What is diabetes mellitus and why is it harmful?

Diabetes mellitus has many symptoms with the most common client concerns being excessive urination, excessive thirst and eating while losing weight. Diabetes mellitus is a serious medical condition where your pet cannot control her blood sugar levels due to problems with insulin production or function. Glucose is the main energy source that body cells need to operate efficiently. Your cat’s digestive system breaks food down into various parts, including glucose, which then enters the bloodstream. Insulin, which is made by the pancreas, is a hormone that acts as the “key” for cells to absorb glucose from the blood stream. When insulin levels are too low or when the body is resistant to insulin, cell “doors” remain closed and glucose stays in the blood stream where cells cannot utilize it. The cat’s cells tell the body they are starving, even though there may be high levels of unused glucose in the bloodstream. This is why many diabetic cats are ravenous, and yet continue to lose weight. Because of the vast amounts of glucose in the body the cat urinates more often and drinks excessively to make up for the increased water loss. Untreated, the cells will begin to utilize other, less desirable fuel sources since glucose is not available. Without treatment, severe problems, such as liver and kidney damage, and even death, can occur. **The good news is that diabetes is a treatable condition**! Diabetes can be permanent, temporary, stable or variable and does require lifelong attention.

There are two main types of diabetes mellitus

- **Type I diabetes mellitus** can be regulated by insulin injections (insulin dependent). This form of diabetes is most closely related to the human form of diabetes seen in children where there is a very low or no production of insulin by the pancreas.

- **Type II diabetes mellitus** is non-insulin dependent and is similar to the human form of diabetes that develops in adult humans. There is a high or normal initial blood insulin level but the body is resistant to the function of insulin. Insulin, diet and other medications may be used to treat this type of diabetes mellitus.

- Cats typically suffer from type II diabetes mellitus.

How will the doctor treat my diabetic cat?

Although there are standard treatment options for diabetes, diabetic cats can be difficult to treat and every cat responds differently to a given treatment plan. After confirming the diagnosis and determining if your pet has any other health concerns, your Banfield doctor will most likely begin treatment with a diet change and insulin.

The first few weeks

The first few weeks will be a learning curve for both yourself and your cat. Frequent trips to your Banfield doctor will be needed to assess how your pet is doing and if any modifications to her treatment plan are needed. Several blood tests may be run at weekly intervals for many weeks to monitor how your cat’s blood glucose levels are responding to the prescribed therapy. The average cat has a blood glucose level of 70 - 120 mg/dL and your cat’s level may be higher or lower. The first few weeks of care will be more expensive and your Banfield team can provide you with an estimate to set your expectations.

For additional information, please contact your Banfield medical team.
What do I need to do?

After a proper insulin dose is decided on, your cat may need only a few trips to the hospital a year to reassess her treatment regimen. An important part of treatment is consistency in timing of feeding and medication administration. Develop a method that works well for your family to monitor when injections were given, how much your cat ate, any abnormal behavior, etc. We recommend a simple chart on the fridge that can be checked off (see chart on next page). Although oral forms of medications to treat diabetes exist, giving injectable insulin usually best regulates cats. Your Banfield doctor will go over with you how to properly give an insulin injection and suggest ways to practice before trying your skills on your cat.

Insulin is stored in the refrigerator. Before being withdrawn from the vial, insulin should be mixed by rolling it between your palms. Do not shake it vigorously. Insulin is administered under your cat’s skin (not in a vein or muscle). Pinch and pull up the skin to form a tent over your cat’s shoulder. Give the injection in the middle of the tent. Because the needle is very short and narrow, few cats even notice the injection. Most cats adjust easily to the injections and will even remind their pet parents that it is time for their injection... and their food! Caring for a diabetic pet will place some restrictions on your ability to spend time away from home. Your pet must be given insulin or other medications, fed properly, and observed every day after meals. Cats will either need to accompany you on vacation or a competent person will need to watch over your cat while you’re away.

Home testing kits available

AlphaTRAK glucometers are available for purchase and use at home. Home glucose monitoring can be an important part of long-term management of diabetic cats after they have been stabilized and their insulin type and dosage have been established. You can monitor blood glucose readings periodically (daily, weekly, etc) or you can perform home glucose curves. If you choose to utilize AlphaTRAK, please partner with your veterinarian to learn how to use AlphaTRAK and establish a regular visit schedule for your cat.

What should I feed my diabetic cat?

There is a number of prescription diets geared toward the diabetic patient. Your Banfield doctor will help you choose the right diet for your pet based on your pet’s current needs. The diets we typically recommend for diabetic cats are the Diabetic DS 44 diet by Royal Canin® or the M/D Feline Weight Loss- Low Carb-Diabetic diet by Hill’s®. Diet therapy and weight loss are extremely helpful and critical to achieving good glycemic control. Occasionally cats will go into remission once their obesity is corrected.

What should I be aware of?

Diabetic cats DO need to be carefully monitored for signs of hypoglycemia (low blood sugar) such as; vomiting, sluggishness, difficulty seeing, disorientation, excessive salivation, and, in very advanced cases, seizures. Eventually most diabetic cats will have a hypoglycemic event and knowing how to handle the situation will lower the stress levels for both you and your cat. Talk with your Banfield doctor about methods for quickly boosting your pet’s glucose levels during these episodes. Determine where your local emergency veterinary hospital is in case your pet needs medical attention after hours. As always if you have any questions or concerns, please contact your Banfield hospital.

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