



Animal Hospital Of Parkland



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Xylitol : *The Sweet Poison*

Sugar substitutes are big business. Less sugar can mean weight loss, improved health, diabetic control, and even reduced tooth decay. The quest for products that can sweeten and cook like sugar is ongoing. Xylitol is a common sugar substitute, especially when it comes to sugarless gum. Not only does xylitol offer sweetness without calories, it also has antibacterial properties in the mouth so as to reduce periodontal disease and has been found to have far reaching health benefits in other areas of the body. Xylitol may help with osteoporosis, prevention of ear and throat infections, and may reduce risk of endometriosis, uterine fibroids, and even breast cancer.

Sounds wonderful and maybe it is – if you are a human. If you are a dog, xylitol is potentially lethal.

Two Deadly Effects of Xylitol

Hypoglycemia

In the canine body, the pancreas confuses xylitol with real sugar and releases insulin to store the “sugar.” The problem is that xylitol does not offer the extra Calories of sugar and the rush of insulin only serves to remove the real sugar from the circulation. Blood sugar levels plummet resulting in weakness, disorientation, tremors, and potentially seizures.

It does not take many sticks of gum to poison a dog, especially a small dog (see below for toxic doses). Symptoms typically begin within 30 minutes and can last for more than 12 hours. Vomiting and diarrhea may also occur.

Hepatic Necrosis

The other reaction associated with xylitol in the canine body is actual destruction of liver tissue. How this happens remains unknown but the doses of xylitol required to produce this effect are much higher than the hypoglycemic doses described above. Signs take longer to show up (typically 8-12 hours) and surprisingly not all dogs that experience hepatic necrosis, will have experienced hypoglycemia first. A lucky dog experiences only temporary illness but alternatively, a complete and acute liver failure can result with death following. Internal hemorrhage and inability of blood to clot is commonly involved.

How Much Xylitol Is Dangerous?

The hypoglycemic dose of xylitol for dogs is considered to be approximately 0.1 grams per kilogram of body weight (about 0.045 grams per pound). A typi-

cal stick of gum contains 0.3 to 0.4 grams of xylitol, which means that a 10 lb dog could be poisoned by as little as a stick and a half of gum.

The dose to cause hepatic necrosis is 1 gram per kilogram of body weight, about ten times more than the above dose. In the example above, the 10 lb dog would have to find an unopened package of gum and eat it for liver destruction to occur.

Treatment

Ideally, the patient should be seen quickly (within 30 minutes) and can be made to vomit the gum or candy. Beyond this, a sugar IV drip is prudent for a good 24 hours. Liver enzyme and blood clotting tests are monitored for 2 to 3 days. Blood levels of potassium are ideally monitored as well. Elevated blood phosphorus levels often bode poorly.

What about Cats?

So far National Animal Poison Control has no reports of xylitol toxicity in cats. At this time, feline toxicity is unknown.

What about Xylitol Containing Mouthwashes for Pets?

The oral health benefits of xylitol do seem to hold true for dogs if appropriately low doses of xylitol are used. Several products have been marketed for canine oral care, specifically for dogs that do not tolerate other methods of dental home care. These products are mixed in drinking water to provide antibacterial benefits. Aquadent® by Virbac comes in a 500cc (half liter) bottle (as well as in small packets) that contains a total of 2.5 grams of xylitol. Breathalyser Plus® from Ceva is similarly packaged. If you follow the dosing instructions on the bottle or packet, there should be no problems.

Trouble could occur if there are animals of different sizes drinking from the same water bowl (dose for the smallest animal using the bowl to be sure overdose is not possible) or if a dog is on medication or has a disease causing excessive water consumption. A dog finding the bottle and chewing it up, drinking a substantial quantity of the undiluted product could easily be poisoned depending on the dog’s size.

Information courtesy of Veterinary Information Network



Making a difference in our community

This last Spring, our own Dr. Mark Peterson shared his knowledge with the Future Animal Health Professionals club at the University of Puget Sound. He taught a lab on basic suturing techniques to students in the pre-veterinary medicine program. The students had a wonderful time and he looks forward to continuing to help teach a future generation of veterinary professionals.

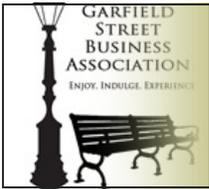


Don't leave your dog in the car!

Summer time is here and that poses a serious threat when we leave our pets (or children) in a parked car. On even a mild day, the temperature inside a car can quickly rise to life threatening in just a short time. Please don't leave them in the car at all. Take them with you or leave them at home. The consequences are just not worth it.

Vehicle Temperature:

Outside	Inside
70° F	100° F
75° F	110° F
80° F	120° F
85° F	130° F
90° F	140° F



Join us at the Garfield Street Fair!

Please join us on **Saturday August 16, 2014** from 10am to 5pm for the annual Garfield Street Fair! The Fair is aimed at bringing the local community together for a day of entertainment, music, food and FUN! We had another great turnout last year. We were amazed at the number of folks that brought their pets by to see us. We are going to be giving away a lot of free products and toys again as well as having some drawings for some awesome gifts. We will also be offering discounted HomeAgain microchipping both at our booth at the Fair (dogs only please), and at our clinic that day (dogs and cats). If you haven't already gotten you pet microchipped, we'll be doing it for only \$25.00! We'll only be able to take cash at the Street Fair location. Also, if you have any questions about animal care, we'll be there to help you out. So please come see us at the Garfield Street Fair and support our local community at the same time.

For more information on the Garfield Street Fair, go to www.shopgarfieldstreet.com.



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Flea Season is Here!

The warm temperatures that we have had so far this Summer have brought the fleas out in force! It was looking like this flea season was not going to be as bad as last year, but that is quickly looking to not be the case. Don't let your pet (and yourself) suffer from fleas! Get those little bloodsuckers under control with quality flea products. We are continuing our popular special on Frontline Plus® for dogs and cats:

We have also had great success with the new prescription chewable flea medication for dogs- NexGard®. If you don't like applying topical medications to your dog or have problems applying them due to a long or thick coat, then an oral medication like NexGard® may be just the thing that you are looking for.

Don't forget to treat your home and your yard if you are having a bad flea problem. In order to completely control a flea problem, the pet and the environment need to be properly treated.

Buy 3 doses of Frontline Plus® and get 1 dose free!

