

## “Sweet gum”? (Xylitol toxicity)

There are many products sold for human consumption that are “sugar-free”, meant to allow us as humans to eat, drink, chew and experience a pleasant sweet taste, but to avoid the calories associated with the intake of sugar. There are many such sweeteners: saccharin, aspartame, sucralose, and many sugar alcohols (malitol, xylitol, etc.).

In most cases ingestion of one of these sweetener containing products is not a cause for concern. However, ingestion of a **xylitol**-containing product by a dog can be life-threatening and is an emergency. Xylitol is found in many chewing gums, candies, breath mints as well as some nasal sprays, syrups and jams. Xylitol in the dog causes a large increase in the blood levels of the hormone insulin, which normally causes glucose in the bloodstream to leave the blood and enter other body cells. With a normal level of glucose in the blood, this would not be a problem, but since the xylitol is not glucose and since it causes such a rapid and large increase in the insulin levels, the blood’s glucose level can be dropped dangerously low. When glucose levels drop too low it is called “hypoglycemia” and there will not be enough glucose for the brain to work properly.

Symptoms of xylitol ingestion include: weakness, stumbling/falling, collapsing, seizures, death. These symptom occur fairly rapidly (within minutes to a few hours – once the xylitol has been absorbed into the bloodstream. In some cases the dog may not have any symptoms - this can lead to a false sense of safety. After 8-12 hours even without initial symptoms, xylitol can have severe effects on the liver, possibly even leading to liver failure.

**Xylitol toxicity is an emergency!** If a dog has recently ingested a product, vomiting may be induced, and activated charcoal given to help absorb any remaining in the GI tract. Blood glucose levels need to be monitored and supplemented with fluids and dextrose if they are found to be low. In a case of liver intoxication, supportive care such as IV fluids, liver anti-oxidants, medications and diets may all be used to try to aid the liver in healing.

Thus far xylitol has not been found to affect other pets such as cats and ferrets the way it affects dogs.

Immediate veterinary care should be sought if any amount of xylitol containing product may has been ingested. **Xylitol is quite a potent toxin in dogs – it may take only 1-2 pieces of sweetened chewing gum to poison a dog!**