



## XYLITOL TOXICITY

### ABOUT THE DISEASE

**Xylitol** is a sugar-substitute used in sugar-free products such as chewing gum, mints, over-the-counter vitamins and supplements, certain foods, and some compounded human medications.

In **xylitol** toxicities, there are two main phases to the symptoms of intoxication.

- Phase 1: **Xylitol** causes a spontaneous release of insulin by the pancreas which causes a critical drop in blood sugar. Symptoms of this phase include:
  - Disorientation
  - Weakness, or even drunk-like signs
- Phase 2: **Xylitol** causes catastrophic damage and death (liquefactive necrosis) to the cells within the liver. Symptoms of this phase include:
  - Severe abdominal pain
  - Spontaneous hemorrhage
  - Liver failure
  - Death

### OBTAINING A DIAGNOSIS

There are no specific tests for **xylitol**.

A thorough clinical history and physical examination with a veterinarian typically yield a presumptive diagnosis. Please be sure to inform the veterinary staff if the pet had access to purses, backpacks, or vehicles where items may be stored.

Routine laboratory testing will help identify blood sugar changes, liver injury, coagulation problems, blood loss, or systemic dehydration.

### TREATMENT

As with most toxicities, if caught within the first two hours, vomiting can be induced to evacuate the stomach. Although there has been no proven benefit with the administered activated charcoal to bind residual intoxicant in the digestive tract.

There are no specific antidotes for **xylitol**, but seeking supportive care is time sensitive.

Patients are typically hospitalized where they are placed on IV (intravenous) fluids with sugar (dextrose), and given liver support medications (denamarin, acetylcystine). However, even with treatment, the prognosis is often grave once patients start to show blood changes or liver injury.

### TIPS FOR SUCCESS

- Contact the Pet Poison Helpline (855.764.7661) for immediate triage of toxicities.
- Seek immediate care for interventional therapies.
- **Xylitol** food products are not always marked as “diet foods” or “sugar free.”
  - A good rule of thumb is to never give pets “people food.”