

# Japan-U.S. BSE discussion WG

## Ministry of Health, Labour and Welfare

### 1. Definition of BSE and its testing methods

#### (1) Testing methods

- Screening

‘Platelia’ ELISA-kit (Bio-rad Laboratories), Enfer BSE test (Enfer) (Appendix 1)

- Confirmation

Western Blot, Immunohistochemical examination (Appendix 2)

- Ground law and testing system in abattoirs

- Ground law

Based on Article 14 of the Abattoirs Law, only animals that pass the ante-mortem and post-mortem inspection that are conducted by meat inspectors (all are veterinarians) who are public officials of prefectures or cities establishing health centers and are approved for the slaughter and dressing for use as edible meat (Appendix 3). It is designated that cattle of 0 months or older (all ages) are subjected to BSE testing in this inspection based on the Law Concerning Special Measures for Bovine Spongiform Encephalopathy (Appendix 4).

The Abattoirs Law prohibits producing meat from cattle affected with BSE, and cattle diagnosed with BSE are incinerated and the processing facilities are disinfected.

- Testing system

On October 18, 2001, BSE testing was introduced in all meat inspection in all abattoirs where cattle are slaughtered.

For cattle suspected of having BSE in ante-mortem inspection with neurological symptoms, etc., slaughter is prohibited. In addition, if an animal tests positive in a BSE screening test in post-mortem inspection, confirmation testing is conducted at the National Institute of Infectious Diseases, Obihiro University of Agriculture and Veterinary Medicine, or Hokkaido University and determinative diagnosis is given by the ‘Expert Committee for BSE Diagnosis, MHLW’ based

on the test results (Appendix 5).

Testing has been conducted on 3,159,408 animals as of May 8, 2004 (Appendix 6).

There are 162 abattoirs where cattle are slaughtered and dressed (as of February 2004) and 2,657 meat inspectors (as of March 31, 2003).

## (2) Definition

- •Process of diagnosis and BSE cases in Japan (including atypical cases)

Diagnosis in BSE testing based on the Abattoirs Law is implemented by the “Expert Committee for BSE Diagnosis, MHLW” established in the Ministry of Health, Labour and Welfare, and positive cases from the BSE screening test are diagnosed conclusively based on the results of confirmation tests.

The criteria for diagnosis as BSE consist of a positive result in either Western Blot or Immunohistochemical examination in the confirmation test. Two of the 11 cases diagnosed as BSE in Japan so far have had positive results only in Western Blot, and the results of Immunohistochemical examination were negative. Furthermore, histopathological tests are also conducted in the confirmation test, and 5 animals among the 11 diagnosed with BSE did not show spongiform symptoms in their brain tissues (Appendix 7).

Since a small amount of PrP<sup>Sc</sup> with an electrophoretic profile different from that of typical BSE-associated PrP<sup>Sc</sup> was seen in Western Blot testing for cattle slaughtered on October 18, 2003, the results were published (Appendix 8) and information was provided to the OIE. This case was diagnosed as bovine prion disease or BSE because abnormal prion protein was confirmed in Western Blot testing.

- •Process of diagnosis in EU

The EU also considers positive results in any of immunohistochemistry, immuno-blotting, and the demonstration of characteristic fibrils by electron microscopy as BSE positive based on the TSE regulation (Appendix 9).

### (3) Tests on sheep and goats

Since the possibilities of BSE being transmitted to sheep and goats cannot be denied, Western Blot testing is implemented on all sheep and goat animals of 12 months or older that are to be supplied as meat in a similar fashion to BSE based on the Abattoirs Law. A total of 529 animals have been tested since May 2001 and no TSE cases are confirmed.

## 2. Definition of SRM and method of removal

### (1) Ground law

Based on Article 6 of the Abattoirs Law and Section 2, Article 7 of the Law Concerning Special Measures for Bovine Spongiform Encephalopathy, owners or managers of abattoirs are required to contain bovine heads (except for tongues and cheek meat), spinal cords and distal ileum (2 meters from connection to caecum) in a special waste container for incineration (Appendix 3, 4).

Similarly, based on Article 9 of the Abattoirs Law and Section 3, Article 7 of the Law Concerning Special Measures for Bovine Spongiform Encephalopathy, slaughter businesses have been required to process bovine heads (except for tongues and cheek meat), spinal cords and distal ileum (2 meters from connection to caecum) so that contamination of the dressed carcass and edible intestines is prevented since October 18, 2001, and related documents have been provided by the Ministry of Health, Labour and Welfare (Appendix 10).

On the other hand, the use of the vertebral column for food by meat processing and other food businesses has been prohibited based on Section 1, Article 11 of the Food Sanitation Law since February 16, 2004.

Brains, eyes, spinal cords and placentas of sheep and goat aged over 12 months, and tonsils, spleens and large and small intestine of those of all aged have been removed and incinerated since April 1, 2002.

### (2) Method of removal/incineration and supervising system

In abattoirs, the removal, disposal and incineration of specified risk materials are implemented under the supervision of meat inspectors who are public officials of prefectures, etc. In addition, it is also accepted that licensed industrial waste processing businesses must incinerate outside the properties of abattoirs (Appendix

12).

For meat processing facilities and butcher's shops, food inspectors of prefectures, etc. have witness inspections regularly to confirm observance.