However, we have concluded that they were not to be criticised. From August 1988, BSE-affected cattle were compulsorily slaughtered and their carcasses destroyed. Eyeballs from such cattle would not have been available for dissection. Eyeballs from all other cattle were not included in the SBO ban in November 1989. We believe this was because it was not thought they would be eaten by humans. But it seems to have been thought by some that their omission from the ban indicated that they were considered safe for human consumption: see the point made by Mr Bradley in his minute of 20 November 1989.\(^{3759}\) It was not until 1995 that the ban was extended to include all bovine eyeballs. Having regard to the terms of the SBO ban, we think it reasonable that those who considered the issue of bovine eyeball dissection in 1988 and 1989 did not pursue it more vigorously at that stage.

Delay within DES

9.141 SEAC advised in July 1990 that eyes from cattle over 6 months old should not be used for dissection in schools.\(^{3760}\) It was 2 ½ years before that advice was passed on to schools. Did that constitute an inadequate response to the emergence of BSE, or were there good reasons to explain the delay?

9.142 When considering this question we were interested in the contrasting approach taken in Scotland, where it took just over a month for guidance to be issued from the time when the question was first raised. We have noted that this approach was not without its critics at the time. Mr J McDonald (HMI Chief Inspector) raised a number of concerns about the consultation process leading to the distribution and substance of the advice.\(^{3761}\) We have noted above the comments made by the Scottish Equipment Research Centre.

9.143 We have sympathy with such considerations, and are mindful of the need not to act rashly or with undue haste. Consultation with appropriate parties assists in drawing to the decision-maker’s attention the competing concerns. On the other hand, it is important not to allow the consultation process to become over-elaborate or to lose momentum, to the detriment of decisive action where that is called for. These are considerations we have had in mind when looking at this part of the story.

9.144 Had advice to schools been issued in May or June 1991, shortly after Mr Lowson and Dr Pickles approved Mr Jacobs’s draft,\(^{3762}\) we do not think that criticism of those concerned would have been justified. We can understand what led to that stage of the consultation process lasting some ten months. Although speedier action would have been preferable we do not think, in the circumstances, that this would have been an unreasonable response. However, we were concerned that, far from guidance being issued at that stage, a further 18 months elapsed before that took place.

9.145 When we raised our concerns with Mr Baker he responded with admirable candour. He told us:

> I was the senior officer who at the time was given and accepted responsibility for the issue of advice to schools on the dissection of bovine
eyeballs . . . and I do not disclaim my major share of responsibility for that delay.

I accepted that responsibility when the handling of the bovine eyeballs business was reviewed within the Department by senior colleagues at the end of 1992, in response to ministers’ concerns about the delay in issuing advice. It was then concluded that I had made significant errors in judgement in dealing with this piece of business; in particular in not ensuring that the matter was brought to the early attention of Ministers, and in taking a view on questions of public sensitivity that were probably a matter for Ministers. The outcome for me was a reprimand and a caution as to my future conduct.3763

9.146 Mr Baker explained to us some of the reasons that lay behind the delay:

With hindsight, it is clear that the issue of advice to schools should have been regarded as urgent and given a high priority. However, that was less clear to me and others at the time – before any new variant of CJD associated with bovine spongiform encephalopathy had been identified. The advice we had been given was that infection by the BSE agent through accidental inoculation in the course of dissecting bovine eyeballs was a remote theoretical risk. There was no epidemiological evidence of the transmission of the disease to humans, and the scientific literature seemed to suggest that transmission was highly unlikely. I recognise that we were not competent to make our own judgement on these matters and should never have been trying to do so. But my point is that I never believed in any real risk to pupils and saw the issue of advice to schools as an ultra-precautionary measure.

At that time the Branch, and my Division within it, was under very heavy and unrelenting pressure to introduce a statutory national curriculum and associated assessment measures, subject by subject, to an exacting and inflexible timetable determined by Ministers. At the beginning of the timeframe of the DFA this had just been further complicated by a decision to revise completely the statutory orders for science and mathematics almost as soon as they had come into operation: a task that fell on Mr Jacobs and his team under my oversight. Later unexpected work requirements falling on myself and my Division included a review of the English curriculum order and an overhaul of the GCSE examining arrangements.3764

9.147 He also identified in more detail some of the matters with which he was concerned between May 1991 and September 1992:

May 1991 to May 1992

By May 1991, although the first stage of consultation appeared to be complete the process had lost impetus. HMI had circulated extracts from the scientific press and were questioning the need to proceed. My Division was heavily engaged in priority curriculum tasks. Mr Jacobs’ team was still engaged in the review of the mathematics and science orders. I had been given responsibility for the establishment of music in the National
Curriculum, was trying to salvage an expensive curriculum materials development project on ‘Language in the Curriculum’, and was fighting a rearguard defence of the English curriculum order against critics inside and outside Government.

