

# features

## COMPANION ANIMALS

# Xylitol poisoning in pets

This substance that is safe for humans can have tragic consequence in dogs, cats

At a veterinary clinic on P.E.I., a much-loved dog died recently after eating homemade cookies containing xylitol.

This sad situation illustrated how well-meaning owners can tragically assume that a substance safe for people is fine to give to their pet.

Xylitol is a naturally occurring substance extracted from various plants, including hardwood trees. It is found in some brands of sugar-free gum and in products such as candies and toothpaste. It tastes as sweet as regular sugar but has only two-thirds of the calories. The crystal form is often used in baking.

Toxic events involving animals are increasing; the American Society for the Prevention of Cruelty to Animals (ASPCA) Animal Poison Control Center lists xylitol as one of the top toxic people foods in pets. Xylitol is widely available on P.E.I. in sugar-free gum as well as in crys-



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Sugar-free gum with xylitol can be purchased on P.E.I. While it's fine for humans, it can be toxic to pets.



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This crystal form of xylitol was purchased on P.E.I.

## Happy endings



PHOTO SPECIAL TO THE GUARDIAN BREANNA MCCLOSKEY

Breanna McCloskey is shown with Bonnie and Clyde, two rabbits recently adopted from the P.E.I. Humane Society. They are now best friends with the family dog, Wilson.

## At a glance

- ◆ Xylitol is a safe sugar substitute for humans but is highly poisonous to dogs and other pets.
- ◆ For more on "People Foods to Avoid Feeding Your Pet," see [www.aspc.org/pet-care/animal-poison-control/people-foods-avoid-feeding-your-pets](http://www.aspc.org/pet-care/animal-poison-control/people-foods-avoid-feeding-your-pets).

## Shelley Burton

Animal Talk



tal form at supermarkets and bulk food stores.

How can this product which is so safe in humans be so dangerous to pets? It is mainly because it does not cause insulin release from the pancreas in humans but does so very strongly in dogs. Xylitol toxicity likely occurs in cats but appears far less common, probably because cats are more discriminating eaters.

If dogs eat enough xylitol, the insulin release causes a severe drop in blood glucose (sugar) within 30 minutes, causing staggering, seizures and even death. High doses can cause fatal blood clotting abnormalities and liver injury if the dog initially survives. There is no specific blood test to measure xylitol levels; initial diagnosis by a veterinarian is based on a history of having eaten xylitol and on symptoms. Unfortunately, there is no specific antidote. Instead, supportive treatment consists of giving fluids and a glucose replacement called dextrose. If caught very early and treated rapidly, dogs can survive. However, if the condition goes on for several hours, death is likely even with treatment.

How much xylitol in sugar-free gum is toxic to dogs? This varies greatly between brands. In an average sized dog, eating as few as two pieces can cause a life-threatening drop in blood glucose while 10 pieces can cause liver failure. Even small amounts of the crystal form of xylitol are very dangerous alone or in baked goods.

To prevent poisoning, owners must store products containing xylitol safely away from pets and avoid sharing human food with them. Only veterinary toothpaste should be used to brush pet teeth, never human toothpaste. Veterinary products like

Prevent poisoning in pets, B6

## Prevent poisoning in pets

FROM B5

mouthwashes may contain

small amounts of xylitol; these should only be used in prescribed amounts.

If a pet is known or suspected to have eaten xylitol, it is critical to immediately call a veterinarian and rush the dog to the clinic. It is very helpful to bring the gum package or box of crystal xylitol so that the toxic dose can be estimated to guide therapy. Pet owners can help spread the word about xylitol poisoning to others - this may save the life of a much loved pet!

**Next month in Animal Talk:** Capacity for care: How many cats is too many?

Dr. Shelley Burton is a clinical pathologist at the Atlantic Veterinary College (AVC) and a member of the P.E.I. Veterinary Medical Association (PEVMA), one of the member groups of the P.E.I. Companion Animal Welfare Initiative (CAWI). Animal Talk is a monthly column in The Guardian produced by CAWI, the goal of which is to improve the welfare of owned and unowned companion animals on P.E.I. CAWI consists of the P.E.I. Humane Society, SpayAid, Cat Action Team, PEVMA, P.E.I. Department of Agriculture and Forestry, P.E.I. 4-H, and Sir James Dunn Animal Welfare Centre, AVC. Check out [gov.pe.ca/agriculture/CAWI](http://gov.pe.ca/agriculture/CAWI). Readers are invited to send questions related to the well-being of owned and unowned companion animals to [cawipe@gmail.com](mailto:cawipe@gmail.com).