

The No. 2 Most Common Pet Poison – Is It in Your Home?

Found in hundreds of everyday products, there's a good chance this pet poison is in your home right now. While it won't harm you, if your dog ingests it, she can experience a sharp drop in blood sugar that can lead to unconsciousness and seizures, liver failure and even death within hours or days.

Analysis by Dr. Karen Shaw Becker

STORY AT-A-GLANCE

- Xylitol poisoning in pets increased an astounding 108% from 2015 to 2020
- In 2020, xylitol earned the dubious title of second most common pet poison, right behind chocolate
- If your dog ingests xylitol, a sharp drop in blood sugar (hypoglycemia) can occur, triggering loss of consciousness and seizures; larger doses can also cause liver failure and death with hours or days of ingestion
- Xylitol is found in hundreds of everyday products, including food, candy, gum, mints and over-the-counter and prescription medications
- It's possible for a small dog to become severely ill from ingesting just one piece of xylitol-containing gum or mint, so keep all products with xylitol out of reach of your pets

Xylitol is a lower-calorie sugar substitute with a low glycemic index that is found naturally in berries, plums, corn, oats, mushrooms, lettuce, trees, and some other fruits. As health-conscious people work to reduce their daily sugar intake, the number of products containing xylitol is exploding. It's being used to sweeten everything from candy to peanut butter and toothpaste, which may be good news for humans, but it's very bad news for pets, especially dogs.

"Most humans can safely consume products containing xylitol. In fact, some research suggests that the chemical compound may also have positive health benefits for people, including better dental health, prevention of ear infections and it possesses antioxidant properties," says Ahna Brutlag, a board-certified veterinary toxicologist at Pet Poison Helpline®.

"Xylitol consumption by pets, particularly dogs on the other hand, can be extremely toxic and potentially deadly. The most common effect of xylitol poisoning in dogs is a precipitous drop in blood sugar which can lead to loss of consciousness and seizures. In high enough doses, liver failure can begin within a few hours or days."¹

It's thought that dogs have much more complete and rapid absorption of xylitol after oral ingestion than humans do, which accounts for its toxicity in canines.²

According to the Pet Poison Helpline, the increase in products containing xylitol has resulted in a corresponding increase in the number of xylitol-related pet poisoning cases. Between 2015 and 2020, calls regarding xylitol poisoning increased 108%. The biggest one-year increase was in 2019, when calls were up 47.2% from 2018. In 2020, calls concerning xylitol were second only to regular chocolate poisoning calls.³

A Dose-Dependent Poison

The dose of xylitol matters when it comes to its toxicity in dogs. A dose of approximately 0.1 grams/kg of body weight is enough to cause hypoglycemia in dogs while a dose of 0.5 grams/kg can lead to hepatic necrosis. This means that it's possible for a small dog to become severely ill from ingesting just one piece of gum or one mint. As explained by Brutlag:

*"Most chewing gums and breath mints typically contain 0.22-1.0 gram of xylitol per piece of gum or per mint. Therefore, only one piece of gum may result in hypoglycemia in a 10 pound (4.5 kg) dog. Hypoglycemia is typically evident within 1-2 hours of xylitol ingestion but, in rare cases, has been delayed as much as 12 hours."*⁴

Interestingly, some pet dental products contain xylitol in small quantities, and its plaque-reducing effects in humans led to a pilot study on the effectiveness of the substance as a canine plaque-reducing aid when added to dogs' drinking water.

A low-dose xylitol drinking water additive led to a 5.1% decrease in mean tooth plaque score, and a 14.9% decrease in mean calculus score, after 90 days, but there's a big watch-out here in that no one knows whether it's safe for dogs to consume xylitol long-term, even at low doses. According to the study authors:

"Regardless of size the maximum daily [xylitol] dose recommended by the manufacturer is 50 mg; therefore, even a 2-kg dog would receive well under the reported toxic dose."

*"If adequate instructions are given and client compliance is good, the product used in this clinical trial poses minimal acute health risk to patients. Despite this, there are no studies reporting the health risks of chronic, low dose administration of xylitol in dogs."*⁵

Despite these study results, I don't recommend taking any chances with xylitol and your dog and advise keeping any and all products that contain it out of your pet's reach.

