Rendered Products are Safe

NRA Statement on Salmonella

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Issue:

Meat and bone meal (MBM) is a nutritious recycled product that is derived when animal materials that are not consumed as human food are processed by the rendering industry. MBM is high in protein, generally digestible to most animals, and a good source of minerals, making it an important and economical feed ingredient. Recently, there has been speculation that MBM was the source of *Salmonella* enteritidis in eggs, which is highly unlikely. The rendering industry has very effective ways to ensure product quality and safety using process controls that have been proven throughout industries worldwide to be more effective than continuous end product testing.

Background

Although there are over 2,500 serovars of *Salmonella*, there is very limited commonality between those found in rendered feed ingredients, farm animals and humans. FDA says that generally, salmonellae found in feed are of three serotypes: *S.* Montevideo, *S.* Cerro and *S.* Senftenberg. There are two common salmonellae serotypes pathogenic to humans (cause Salmonellosis): *Salmonella* Enteriditis and *Salmonella* Typhimurium. It would be extremely rare for these serotypes to be found in feed or ingredients, unless they were contaminated by an outside source in storage or feeding. As a result, *Salmonella* enteritidis is not recognized as a hazard reasonably likely to occur in rendered feed ingredients.

Quality and Safety Control Systems Used in Rendering

Nearly all renderers have quality and safety control systems in place via formal programs such as the Rendering Industry Code of Practice, Hazard Analysis and Critical Control Point (HACCP) Program, Safe Feed/Safe Food, or Good Manufacturing Practices. In these programs, a concerted effort is made to foresee any hazard likely to occur and to prevent those occurrences. Process controls in rendering ensure that cooking temperatures control pathogenic microbial contamination. These programs also address rodent control for feed ingredient processing, plant and transport sanitation, and other biosecurity measures such as traffic control.

The Role of Testing in Rendering

Testing of protein meals for bacteria is used to check the system, not to check every load made. Renderers also routinely test batches of rendered fats for commonly used pesticides and contaminants before they are released for feed use.

Widespread testing of rendered ingredients for the presence of *Salmonella* enteritidis is not necessary, cost efficient or practical. Research shows *Salmonella* enteritidis is not a hazard likely to occur in rendered products. Serotype testing for *Salmonella* is an expensive procedure that can take up to eight days. Like other feed ingredient suppliers and feed manufacturers, the rendering industry lacks the infrastructure to test and hold for that period of time.

Conclusion: Rendered Products are Safe

Renderers are dedicated to capturing value from food byproducts and producing pet, livestock, and fish feeds that are safe and nutritious. In recent years, renderers have conducted re-evaluation of hazards, including *Salmonella* enteritidis. Every effort is made to ensure that cooking destroys bacteria, and re-contamination does not occur in the plant after the rendering process.

However, re-contamination can occur in many places in the animal food chain. FDA research shows that many common feed ingredients contain salmonella. Overall salmonella incidence for all feed, ingredient and supplement samples (including soybean meal and corn) FDA analyzed in 2007 and 2008 was 5.8%. Recent rendering industry research shows re-contamination by generic salmonella to be 7.5%. Further serotyping on 32 randomly selected positive samples showed no foodborne *Salmonella* serotypes such as Enteritidis or Typhimurium, and none of *Salmonella* serotypes identified in the recent ***FDA draft Compliance Policy Guide on Salmonella in feed and pet food*** as pathogenic to animals were found.

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