DIABETES MELLITUS (SUGAR DIABETES)

What is it? The body uses a substance called insulin to control the transportation of glucose, or blood sugar, from the bloodstream into the cells that use it for fuel. Diabetes mellitus is a disorder in which the body either does not produce enough insulin or does not respond to it appropriately. The result is that glucose levels in the bloodstream become dangerously high at the same time as the cells are starving for lack of fuel. The cause of diabetes usually cannot be found.

Who gets it? Diabetes is a common disorder in middle-aged to older cats and dogs. Like humans, pets may be at higher risk for diabetes if they are overweight. In some cases, it may develop following a case of pancreatitis.

What are the clinical signs? Classic signs of diabetes include weight loss accompanied by a ravenous appetite and increased urine production. Diabetes can result in a general lack of health and vitality, which may take the form of decreased energy or a poor hair coat. It can cause other problems, such as cataracts in the eye or weakness of the hind limbs. Especially if other diseases are also present, diabetes can result in two different complex situations called diabetic ketoacidosis (DKA) and hyperglycemic hyperosmolar syndrome (HHS) in which a pet can become very lethargic, nauseated and unable to eat or drink.

How is it diagnosed? Several tests can be used to contribute to a diagnosis of diabetes. These include fasting blood glucose, urinalysis, or measurement of fructosamine. Fructosamine is a protein compound in the blood that increases when blood glucose has been chronically above normal. DKA can sometimes be diagnosed by physical exam, but blood tests are needed to confirm the diagnosis and characterize the details. HHS is diagnosed on bloodwork.

How is it treated? Many cats and dogs are treated with insulin to help move the glucose out of the bloodstream and into the cells where it can be used. In cases of DKA or HHS, IV fluid therapy and supportive care usually require hospitalization for several days.

What is the aftercare? Insulin is given by injection at home once or twice a day. Most owners who learn to give their pets insulin injections are surprised at how easy it is to do. Several different types of insulin are available, and veterinarians may need to try more than one kind or more than one dose before arriving at the treatment plan that works best for each individual pet. Blood tests are needed occasionally to ensure that blood glucose is being controlled adequately. Some owners learn to test their pets’ blood glucose at home, just as human diabetics do. Other treatments include oral medications, such as glipizide, and careful attention to diet and exercise. Dietary management may be the most important part of treating diabetes at home.

What is the prognosis? Some diabetic cats undergo remission for some time, meaning that they do not need to be treated with insulin after a while. However, most pets need insulin or other treatments lifelong. In many cases, diabetes can be very well managed and pets can live long, comfortable lives. Typically, diabetic pets do not develop the problems with poor circulation that can affect diabetic humans. Most pets who develop DKA will recover with proper care, although they may suffer future episodes. Pets with HHS are more challenging to treat and may not do as well.