Mad Cow Madness USA
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Mad cow goes down in Canada
In January 2003 an eight year old cow on a farm in Alberta, Canada, went ‘down’ and was unable to rise. As is normal in an industry that treats animals primarily as money-making machines, the farmer sent the cow to slaughter, rather than paying for veterinary care.

At the slaughterhouse inspectors noted the cow was underweight, and decided she probably had pneumonia. After retaining several tissue samples for testing, the remains were rendered and distributed to ten feed mills, from which chicken feed and dry dog food were produced. Some of these products may have been distributed to the US.

After sitting on a shelf for four months the tissue samples were finally tested, whereupon laboratory technicians discovered to their horror that the cow was positive for bovine spongiform encephalopathy (BSE), otherwise known as ‘mad cow disease.’

The reaction of governments around the world was swift. Desperate to protect their citizens and industries from one of the most devastating agricultural diseases in history, the US, Australia, New Zealand, Japan, Singapore and South Korea promptly banned the importation of Canadian beef.

Mad cow madness in Britain
Mad cow disease achieved world notoriety in Britain in 1986. For 10 years meat eaters were assured by a government desperate to protect its industry that interspecies barriers would ensure their health. Only cows could catch mad cow disease, exclaimed officials such as then agriculture minister John Gummer, who in 1990 made a show of feeding a hamburger to his 4-year-old daughter, Cordelia, on national television. Since then at least 132 Britons have died from variant Creutzfeldt-Jakob disease, the human form of BSE, and the number of cattle that have died or been slaughtered to purge British herds has reached 3.7 million.

Prions: The toughest of all pathogens
The microscopic agents responsible for devastating the British beef industry and causing so many deaths caused considerable alarm within the medical world when they were first discovered, for they remain lethal under conditions that would kill or inactivate all other pathogens. More basic than anything else known to exist in that gray zone between the living and non-living, these proteinaceous infectious particles, aka ‘prions,’ can survive temperatures above 1,000 degrees Fahrenheit, far in excess of the temperatures found in rendering facilities, or even in hospital autoclaves used to sterilize surgical equipment. Similarly undeterred by radiation or disinfectants, prions can retain their ability to kill for several years.

Prions are a type of protein naturally produced by the body’s cells, that for some reason assume an incorrect shape. Normally cleared and broken down by the body’s repair machinery, they may cause other proteins to similarly fold into incorrect shapes if they come into contact with them. The results can be lethal sponge-like holes in brain cells if enough of them are formed together.
The initial abnormal prions need not come from one’s own body but can be ingested from another animal’s flesh. Brain and nervous tissue are the most dangerous, but no tissues can be completely guaranteed as safe.

The class of diseases that can result are known as transmissible spongiform encephalopathies, and affect several species other than cattle. They include chronic wasting disease in elk and deer, scrapie in sheep, transmissible mink encephalopathy, and variant Creutzfeldt-Jakob disease in humans.

Symptoms in people include depression or, less often, a schizophrenia-like psychosis, a sensation of ‘stickiness’ of the skin, including unsteadiness, difficulty walking and involuntary movements, and, as death draws near, patients become unable to move or speak. There is no known cure.6

Maddest of all: The USA

Prior to 1997, US and Canadian cattle were fed pieces of their herd mates in the form of meat and bone meal. Although the feeding of most mammalian remains to cattle became illegal following the European outbreak, there remain several ways US cattle, and hence consumers, may be exposed to infectious prions today.

A “plate waste” exemption to the 1997 law allows restauranteurs to sell plate scrapings and leftovers to renderers, who turn them into cattle feed and a range of other saleable products. The American Feed Industry Association’s Rex Runyon defends the practice thus: “How can you tell the consumer ‘Hey, you’ve just eaten a T-bone steak and it’s fine for you, but you can’t feed it to animals’?”7

Leftover pet food is also sold as salvage and sometimes recycled into cattle feed. However, retail pet food frequently contains meat and bone meal from cattle. Unlike agricultural animal feed, there is no requirement that pet food containing such products be labeled “Do not feed to cattle or other ruminants.” The FDA is presently wondering whether all pet food should now be labeled to try to prevent this.7

Because poultry are not known to get transmissible spongiform encephalopathies, they may presently be fed meat and bone meal made from cattle, as part of their highly concentrated diets. Furthermore, in parts of the US where cattle are raised near poultry production areas, it’s not uncommon to feed them poultry litter—which includes feces, feathers, and spilled feed. However, this allows the possibility that cattle byproducts may be fed back to cattle in the form of spilled feed, or partially-digested feed in poultry feces. This practice of feeding poultry litter to cattle is banned in Canada.7

Perhaps least savory of all, spray-dried cow and pig blood is used in agricultural animal feed to provide protein. It is also used as a soluble product to mix in animals’ drinking water, and, most commonly, as a milk replacement for calves, to enable humans to steal the milk produced for them by their mothers.7 (After all, if the definition of ‘theft’ does not cover a biologically optimal product produced by a mother to feed and maximize the health and growth of her child, then what does it cover?)

John Stauber authored the recent book Mad Cow USA: Could the Nightmare Happen Here? He finds it laughable that while US regulatory agencies refuse to allow anyone who lived in Britain in the 1980s to donate blood, they allow cow blood to be fed to cows every day, and then allow those cows to be eaten by people.

Finally, according to a Government Accounting Office investigation, cross contamination of feed can occur at rendering and feed plants producing both ruminant and non-ruminant meat and bone meal. Consequently the FDA is considering whether it should prohibit these facilities from producing both types of feed.7

Mad Cow author Stauber has followed the disease for more than a decade. He says he’ll believe these reforms when he sees them. “Every time there’s media attention to this issue, every time consumers and producers start asking questions, we get
this lip service out of USDA and FDA that ‘Yes, we need to do the right thing; it’s just going to take time.’ But they’re just not ready to bite the bullet—it’s too economically painful for the livestock feed industry.”

Recent comments from senior government officials seem to confirm his assessment. "We're being very vigilant," said FDA Deputy Commissioner Les Crawford. But, "I don't think it poses, at this point, a public health threat for the U.S." Agriculture Secretary Ann Veneman was more pointed when interviewed on CNN: "At this time we see no reason for any consumer to be concerned about the safety of the food supply, and in fact I intend to eat a steak tonight."7

According to the National Cattlemen's Beef Association chief executive, Terry Stokes, American consumers should be confident that their food is safe because of the Canadian ban and because the U.S. government routinely tests for the disease.8 In fact, out of an annual slaughter total of about 35 million, only 19,900 cattle were tested for BSE in the US in 2002, or one in every 1,759 cows. At least this was nearly four times the number tested the previous year.9

The meat-eating American public are hardly beating down doors to demand the government gets serious about dealing with BSE. According to a marketing survey conducted a week after the first Canadian case by New York-based consulting firm NPD Group, 57 percent of respondents said they would continue to eat the same amount of steak, 18 percent said they would eat more, and 15 percent said they would eat less, with similar responses for hamburgers. Sixty-nine percent said they thought food in the United States was safe.10

"Consumers are telling NPD that Canada is about as far away in their minds as Germany, meaning that even though we're neighbors, mad cow disease in Canada has not affected Americans' intentions to eat beef in the U.S.,” said Harry Blazer, vice president of the NPD Group.

This level of concern hardly seems likely to motivate government and industry leaders to accept the economic pain associated with ending the feeding of cow blood, restaurant waste and pet food to cattle. Perhaps a UK-style outbreak will be necessary before American meat-eaters get the message. If so one can only speculate as to how many of them will die before they do.

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References
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