By about April 1992 it would seem . . . that we should have been in a position to issue the advice so long in gestation. However, delay itself had bred indecision and vacillation. HMI expressed doubts about the educational advantages and the political implications of issuing advice at that point in time. And in May Dr Ernaelsteen expressed the view that the issue of advice was no longer timely, and the advantages would be outweighed by the disadvantages.

June to September 1992

In my mind the exercise had taken a new direction, and the task was now to draft a submission to Ministers advising them against the issue of advice on the dissection of bovine eyeballs. However, the wording of a submission was obviously going to be tricky, and I found the draft put up by Miss Casbon unconvincing. I did not find the time to produce my own draft. I now had other problems. In June I took over responsibility for the conduct of GCSE examining, which raised questions for urgent resolution about compatibility with National Curriculum assessment. Then the publication of GCSE results in August was followed by a published report from HMI calling in question the integrity of examining standards, and Ministers demanded immediate action. 3765

9.148 Mr Jacobs also displayed admirable candour when we raised the matter with him. He said of the period from May 1991 to February 1992 (when his responsibility for the matter ended):

I accept that, with the benefit of hindsight, I should have produced a revised submission for circulation sooner than I did. I cannot recall that there was any specific reason for not doing so other than my giving the matter a lower priority than my other work at the time. 3766

9.149 He gave us this explanation of his thinking, and of the other priorities competing for his time:

. . . However, again, I cannot recall being chased by anyone within or outside DFEE about the matter until Mrs Whyte made contact in late October or November 1991. Indeed, I suspect the fact that I was not chased may have meant that as time passed the matter became less of a priority for me. I note that Mrs Whyte in her letter to me of 4th November 1991 states ‘. . . Kent CC’s enquiry appears to have reminded everyone of the proposed advice . . .’ I copied my reply to her quite widely within the department as well as to MAFF and Dept of Health, but again no one pressed me to circulate a revised submission or expressed concern that I had not already done so.

. . .
Health Risk

I should emphasise that I always understood that any advice to schools that they should cease bovine eyeball dissection was a precautionary measure. For example, I note that in the first draft of my letter to the CEOs I stated that

‘I should emphasise that there is no evidence of BSE transmission to humans and there is no direct evidence that eyeball dissection will be a possible route of such transmission. It cannot be said, however, that there is absolutely no possibility of BSE transmission to humans. To the extent that such a possibility exists there is indirect evidence that injury during dissection could provide a means of transmission of the BSE agent . . . It is recommended that bovine eyeball dissection in schools should be discontinued until the evidence of the possibility of any risk is clearer.’

I continued to have this understanding of the health issues until I left the post in February 1992. This understanding was reaffirmed by comments such as those found in paragraph 11 of Dr Ernaelsteen’s minute of 18th January 1991 where she refers to a ‘sensible precaution . . . against a very remote and theoretical possibility’, and J Creedy’s minute of 19th April 1991, where he states ‘I am no human geneticist, but is [sic] seems that a human encephalopathy needs highly unlikely transmission to occur to an individual with a very rare genetic make-up . . . If I am interpreting the facts correctly, two events – each with a one in millions likelihood, need to coincide – are we going over the top in our concern?’. Whilst I now understand that this analysis is probably scientifically incorrect, at the time it reinforced in my mind the ultra precautionary nature of the advice we proposed to issue. At no time did I consider this to be an issue on which human health would be at any real risk unless the advice was put out, nor did I ever get this impression from colleagues within the department, or from Dept of Health or MAFF. I am sure that if there had been any such understanding, or if the commitment made by Mr Gummer had been made clear, the matter would have been dealt with sooner.