Understanding Xylitol on Ingredient Lists

Because xylitol is typically considered a proprietary ingredient, most products containing it will not list the amount on the label. This is why it's better to be safe than sorry, and if you suspect a product contains this alternative sweetener, do not give it to your dog and keep it stored safely away from pets. It's important to note that xylitol has a sweet, pleasant flavor, which makes it alluring to dogs who have access to it.

Sometimes, the placement of xylitol on an ingredient list can be helpful in determining the amount in a product. In the U.S., ingredients must be listed on product labels in order of weight, with the ingredient with the greatest predominance by weight listed first. If xylitol appears high up on the ingredient list — especially in the first, second or third spot — assume the product contains a significant amount.

*"In general, for most chewing gums, the amount of xylitol is often clinically insignificant if it's listed as the 4th or 5th ingredient," writes Brutlag. "If it's listed as one of the first three ingredients, extreme caution should be taken."*⁶

To further confuse the issue, this standard doesn't apply to drugs and dietary supplements, because xylitol is considered an inactive ingredient in these products and therefore may simply be listed alphabetically on the label. This means it can appear at or near the bottom of the list, even when significant quantities are present.

The Pet Poison Helpline has an extensive catalogue of how much xylitol is found in different products, so it's a good resource if your dog ingests something suspect. If in doubt, however, it's always best to seek emergency veterinary assistance.

Beware of These High- and Hidden Xylitol Products

The Helpline has uncovered some products that either contain high amounts of xylitol or act as unexpected sources. Marijuana TCH-infused edibles are one source to be aware of, as they often contain xylitol and are becoming more popular with the legalization of marijuana.⁷

Foods that contain xylitol as the primary sweetener, meaning they must be kept away from pets, include:⁸

- Clemmy's Rich and Creamy ice cream products
- Dr. John's products (hard and soft candies, chocolates, drink mixes, etc.)
- Jell-O sugar free pudding snacks
- Nature's Hollow jams, syrup, ketchup, honey, etc.
- SparX Candy
- Zipfizz energy drink-mix powders

The following dietary supplements and over-the-counter medications also contain xylitol:⁹

- Axia3 ProDigestive Antacid (flavored chewable tablets)
- Children's Allegra Oral Suspension
- Fleet Children's Pedia-Lax Liquid Stool Softener
- Umcka Cold and Flu chewable tablets (homeopathic product)
- KAL Colostrum Chewable, Vanilla Cream
- KAL Dinosaurs Children's Vitamins and Minerals (chewable tablets)
- Kidz Digest Chewable Berry from Transformation Enzyme
- L'il Critters Fiber Gummy Bears
- Mega D3 Dots with 5,000 IU of Vitamin D3 per "dot" (dissolvable tablet)
- Suntheanine L-Theanine chewable tablets by Stress-Relax
- Vitamin Code Kids by Garden of Life (chewable multivitamins)
- Webber Natural Super Sleep Soft Melts (dissolvable tablets)
- Xlear Sinus Care Spray
- Xlear Nasal Spray (for adults and children)
- Xyliseptic Nasal Spray

These human prescription medications contain xylitol as well:¹⁰

- Abilify Discmelt Orally Disintegrating Tablets (aripiprazole) (an atypical antipsychotic)
- Neurontin (gabapentin) Oral Solution
- Clonazepam Orally Disintegrating Tablets, benzodiazepine
- Riomet (metformin) Oral Solution, antidiabetic agent
- EMTRIVA oral solution (emtricitabine), HIV-1 reverse transcriptase inhibitor
- Varibar barium sulfate products, liquids and puddings for swallowing studies
- Mobic Oral Suspension (meloxicam), nonsteroidal anti-inflammatory
- Zegerid Powder for Oral Suspension (omeprazole), proton pump inhibitor

If your dog consumes a product that contains xylitol, get to an emergency veterinary clinic right away. If ingestion is caught early and treatment begins right away, most dogs can be decontaminated and have a full recovery.¹¹ However, if liver failure has already begun, treatment becomes much more difficult. In an emergency poisoning situation, you can also contact the Pet Poison Helpline, 24/7, at 855-764-7661.

Sources and References

^{1, 3, 7} [Pet Poison Helpline, Xylitol Pet Poisoning Cases More than Doubled Over Five Years](#)

^{2, 5} [Can Vet J. 2020 Jan; 61\(1\): 63–68](#)

^{4, 6, 8, 9, 10, 11} [Pet Poison Helpline, There's Xylitol in That Too?](#)
