

Hypoglycemia in Dogs

Overview

Hypoglycemia is often referred to as “low blood sugar.” When your dog’s body is deprived of sugar, its main source of energy, his ability to function declines and, in severe situations, loss of consciousness or even death can result.

Low blood sugar is not a disease itself; rather, it is a symptom of an underlying disease or problem. There are many causes of hypoglycemia.

Puppies, especially those under 3 months of age, have not fully developed their ability to regulate their blood glucose (sugar) levels. Hypoglycemia can be brought on when puppies are introduced to other stress factors such as poor nutrition, cold environments, and intestinal parasites. Toy breeds are especially susceptible to this problem. Hypoglycemia can also be brought on by fasting combined with rigorous exercise, or by [Addison’s disease](#). Dogs treated for [diabetes mellitus](#) are at risk, as well as dogs with severe liver disease, tumors of the pancreas, or portosystemic shunts.

Symptoms

If your pet is hypoglycemic, you may notice the following symptoms:

- Extreme [lethargy](#)
- Muscle twitches
- [Loss of appetite](#)
- Trembling
- Incoordination
- Unusual behavior
- Blindness
- Unconsciousness

Diagnosis

- If your dog is suspected of being hypoglycemic, your veterinarian will perform a thorough physical exam, take a complete history, and may recommend diagnostic tests that could include:
 - Measurement of blood glucose levels (sugar levels in the blood)
 - Chemistry tests to evaluate kidney, liver, and pancreatic function
 - A complete blood count (CBC) to rule out blood

related conditions

- Electrolyte tests to ensure your pet isn’t dehydrated or suffering from an electrolyte imbalance
- Urine tests to screen for urinary tract infection and other disease, and to evaluate the ability of the kidneys to concentrate urine
- A thyroid test to determine if the thyroid gland is producing too little thyroid hormone
- A cortisol test to rule out Addison’s disease
- Ultrasound examination of the abdomen to rule out tumors

Treatment

Your veterinarian will want to immediately treat the low blood sugar as well as the underlying cause. It may include oral or intravenous glucose supplements. Other treatments will depend on the underlying cause.

Prevention

Keeping a vigil eye on your pet, especially when she is a puppy, is an important factor in preventing hypoglycemia. Providing proper nutrition on a routine schedule is also very important. Screening for hypoglycemia in situations where your dog must fast, such as prior to surgery or anesthetic events, can also prevent her from becoming hypoglycemic.

If you have any questions or concerns, you should always visit or call your veterinarian – they are your best resource to ensure the health and well-being of your pets.