

How now, mad cow?

Mad cow disease, or technically, bovine spongiform encephalopathy (BSE) is a fatal neurologic disorder occurring in cows, caused by an infectious, virus-like agent termed a prion. With progression of the disease, sponge-like holes occur in the cow's brain. After five to six years, the affected cows show increased apprehension, poor coordination, weight loss, difficulty in walking, becomes a "downer" (no longer stands) and dies.

There is much more hype than fact for this prion to be transmitted to humans. Worldwide, there are less than 150 people who died of this, but a similar disease referred to as Creutzfeldt-Jakob is more prevalent and there is a remote possibility that BSE could play a role in this infection in which prions have also been discovered.

The real problem is in animal rendering! Scrapie, a very similar disease in sheep and first reported in the U.S. in 1947, as well as chronic wasting disease in deer and elk and transmissible mink encephalopathy may be thrown in the rendering vats. Rendering of animal parts is a large industry and in addition to non-consumed products, such as glue, there are portions ingested by animals, such as bone meal in processed cattle and other animal feed. The latter could be contaminated and if fed to animals, might cause disease. Also with the oil crunch of the 1980s, rendering companies used pressure rather than high heat to bring this contaminated stew to a

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boil. The prions were not "killed" and remained infective. Moreover, efficient extracting machines came into being in 1985 that over-stripped all the meat from the carcass, which might include some of the contaminated parts of the nervous system.

Should we need to worry about this disease in America? I think there is a very, very remote concern. Eating whole cuts of beef is certainly safer. Certainly, the previously unused parts of the cow that finds its way into sausage, hot dogs and mixed cold cuts may not be safely consumed. We are now in the middle of a high protein/high fat eating fad, such as Atkins and the South Beach Diet, which consumes a fair amount of meat. This is not a problem and for me, I'm going to continue to eat my steak and hamburger at home, the former from grass-fed cattle and the latter from organically grown beef, of which there are many sources to purchase in health food stores as well as on-line.