Other Work Pressures

This post was my first job in the civil service and throughout the relevant period I was extremely busy. In particular I was heavily involved in what had been the entirely unexpected task of revising the national curriculum for mathematics and for science. This was known as ROMAS (in-house review of mathematics and science), and began at the start of 1991 and continued until the end of that year. Proposals were published in March 1991, with statutory instruments being published in December 1991. The task was the absolute priority for my team and a great deal of the burden of the work fell on myself. During this time I consistently worked at least 50-hour weeks and I travelled to the National Curriculum Council in York about once every two weeks. There was also a great deal of evening and weekend working. I would like the Committee to appreciate the competing demands on me during my time in this post.
Summary

In summary, and with the benefit of hindsight, I accept there were occasions when I did not deal with the question of advice on dissection of bovine eyeballs as expeditiously as I might have. I recognised in February 1992 that it would have been preferable if I had produced a submission sooner, and I accept that I share with Mr Baker some part, but not a major part, of the responsibility for the delay. I can provide no explanation for these delays other than the fact that, in all the circumstances, I gave priority to other work. However, at no time was this matter presented to me as a priority or as something about which the department, the Dept of Health or MAFF, felt strongly. Further, at no stage did I consider that the issue of any advice was anything other than an extremely precautionary measure.

9.150 We have considerable sympathy with the heavy workload that Mr Baker and Mr Jacobs were faced with, and we can well understand that this may have led to a lower priority being assigned to guidance on bovine eyeball dissection than would otherwise have been the case. We also bear in mind the views expressed by others as to the urgency of the matter.

9.151 None the less, we must record that, as they have acknowledged, both Mr Baker and Mr Jacobs should have taken steps to avoid the delay that occurred from May 1991 onwards. There does not seem to us to have been any adequate reason why the guidance was not issued at that stage, and why it was delayed until early in 1992. This does seem to have been an occasion on which the consultation process was allowed to lose momentum, where action to implement the advice of SEAC was called for. Mr Baker, who assumed responsibility for the issue in July 1990, bears a major share of the responsibility for that delay, as he frankly acknowledged. Mr Jacobs, who had day-to-day responsibility for the issue, but reported to Mr Baker, shares with him some part, but not a major part, of the responsibility for the delay until his departure in February 1992.

Dr Ernaelsteen’s involvement

9.152 We record first our commendation of Dr Ernaelsteen’s involvement in this story from the earliest stages, when she raised the question of bovine eyeball dissection on her own initiative, through to early 1992. We have noted the occasions on which she chased her colleagues in DES to see that progress was made, and her consistent advice until early 1992, in accordance with SEAC’s view, that guidance should be issued to schools.

9.153 Dr Ernaelsteen explained to us the reasons why it took her some weeks to reply to Ms Casbon’s urgent request of 1 April:

I was attending a DFE/DH Communication-Aids Day Conference on Monday 1st April 1992 and having personally invited the principal Speaker, was therefore acting as Departmental ‘host’. As a result I was unable to deal with the letter immediately. I was also committed to a 5-day long Annual British Paediatric Association conference from 2nd to 7th April in York representing the Department. Immediately following this I was booked to go
on annual leave abroad. I therefore asked my secretary Ms Hutchens to send
an e-mail stating that I would be away until the end of April, to apologise for
this delay and to state that I would deal the matter on my return.

Following my return from annual leave on 30th April 1992, I was faced with
an enormous backlog of urgent queries and casework from and in both
departments. My personal diary also records that I attended a minimum of
14 scheduled meetings between then and 15th May.3770

9.154 We think it reasonable that Dr Ernaelsteen dealt with the matter as she did.
We note that she ensured that Ms Casbon was told of the position on 1 April, giving
her the opportunity to contact Dr Ernaelsteen if her suggested timetable was
unacceptable.

9.155 However, we were concerned about the content of Dr Ernaelsteen’s reply,
when it came on 21 May 1992.3771 Dr Ernaelsteen explained to us the background
to the drafting of this minute. She told us that she remained of the view that guidance
should be issued, and that she envisaged merely that it would be postponed by a few
weeks:

I had had discussions with Miss Casbon in some depth earlier that day. I had
also spoken with officials from HMI, and in particular HMI Mr Creedy,
about his major anxieties of causing a public health panic and a major row
with the farming lobby. I had genuine reservations about issuing the advice
on stopping bovine eyeball dissections at that point in time. I was concerned
that in light of the delay which had taken place between SEAC’s
recommendation and the present time and there being, on the face of it, no
ostensible reason for issuing the advice at that particular time, that the public
would assume (wrongly) that this was prompted by the emergence of some
new scientific evidence which it was not being told about. I was not informed
of the reasons for that delay, and it was not my responsibility to issue the
guidance – I had simply assisted Schools Branch 3 by advising from a
medical viewpoint on the drafting and clarification of the guidance. I had
expected that the Branch would take the matter forward as it thought
appropriate.

