Diabetes in Cats and Dogs: Symptoms, Causes, and Monitoring

Diabetes is a chronic disease that can affect cats, dogs, and other animals such as horses, and small mammals. Although this condition cannot be cured, it can be managed successfully so that your pet can live a comfortable life.

Diabetes Mellitus, or “sugar diabetes” is the type of diabetes seen most often in cats and dogs. It is a metabolic disorder of the pancreas that distributes the insulin hormone, which controls your pet’s ability to use glucose, a type of sugar that is a vital source of energy needed by cells and organs to maintain normal body function.

There are two types of Diabetes, Insulin-deficient and Insulin-resistant

Insulin-deficient diabetes requires your pet to receive daily shots to maintain normal body function because the pancreas cannot produce enough insulin.

Insulin-resistant diabetes occurs when the pancreas is producing insulin, but the pet’s body isn’t utilizing the insulin as it should. This causes the cells to not respond as they should to insulin’s signal to pull glucose into the necessary organs and cells to function properly. This type of diabetes occurs especially in older cats and dogs and obese pets.

Whatever type of diabetes that your pet may have, the negative effects are twofold:
• Muscles and organ cells are deprived of glucose(fuel) that they need for energy. In response, the body starts breaking down its own fats and proteins to use as an alternative fuel that can lead to a life-threatening condition known as DKA (Diabetic Ketoacidosis).
• High sugar levels in the bloodstream can damage organs. Without insulin to convert the glucose into fuel, it builds up causing an abnormal blood chemistry that acts like a poison. This eventually causes damage to the kidneys, eyes, heart, blood vessels, and even nerves.

What is DKA (Ketoacidosis) and why is it important?

It is important to recognize that diabetic ketoacidosis (DKA), a complication of diabetes mellitus, is a severe metabolic disease that often requires intensive treatment. The earlier it is recognized the faster and more efficient the pet can be triaged and treated in the clinical setting. Recognition of the clinical signs and definitive diagnosis are critical for proper treatment.

DKA up to now has been diagnosed by using urine reagent strips. Now there are medical devices that can give an accurate, quantitative reading within seconds. This assists the veterinary staff in treating this severe diabetic condition by detecting excessive and dangerous ketones within the blood stream.

Pets can present with DKA due to diabetes mellitus, cardiac disease, respiratory conditions (asthma), cancer, and even stress.

Being able to accurately and successfully monitor for this condition in the clinic and at home can be beneficial to the overall care and well-being of the pet.

Some of the symptoms associated with Diabetes in the Early Stages Are:
• Excessive thirst. The pet may empty the water bowl more often.
• Increased urination. This occurs because the body is trying to get rid of the excess glucose through urination.
• Weight loss. This occurs because the pet isn’t converting nutrients from its food.

Advanced Signs of Diabetes:
• Loss of appetite
• Lack of energy
• Depressed attitude
• Vomiting

Monitoring and Managing Your Pet’s Diabetes

Although many cases of pet diabetes can be challenging, this condition can be managed. The veterinarian will determine the best treatment and disease management plan for the pet. In the initial stages, treatment of the disease may involve frequent visits to the clinic for testing, medication adjustments to diet, and home monitoring training to enable the pet owner to keep their pet’s blood sugar consistently regulated.