

“Xylitol and Bread Dough Toxicities”

DID YOU KNOW?

Diana Schropp DVM

Xylitol Toxicity

Xylitol is a natural sweetener used in many “sugar-free” items including chewing gums, baked goods and breath/dental products. Unlike in people, xylitol induces massive insulin secretion in our dogs (unknown effects in cats). It has variable absorption, with hypoglycemic effects surfacing anywhere from 30minutes to 24 hours later. Items, such as gum, which previously might have not been considered dangerous to dogs, can cause life-threatening hypoglycemia when even small amounts are ingested. A stick of gum (such as Orbitz®) may contain up to a gram of xylitol and two sticks is enough to cause life-threatening symptoms in a 10kg dog. Some dogs may also develop coagulopathies and hepatic failure. The mechanism for the hepatic failure is unknown and does not affect every dog.

Treatment:

- Supportive care
- Emesis (activated charcoal **does not** adsorb xylitol)
- Baseline blood glucose, liver enzymes and clotting tests
- IV dextrose CRI for at least 12 hours.
- Monitor glucose for first 24 hours. Recheck liver enzymes and clotting panel at 72 hrs.

Bread Dough Toxicity (ethanol toxicity)

Ingestion of rising dough by dogs is common if they have the opportunity. The yeast releases ethanol gas leading to ataxia, blindness, metabolic acidosis, obtundation and hypoglycemia (**false positive on ethylene glycol test**). Sticky, rising dough may cause gastric distention/bloating, foreign body obstruction and severe gastroenteritis. Dough is usually too thick to pass through lavage tube.

Treatment:

- IV fluids, anti-emetics and supportive care
- Cold water gastric lavage to kill yeast
- Gastric decompression
- Pain medication
- Possible surgical removal

References

- Todd JM, Powell, LL. Xylitol intoxication with fulminant hepatic failure in a dog. JVECC Sept 2007, 17(3)286-289
- Dunayer, Eric. New findings on the effects of xylitol ingestion in dogs. Vet Med Dec 2006; 101(12) 791-796.
- Means, C. Bread dough toxicosis in dogs. JVECCS Mar 2003; 13(1) 39-41.

If we can help you with your cases don't hesitate to call 24/7!!

Next Edition:
“Gorilla Glue”