The North American rendering industry perspective on animal proteins and bovine spongiform encephalopathy

Bovine spongiform encephalopathy, a complex and fatal degenerative neurologic disease of cattle that is characterized by a long incubation period and a causative agent that has never been identified, was first recognized in Great Britain in 1986. The prevailing hypothesis is that the disease resulted from the consumption by cattle of meat and bone meal containing a scrapie-like infective agent. Inferences from a comparative analysis of the production profile of rendered proteins of ovine origin from 1990 through 1992, to contrast any epidemiologic parallel to the rendering risk factors of the United Kingdom, indicate marked differences between the 2 countries and will not support a meat and bone meal causation hypothesis for the United States. Nonetheless, the complexities surrounding the transmissible encephalopathies heighten the imperative for longitudinal studies and the continued evaluation/analysis of potential risk factors. Anecdotal conclusions promote the possibility of inexactitudes, thus confounding the science. Planned research initiatives remain the most important regimen to attain answers to this challenging disease.—D. A. Franco, DVM, MPH. From the National Renderers Association, Washington, DC.

Regulatory concerns about bovine spongiform encephalopathy

Wisconsin is a large exporter of cattle and bovine genetic material into domestic and international markets. Any real or perceived risk of disease in Wisconsin has the potential to be quite damaging. Although public discussion of transmissible spongiform encephalopathy (TSE) is valuable for establishing policy and research priorities, markets do not always recognize the nuances of scientific discourse. Care must be taken that such discussions not create the perception that the presence of bovine spongiform encephalopathy in Wisconsin cattle is an established fact.

Surveillance for TSE is a time- and labor-intensive activity that is presently being managed in Wisconsin through foreign animal disease investigations by specially trained USDA/APHIS veterinary officers who are trained to recover brainstem tissues. Surveillance is being performed through the collaboration of veterinary practitioners, regulatory and public health agencies, Wisconsin Animal Health Laboratories, and veterinarians in state and federally inspected slaughter plants. Fifty brainstem tissue specimens, a small sample of the 600,000 cows slaughtered annually in the state and of the estimated 20,000 nonambulatory cows slaughtered, have been submitted to the National Veterinary Services Laboratory from Wisconsin. However, the very low prevalence estimates hypothesized for TSE indicate that no affordable surveillance program is likely to detect an animal with spongiform encephalopathy. If TSE prevalence is near zero, administrators of regulatory programs must question how many resources can be diverted from other disease control programs for TSE surveillance.

Because of the present narrow margin between production costs and prices for dairy producers, regulatory decisions must be made with a broad view of all potential impacts. The demonstrable benefit of feeding bypass protein to dairy cows makes it necessary that the cost availability and palatability of alternatives to meat and bone meal be part of a broad-based, multidisciplinary risk analysis of the potential for transmission of TSE through present feeding practices.—T. H. Howard, DVM. From the Wisconsin Department of Agriculture, Trade and Consumer Protection, Division of Animal Health, Madison, Wis.