**Xylitol-Toxic to Dogs! Dr. Erin**

This past week I was surprised and concerned to learn that one of our favorite sweeteners is actually toxic to dogs! While completely safe in the human endocrine system, in dogs xylitol stimulates massive insulin secretion and resultant hypoglycemia and possibly acute liver failure and more, depending on the dose ingested.

This reaction is so strong, doses as small as >0.1 gm/kg could be toxic to a small pooch. In other words, something as seemingly harmless as 1 piece of gum sweetened with 1 gram of xylitol could severely affect the metabolism of a 22 pound dog, with systemic effects. Five pieces of gum might do Fido in. I find this so alarming, I wanted to make sure that any patient to whom I’ve ever suggested xylitol understands this risk. Xylitol is great for diabetics and excellent for oral care, but please keep it under lock and key if you have dogs who tend to get into things in your pantry!

Treatment typically consists of getting the dog to vomit if the xylitol was consumed recently (limit absorption), IV fluids and dextrose (to bring up blood sugar) and not too much else.

If you would like to know more about the mechanism, please email me directly or also see the following information.

**Studies & Links related to Xylitol - Dental Health and Toxicity to Dogs:**


**Xylitol toxicosis in dogs.**

Murphy LA, Coleman AE.

Source
Department of Pathobiology, University of Pennsylvania School of Veterinary Medicine, New Bolton Center Toxicology Laboratory, 382 West Street Road, Kennett Square, PA 19348, USA. murphylp@vet.upenn.edu

Abstract
The sugar alcohol xylitol is a popular sweetener used in gums, candies, and baked goods. While xylitol has a wide margin of safety in people and most mammalian species, when ingested by dogs it is believed to stimulate excessive insulin secretion leading to severe hypoglycemia, potentially followed by acute hepatic failure and coagulopathies. Additional clinical findings may include thrombocytopenia, hypokalemia, and hyperphosphatemia. The prognosis for recovery in dogs that develop uncomplicated hypoglycemia is generally good with prompt and aggressive veterinary care.

PMID: 22381181 [PubMed - indexed for MEDLINE]

Xylitol toxicity in dogs.
Piscitelli C, Dunayer E, Aumann M.
Source
Florida Veterinary Specialists and Cancer Treatment Center.
Abstract
Xylitol, a sugar substitute used in sugar-free gum, oral care products, and baked goods, is gaining popularity in the United States. Xylitol consumption is considered harmless to people but is known to cause life-threatening toxicoses in dogs. Dogs that ingest doses of >0.1 g/kg of xylitol are at risk for developing hypoglycemia, while dogs that ingest >0.5 g/kg may develop acute liver failure. Treatment includes dextrose supplementation for hypoglycemia and aggressive monitoring, treatment, and supportive care for dogs experiencing hepatotoxicosis. The prognosis for dogs with uncomplicated hypoglycemia is good, whereas the prognosis for dogs that develop severe hepatotoxicosis is guarded to poor.

On Xylitol & Dental Health: http://www.drellie.com/Xylitol.php