Nevertheless, I believed that it was necessary to issue the advice but simply
not at that particular moment. I advised that the Department should stand
ready with the agreed draft, able to issue it at short notice should new
evidence emerge, questions be asked or anxiety over the issue be
demonstrated. I did not envisage an indefinite postponement of the issue of
the guidance – rather, that it should be issued when DFE colleagues
considered that the time was right. This was a matter of considered
judgement for DFE Ministers on the sensitive issue of timing, rather than a
scientific issue. My minute raised no new additional medical facts.3772

9.156 Dr Ernaelsteen also referred us to her minute of 1 June 1992 to Ms Casbon,
enclosing the British Medical Journal article.3773 She said that her reason for
highlighting the two paragraphs:
... was to stress to Ms Casbon the fact that although extremely small, the risk of transmission to humans was nevertheless present, and therefore my advice was that it should not be a viable option (if it had ever been considered) not to issue the guidance at all. I had also had discussions with Miss Casbon about this. I envisaged that unless specific requests for information were made to the Department in the meantime, the guidance would be issued in some 4–6 weeks, and at a time when its release would not coincide with the screening of the BBC serialisation “Natural Lies”, which was about transmission of BSE to humans. Having been asked about the timing of the guidance, my considered view was that to have issued the guidance at that particular time would have risked causing unnecessary and disproportionate public disquiet. My concern at all times during this period was to ensure that the timing of the issue of guidance was not ill-thought out; that it should not be issued in such a way or at such a time that public fears were needlessly aroused, either because the public suspected the DFE had kept information hidden or equally because it coincided with sensationalist media coverage on the subject of BSE which might be likely to provoke public hysteria.

9.157 It remains unclear to us whether Dr Ernaelsteen envisaged the indefinite postponement of the advice, or whether she envisaged that it would be postponed only for a matter of weeks. If it was the latter, then it does not seem to us that she made this clear in her minute of 21 May. In any event, having commendably stood her ground up to May 1992, we consider it regrettable that, in the absence of any new medical facts, Dr Ernaelsteen countenanced any further delay in issuing advice on stopping the practice of bovine eyeball dissection. We do not consider it likely, as was suggested on her behalf, that this delay would have occurred in any event. Her minute was written in response to a request for her ‘medical assessment of the weight’ that should be given to the points identified by Mr Creedy and it was highly likely that reliance would be placed on her views. It seems to us that, whatever her intention, Dr Ernaelsteen’s advice led to a further delay of some three or four months in the issue of guidance to schools.

General comments

9.158 At the beginning of this chapter we said we would return to some general points that emerged from the way the issue of advice on bovine eyeball dissection was handled. As we have discussed above, there were human failings and confusion of professional advice with judgements about handling particular to this case. However, we were also interested in how this story was a case study of some common defects in the way the threat of BSE was addressed by Departments. This seemed to us to hold lessons for the future. We comment in the following paragraphs on:

- The perception gap about risk
- Handling the unusual
- Absence of a frame of reference
- Putting the best face on omissions.
The perception gap about risk

9.159 Although Dr Ernaelsteen attached importance to implementing the SEAC recommendation, and demonstrated this by her efforts to get guidance issued, that urgency was not perceived by her DES colleagues. Once again the reassuring language used to avoid arousing public alarm sedated the watchdogs, in this case those responsible for ensuring schoolchildren and teachers were not exposed to risk through their work.

9.160 It was not surprising that various officials at the time, each with their own departmental priorities and preoccupations, had concerns about not ‘going over the top’ or being ‘over-zealous’ on what they saw as ultra-precautionary measures on a remote theoretical risk. They were far from the front line on BSE. Having sought advice from SEAC and informed DES of this advice, Dr Pickles left it to them to discuss whether there was a need for general advice within England. Nobody was knocking on their Minister’s door about it. The Southwood Working Party Report and Tyrrell Committees were unfamiliar oracles far distant from national education policy. Mr Gummer’s decree about the handling of SEAC recommendations was unknown to them. Enthusiasm for action languished, and as time passed it became even more unappealing in the absence of any apparent real risk.

