

To: NIAA Board of Directors

From: Karen Jordan, DVM, Chair of NIAA Cattle Health Committee

**Re: 5-19-05 ARS BSE Industry Consultation meeting,
USDA, Washington, DC**

NIAA was invited to send a representative to the ARS BSE Industry Consultation Meeting. The purpose of the meeting was to review future BSE research plans and to receive industry input on research needs and priorities.

The following is a brief list of some of the research ideas that the cattle industry might find interesting.

- Amplify (grow) the North American BSE agent so that adequate BSE infected brain material will be available for research programs.- (intracerebral inoculation of calves is used to produce BSE infected material.)
- Determine whether BSE is inactivated by rumen fluids. The rationale is to question whether adult cattle can be infected with BSE by the intestinal route.
- Develop the ability to detect dorsal root ganglia and CNS tissue on carcasses (The rationale behind developing such a device is to avoid slaughter house contamination of meat.)
- Identify "markers" to improve early diagnosis of BSE before clinical signs are seen.
- Try to determine the minimum infective dose of the BSE agent to prove inactivation studies.
- Evaluate methods to inactivate BSE agent in carcasses, rendered products and the environment without using harsh chemicals.
- Develop processes for prion destruction in meat and bone meal, evaluate the treated material and its potential to be a value added product.
- Develop a method of composting that would inactivate BSE.

Many questions were asked by industry representatives. The following is an example of the questions:

- In an environment where Chronic Wasting Disease, or scrapie, or BSE animals were located, how long is the environment capable of infecting calves?
- Is there any new, better, or development of the technology to be able to detect prohibited materials in feeds?
- Is there research ongoing on the age of the calf that is susceptible to infection and what is the infective dose for the young calf?
- Is there research being done on non feed applications for meat and bone meal?

- Have all the risk materials in BSE infected cattle been identified?
- We need a live animal diagnostic test. Will this be available soon?

It was my pleasure to attend this meeting for NIAA. I hope this brief summary gives you some indications of the directions that BSE research is taking and needs to take. There are many more research areas dealing with genetic markers of the BSE agent, characterize the different strains of BSE, and mapping the tissue migration of the prion from the digestive tract to the central nervous system.

The industry representatives expressed appreciation to ARS for hosting this BSE Industry Consultation Meeting.