



## NATIONAL RENDERERS ASSOCIATION

# BSE and the Safety of Tallow

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### *Issue*

Since the discovery of Bovine Spongiform Encephalopathy (BSE) in North America in 2003, trade of certain categories of bovine products has been disrupted. BSE is a condition affecting the neurological and lymphatic tissues of bovine species. The National Renderers Association (NRA) stresses the safety of ruminant tallow and its derivatives.

### *Terminology and Uses of Fats and Greases*

Fats and greases, belonging to a broad group of substances called triglycerides, are produced from various plants, marine and animal species. Fats from animal origin are one of the by-products of animal processing. Fat derived from porcine tissues is commonly known as lard. The term used for processed bovine fat is tallow. The Association of Feed Control Officials defines tallow as animal fats with a titer above 40 degrees C. Below 40 degrees C is considered grease. In commerce tallow and feed -grade animal fat are interchangeable terms. Yellow grease, derived through recycling of cooking fats and oils, also belongs to this category of products. Fats, including tallow, come in two major grades – edible and inedible (technical/ industrial). Edible fats come from USDA inspected and passed carcasses and can be used in human food. Tallow and grease are used industrially as a component of oleo chemicals, cosmetics, soaps, detergents and fuel. The former serves also as the raw material for manufacturing of tallow derivatives. Tallow and greases (either edible or inedible) are also used as a high-energy ingredient in animal feeds.

### *The Safety of Tallow, Grease and Derivatives*

Ample scientific evidence documents that transmission of BSE through tallow is extremely unlikely.

The World Health Organization declared in 1991 and reaffirmed in 2004 that tallow is not a health risk to either humans or animals. Also, the World Organization for Animal Health (OIE) states that tallow free of impurities (maximum level of 0.15% in weight) and derivatives made from this tallow should not be restricted for import or transit reasons *“regardless of the BSE status of the exporting country.”*

In 2005, the European Food Safety Authority (EFSA) assessed the validity<sup>1</sup> of the outcome of a quantitative risk assessment of the residual BSE risk in tallow<sup>2</sup>. The risk assessment supported earlier statements from the EU Scientific Steering Committee (SSC) which said there is no evidence that tallow derived from ruminants or tallow derivatives present a risk of BSE transmission. Furthermore, epidemiological studies<sup>3</sup> showed that feeding tallow to cattle posed no risk for developing BSE.

Experiments<sup>4,5,6</sup> in the United Kingdom using raw material spiked artificially with prion infectivity and carried under simulated and actual rendering conditions have shown that BSE and scrapie tend not to partition with tallow. Even then, when fat obtained from cows with natural BSE infection was injected by two different routes into susceptible mice the bioassays were negative<sup>7</sup>.

### ***Trade in Tallow, Grease and Derivatives***

Trade of tallow (less than 0.15% impurities) and derivatives made from this tallow should not be restricted.

#### **References**

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