9.161 It was plainly a rude shock when Mr Murray’s incensed letter of 14 October 1992 tore the veils from their eyes. They were now being called on to justify to the Chief Medical Officer (CMO) and Ministers why they had apparently substituted their own judgement about risk for that of the ‘experts’. As Mr Lowson aptly commented to MAFF Ministers in November, they had apparently simply not realised ‘the sensitivity of the issue or the status of the Tyrrell Committee’.

9.162 We have some sympathy with the DES in finding itself so ill-informed. We believe that the way the Southwood findings were generally interpreted as having dealt with all the matters needing attention was an initial cause, and that the pains that MAFF and DH took to gloss matters reassuringly – that Ministers were taking further steps on a purely precautionary basis – maintained and fostered that impression. In successive drafts of the submission and guidance DES officials sought to ‘strengthen’ the assurances, and the advice on timing became open-ended. There was a failure in risk communication.

Handling the unusual

9.163 Although Schools Branch 3 shouldered the task of dealing with the guidance issue without demur, this was undoubtedly on the outer fringes of their field of responsibility. In 1992, when they queried whether the topic might better have rested elsewhere, they were assured that their past role in issuing advice on the giant African land snail was a precedent. We felt that this indicated the topic constituted an exceptional task, an attitude which was confirmed by the descriptions given to us by witnesses of the very different nature of the work on which they were heavily engaged. That was indeed a far cry from health and safety guidance on the dissection of bovine eyeballs.

9.164 The natural relationship of the guidance was with occupational risk advice generally. Indeed, Dr Ernaelsteen drew attention to this ‘tension’ in a minute to
Dr Pickles in February 1990 stating: ‘If one points to particular dangers in school, then housewives, butchers, abattoir workers are at equal theoretical risk’. However, it appears that there was no contact with the HSE until spring 1992, when Ms Casbon informed them that she had taken over the topic of bovine eyeball dissection from Mr Jacobs.

9.165 Given the somewhat relaxed performance of the HSE in issuing consistent advice on handling BSE risk tissues to all occupational groups (described earlier in Chapter 8 of this volume), it is doubtful how much faster an association between the DES and HSE initiatives might have moved matters along. However, it seems to us that the idiosyncratic nature of the topic within Schools Branch 3 meant that there was no established procedure within the Branch for dealing with it, and that this did not foster progress.

9.166 This was unfortunate because it was not a straightforward matter to agree policy advice between the different tribes of the DES: the Inspectorate, the different policy branches and the medical and safety experts. A clear and firm lead by those with ‘ownership’ might have produced a speedier outcome. That happened only after the topic blew up in 1992.

Absence of a frame of reference

9.167 Even in the absence of a more direct HSE role in addressing occupational risk generally, the repeated stranding of the draft guidance might still have been avoided had MAFF and DH been systematically mapping and monitoring action on all potential channels of transmission. We discuss in vol. 7: Medicines and Cosmetics the consequences of the failure to carry out an audit of the uses of bovine tissues at the outset, and how such an audit might have helped avoid matters being overlooked or excessively delayed.

9.168 Had this been done, we believe DES, along with other Departments, would have had a clearer picture of what was expected of them, and how it fitted into a comprehensive and sustained approach. Moreover, systematic accountability for action remitted to them might have averted delays and misunderstandings of the true position. It might also have stimulated better liaison between DES and HSE on their shared interest in BSE risks for those in education. These risks were considered by the Education NIG of the HSE in 1988 in relation to higher education establishments but no action was taken. Concerns about bovine eyeballs arose in the HSE in 1995 and they issued advice in 1996 to researchers handling these. They appear to have been unaware of the consideration being given by DES to this in 1990–92 and the issue of guidance to schools.

Putting the best face on omissions

9.169 These delays and misunderstandings were fostered by DES evasiveness and temporising about what was happening. This is something we sometimes heard said about MAFF, but it certainly did not apply to them in the case of bovine eyeballs. Both they and DH favoured immediate issue of the guidance. By contrast, DES had changed their minds about this, partly because they were concerned that to issue advice at that stage would have been potentially awkward for Ministers. However, they delayed telling MAFF and DH of their change of heart. Nor were their concerns
about possible criticism put to Ministers themselves to consider. Until DH found out about the change of heart, they were unable to correct any misapprehension on the part of DES as to their view, or to inform DES about Mr Gummer’s commitment to act on SEAC’s advice.

9.170 We think this illustrated how things can go wrong where people are under-informed, for what at the time may seem good reasons.