A Statement on Mad Cow Disease and the Safety of the U.S. Beef Supply from The American Council on Science and Health

By ACSH Staff — December 24, 2003

Mad Cow Disease Hysteria

When tests on a cow slaughtered near Yakima, Washington tested positive earlier this week for what is known in lay terms as "Mad Cow Disease", consumers were understandably bewildered and anxious. What did this mean for their food selection--and health?

Is it safe to eat beef? Is the USDA falling down on the job--and allowing an infectious agent into our food supply?

Is it possible that this one infected cow transmitted the disease to many more? Is there anything I can personally do to ensure the beef I purchase and prepare is safe? If the beef is as safe as USDA Commissioner Ann M. Veneman keeps telling us, why are countries like Japan and Korea now refusing to import American beef? Is this just another food scare du jour with absolutely no basis in scientific fact?

There are many questions---and at this point, only a few answers:

First, Mad Cow Disease is a nickname for Bovine Spongiform Encephalopathy (BSE), a transmissible, slowly progressive, degenerative fatal disease affecting the central nervous system of cattle. It is a member of a group of similar diseases that have been found in other animals like sheep. BSE only affects cattle. There is, however, a disease similar to BSE --called Creutzfeldt-Jakob Disease (CJD), a serious, life-threatening neurological disorder which occurs in humans. CJD occurs at a rate of about 1 in one million world wide, and is not associated with consumption of beef. After an outbreak of BSE in Britain in the 1980Âs, a new type of CJD was diagnosed in a small number of people thereAand was named Âvariant CJD,Â or vCJD. These cases occurred in people who consumed beef that may have been contaminated. There is both epidemiological and laboratory evidence that the agent that causes BSE in cows causes vCJD in humans.

Given these facts, the risk of Mad Cow Disease as a threat to human health is not merely a theoretical threat, as is the case with human exposure to trace levels of chemicals that at high doses cause cancer in lab animals. But, as we will see, the current risk to Americans eating beef, while not theoretical, is exceedingly small.
Second, the fact that the USDA was able to pick up this presumptive case of BSE in a single cow is testimony to the sensitivity and efficacy of our agricultural surveillance system. Indeed these reports are good news—reassurance that we have a system in place to monitor the safety and quality of our beef supply.

Third, contrary to what has been erroneously harped upon in the press, Mad Cow Disease, while it is an infectious disease, is not transmitted from one living animal to another. It is not like Foot and Mouth Disease, which is a highly communicable, infectious disease. Indeed the primary way a cow becomes infected with BSE is by eating feed which has been contaminated with parts of brain and spinal cord tissue from other infected animals. (By some unknown mechanism, animals can also develop the disease spontaneously.)

Fourth, even if you were to eat beef from an infected cow— itself a highly unlikely scenario—you would almost definitely not be exposed to the "prions, the aberrant proteins which are the causative agents of BSE. This is because BSE does not show up in the muscle ---and thus cuts of beef like steak, roasts, and chops have virtually no risk. There is a theoretical risk of BSE contamination of ground beef if the beef in processing gets mixed with specks of neural tissue---but this risk is infinitesimally small. Thus, the calls from food-nanny groups like the Nader-inspired Center for Science in the Public Interest to avoid pizza toppings, taco fillings, hot dogs, and salami, are scientifically without merit—in other words, baloney.

Fifth, the mere fact that certain countries initially announce their intention to ban U.S. beef imports means nothing scientifically. Such a move is a normal part of ongoing trade wars between countries—plus it represents a public relations move for the leadership of a country which wishes to communicate to the public that they are doing their job "protecting" them— even though no risk exists (The U.S. did the same thing—temporarily banning Canadian beef imports earlier this year when a single case was identified in Canada).

Along similar lines, any beef scare brings out advocates with agendas other than public health, including vegetarians and animal rights groups who take advantage of a scare to generally discourage people from eating virtually any animal product.

Sixth, food is a highly emotionally-charged issue. When it comes to scares, to paraphrase an old proverb, reports of exaggerated risks can be half way around the world before the Truth gets its boots on. The key here is to make our own decisions based on science, not fear.

The bottom line: there is no reason whatsoever to hesitate to eat American beef. Like the rest of the American food supply, our beef supply is safe. If we only spent as much time focusing on real, significant risks (for example, cigarette smoking, skipping our influenza vaccine, over exposure to sunlight etc.) as we do to a minuscule risk like BSE in beef, our nation would be even healthier than we are today.