WHAT IS BSE AND WHY IS IT SUCH A CONCERN?

Bovine spongiform encephalopathy (BSE), also known as “mad cow disease,” is a slow, progressive, fatal disease of the nervous system of cattle. It typically occurs in cattle 5 years of age or older. BSE has been found in cattle native to the USA and Canada. Scientific evidence suggests BSE is associated with a prion protein called the “exogenous prion protein.” This protein is spread through the nervous system of cattle and can be used to transfer the disease to other animals. It is widely believed cattle become infected by eating feed contaminated with BSE-infected material.

WHAT IS THE USA DOING TO PREVENT BSE TRANSMISSION IN CALFTE?

The USDA regulates the importation of animals from countries with BSE. The use of certain prohibited materials in animal feed is prohibited. The FDA’s Feed ban enforcement of 2009 prohibits the use of certain prohibited materials in animal feed. The FDA’s regulations on animal feed materials are based on the same principles of prion protein purification as used in the UK’s Prion Disease Prevention Program. The USDA regulates the importation of animals from countries with BSE. The FDA’s regulations on animal feed materials are based on the same principles of prion protein purification as used in the UK’s Prion Disease Prevention Program.

WHAT CAUSES BSE AND HOW DO CATTLE BECOME INFECTED?

The causative agent of BSE is believed to be an unconventional transmissible prion protein. These proteins accumulate in brain tissue, causing changes in behavior that progress to dementia and death. It is widely believed cattle become infected by eating feed contaminated with BSE-infected material. The suspected source of infectivity is rendered proteins derived from ruminants. Ruminant animals are any animals with a four-chambered stomach including, but not limited to, cattle, sheep, goats, buffalo, elk, and deer. Communal feeding, including bale feeding, is associated with an increased risk of transmission. Prohibited materials for ruminants are protein-based materials derived from ruminants. Cattle material prohibited in animal feed (CMAF) includes, but are not limited to, the brains and spinal cords from cattle 30 months of age and older.

Additional Resources:

USDA - Animal and Plant Health Inspection Service
http://www.aphis.usda.gov
Nebraska Department of Agriculture
http://www.agr.ne.gov
Food and Drug Administration - Center for Veterinary Medicine
http://www.fda.gov/AnimalVeterinary/default.htm
University of Nebraska–Lincoln Veterinary Extension
http://vetext.unl.edu

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BSE: Your Actions Matter

What do I need to do to comply with the FDA’s enhanced BSE regulations?

- Feed Manufacturers’ are required to exclude Cattle Material Prohibited in Animal Feed (CMPAF) from the feed of all animals
- If you manufacture feed using tallow products or fat products containing tallow you must comply with these regulations
- Fats and oils not derived from cattle are exempt from these tallow regulations

1. DID YOU KNOW?

- Tallow is defined as the animal fat from cattle
- Tallow for RUMINANT feed must contain no more than 0.15% insoluble impurities
- Tallow over 0.15% insoluble impurities can only be fed to NON-RUMINANT animals

2. FOLLOW LABELING REGULATIONS

- Tallow ≤ 0.15% insoluble impurities can be labeled for all animals
- Tallow > 0.15% insoluble impurities must be prominently labeled:
  “DO NOT FEED TO CATTLE OR OTHER RUMINANTS”

3. MIXING AND HANDLING

- Prevent cross contamination of prohibited and non-prohibited tallow with separation and/or cleanout
- Products containing tallow AND other animal fats or oils may contain > 0.15% insoluble impurities and NOT need the caution statement IF when the products were mixed the tallow had ≤ 0.15% insoluble impurities

4. KEEP RECORDS

- Document receipt, processing, and distribution of products containing prohibited tallow
- Maintain records of tallow insoluble impurity levels
- If prohibited and non-prohibited tallow are used, keep records of separation and/or cleanout
- Keep records for at least ONE YEAR

<table>
<thead>
<tr>
<th>Source of Tallow</th>
<th>Insoluble Impurities Level</th>
<th>Feed Use</th>
<th>Caution Statement Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any Source (CMPAF or non CMPAF)</td>
<td>≤ 0.15%</td>
<td>Allowed in feed of all animals</td>
<td>None</td>
</tr>
<tr>
<td>non-CMPAF</td>
<td>&gt; 0.15%</td>
<td>Allowed in all but ruminant feeds</td>
<td>“Do not feed to cattle or other ruminants”</td>
</tr>
<tr>
<td>CMPAF</td>
<td>&gt; 0.15%</td>
<td>Not allowed in animal feed</td>
<td>“Do not feed to animals”</td>
</tr>
</tbody>
</table>

If you handle tallow or fat products containing tallow - YES!