

**Dog Tips** 

# This Human Food Could Kill Your Pet Before You Arrive Home

Many dogs love it, and countless pet parents use it daily to pill their pet. But be aware if your brand contains this toxic ingredient. It's being added at an alarming rate to foods that we often share with our pets. In large enough quantities, it can be a heartbreaking killer.

#### Reviewed by Dr. Becker

#### STORY AT-A-GLANCE

- Tragically, peanut butter containing xylitol caused the death of two 3-month-old puppies in Virginia
- Xylitol is a natural sweetener that is highly toxic to dogs, and it's being found in an ever-growing list of consumer products
- An additional problem with feeding peanut butter to pets is the potential for aflatoxin contamination
- Signs of xylitol intoxication in dogs include vomiting, weakness, lethargy, loss of coordination, seizures and collapse; early detection and effective treatment of xylitol exposure in dogs offers the best chance for a full recovery
- It's important to be aware of any product in your home containing xylitol especially anything you might consider offering to pets

#### Editor's Note: This article is a reprint. It was originally published February 13, 2019.

Two 3-month-old puppies in Virginia were rushed to a veterinarian after they suddenly started having seizures. The vet quickly realized the pups had probably ingested the sweetener xylitol because they were highly hypoglycemic.

"It makes their insulin produce seven times more than they should," said veterinarian Dr. Marc Nay in an interview with local news station WTOL 11. "Thus, there needs to be a ton of glucose running around in their body for the insulin to work with so they don't become hypoglycemic." <sup>1</sup>

Tragically, the level of xylitol toxicity caused such extreme cellular damage that the puppies couldn't be saved and were euthanized. Xylitol poisoning doesn't always end this way, but if it reaches a dog's liver, the danger increases exponentially.

## **Products Containing Xylitol**

This sweetener is being used in an ever growing list of products because it's as sweet as sucrose, but with only twothirds the calories of sugar. It's less expensive than other sugar substitutes, tastes better and causes little if any insulin release in humans. Just a few years ago, xylitol could be found in less than a hundred products in the U.S. Today it can be found in a wide range of health and beauty products, food products, over-the-counter drugs and supplements, and prescription medications. Dr. Ahna Brutlag, associate director of veterinary services for **Pet Poison Helpline** explains the seriousness of the situation:

"First, dogs fed straight peanut butter as a treat or fed treats baked with xylitol-containing peanut butter may certainly be at risk for harm. Second, a dog that nabs the entire jar of xylitol-containing peanut butter and happily gorges on his or her treasure without anyone knowing could quickly become extremely ill. If this occurred during the day while the owners were not home, it's possible the dog could die before people returned."<sup>2</sup>

You should be aware of any product in your home containing xylitol, and especially anything you might consider offering to your dog. You can find a comprehensive list of products containing xylitol **here**.

## **Known Peanut and Nut Butters Containing Xylitol**

Dr. Jason Nicholas, who runs **Preventive Vet**, keeps a list of nut butters containing xylitol:<sup>3</sup>

#### • Go Nuts, Co.

- Almond Butter
- Almond Butter Chocolate Almond Butter
- Peanut Butter Dark Chocolate Mint
- Peanut Butter Natural Chocolate Flavor
- Peanut Butter Natural Flavor
- Peanut Butter Organic Maple Flavor

#### Krush Nutrition

- Nutty By Nature Peanut Butter Brownie Batter
- Nutty By Nature Peanut Butter Cookie Dough
- Nutty By Nature Peanut Butter Snickerdoodle Cookie
- Nutty By Nature Peanut Butter Thick & Creamy

#### • Nuts 'N More®

- Almond Spread Almond Butter
- High Protein + Almond Spread Almond Butter
- High Protein + Almond Spread Chocolate Almond
- High Protein + Almond Spread Cinnamon Raisin
- High Protein + Peanut Spread Chocolate Peanut
- High Protein + Peanut Spread Peanut Butter Flavor
- High Protein + Peanut Spread Pumpkin Spice
- High Protein + Peanut Spread Toffee Crunch
- Peanut & Protein Spread Sesame Cranbutter

