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Chronic Wasting Disease in Deer and Elk: Food Safety Precautions

Chronic wasting disease (CWD) is a debilitating, ultimately fatal disease in deer and elk. Affected animals become listless, lose significant weight, and eventually die in a wasted state. Deer with CWD commonly drink large amounts of water and urinate frequently. The brains of animals with CWD develop many microscopic-sized holes, which give the brain a sponge-like appearance. To date, the only cases of CWD in free-ranging deer and elk in the United States have occurred in southeast Wyoming and northeast Colorado. CWD also occurs in a few captive herds, and appears to be more common in areas where deer and elk congregate at man-made feed and water stations.

CWD is part of a group of disorders referred to as Transmissible Spongiform Encephalopathies (TSEs). (Encephalopathy is a general term for brain disease.) Other TSEs include scrapie, which affects sheep; Bovine Spongiform Encephalopathy (BSE, also informally termed "mad cow disease") which has affected cattle in Great Britain; and Creutzfeld-Jakob Disease, a degenerative nerve disease in humans. TSEs are caused by poorly understood agents called proteinaceous infection particles or prions. Prions are destructive brain proteins that can damage healthy brain proteins. It is not yet known if prions are capable of damage on their own or if they act in concert with or are the result of another infectious agent, such as a virus.

Because of the uncertainties about prions and the potential for public health problems and wide-spread concern among the general public, TSEs are the focus of intense monitoring and research. The U.S. Department of Agriculture and the Food and Drug Administration also have many regulations and procedures in place to help safeguard the food supply. In light of these potential problems and concerns, the following are important to note about CWD:

According to wildlife experts and public health officials,

- *No evidence indicates that the agent that causes CWD occurs in the meat.*
- *No evidence indicates that chronic wasting disease can be naturally transmitted to*
- *humans,*
- *domestic livestock, or*
- *animals other than deer and elk.*
- *Although the diseases are similar, no evidence suggests that either scrapie or BSE is caused by contact with wild deer or elk.*

Nevertheless, in light of the uncertainties, hunters and other individuals who handle deer and elk and who want to avoid unknown potential risks can take these precautions:

1. Do not harvest, handle, or consume any wild animals that appear to be sick, regardless of the cause.
2. Wear rubber gloves when dressing carcasses, particularly carcasses of animals from areas where CWD is known to occur. Minimize handling of brain and spinal tissues. Wash hands thoroughly afterwards with warm, soapy water.
3. Bone out carcasses. Discard the brain, spinal cord, eyes, spleen, and lymph nodes from deer and elk harvested in southeast Wyoming and northeast Colorado.
4. Discard bones, hide, and head in the appropriate location at landfills.

References:

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Source: Suzanne Pelican, Food and Nutrition Specialist, Cooperative Extension Service, Department of Family and Consumer Sciences, College of Agriculture, University of Wyoming, P.O. Box 3354, Laramie, Wyoming 82071, with assistance from and review by Dr. Elizabeth Williams, UW Professor of Veterinary Science. September 1998.

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