- Peanut Spread Peanut Butter Flavor
- Peanut Spread Toffee Crunch

#### P28 Foods

- High Protein Spread Almond Butter
- High Protein Spread Banana Raisin
- High Protein Spread Peanut Spread
- High Protein Spread Signature Blend

#### No Cow® (formerly D's Naturals)

- Brownie Batter Almond Fluffbutter
- Chocolate S'Mores Peanut Fluffbutter
- Salted Caramel Sundae Peanut Fluffbutter
- Vanilla Maple Frosting Almond Fluffbutter

These are specialty nut butters, but the fact that xylitol is found in these products is a heads-up for dog parents everywhere of the importance of reading ingredient labels. It may be just a matter of time before more mainstream peanut and nut butters also contain xylitol.

### **Another Heads-Up for Pet Parents Who Feed Peanut Butter**

An additional risk of feeding companion animals peanut butter is the potential for aflatoxin contamination. Aflatoxins are naturally occurring mycotoxins produced by the Aspergillus flavus and Aspergillus parasiticus species of fungi that grow on certain crops. Aflatoxins are highly carcinogenic. They poison the liver and promote tumor development.

The three plants with the highest rate of aflatoxin contamination are corn, peanuts and cottonseed. Other frequently contaminated agricultural products include:

- Maize, sorghum, pearl millet, rice and wheat cereals
- Peanut, soybean and sunflower oilseeds
- Chili peppers, black pepper, coriander, turmeric and ginger spices
- Almonds, pistachios, walnuts, coconuts, Brazil nuts

Processed foods containing corn can also carry a risk of aflatoxin adulteration. Infected corn and cottonseed meal fed to dairy cows has resulted in aflatoxin contamination of milk and other dairy products including cheese and yogurt.

# Why Xylitol Is so Dangerous for Dogs

Although this sweetener is safe for humans, its effect varies by species. In people, rhesus monkeys, rats and horses, it causes little to no insulin release. However, it has the opposite effect on dogs, ferrets, rabbits, cows, goats and baboons. At the present time, its effect on cats is unknown.

Humans absorb xylitol slowly, and the sweetener when ingested orally is absorbed at from 50% to 95%. However, in dogs, xylitol is rapidly and fully absorbed within about 30 minutes. Just a small amount of xylitol can cause a dangerous insulin surge and a rapid drop in blood sugar.

The toxicity of xylitol in dogs is dose-dependent. The dose required to trigger hypoglycemia (low blood glucose) is approximately 0.1 grams/kg, while the amount needed to cause liver failure is about 0.5 grams/kg. Most gum and breath mints typically contain 0.22 to 1.0 gram of xylitol per piece of gum or mint.

This means just a single piece of gum or one mint may cause hypoglycemia in a 10-pound dog. For more detailed information and graphics on how much xylitol is dangerous to different sized dogs, as well as a comparison of xylitol versus chocolate toxicity in dogs, take a look at this **Preventive Vet page**.

## **Symptoms of Xylitol Toxicosis**

Symptoms of xylitol intoxication in dogs include:

- Vomiting
- Loss of coordination
- Weakness
- Seizures
- Lethargy
- Collapse

Hypoglycemia typically develops within an hour or two after a dog ingests a product containing xylitol, but symptoms are occasionally delayed for several hours.

Treatment depends on how quickly it's given. Vomiting is induced in cases where the xylitol has just been ingested. Once a dog develops hypoglycemia, intravenous (IV) dextrose must be administered until the animal can self-regulate his blood glucose concentrations, which typically takes from 12 to 48 hours.

In dogs who ingest enough xylitol to cause liver toxicity, liver enzymes must be closely monitored, as evidence of hepatic necrosis can show up one to two days after ingestion. Should the liver begin to fail, the dog will require IV fluids, dextrose, hepatoprotectants (substances to help support and repair the liver) and regular monitoring of blood clotting activity.

When xylitol exposure is caught early in a dog and treated effectively, the prognosis for a full recovery is excellent. The prognosis for dogs who develop hepatic failure is less optimistic.

#### **Sources and References**

<sup>&</sup>lt;sup>1</sup> BravoTV, June 7, 2018

<sup>&</sup>lt;sup>2</sup> dvm360, July 15, 2015

<sup>&</sup>lt;sup>3</sup> PreventiveVet.com