So my cat has diabetes

What is diabetes and what are risk factors?
Diabetes mellitus, more commonly known as diabetes, is a disease hallmarked by a persistent elevation in the blood glucose (sugar). This elevated blood sugar is caused by the body’s decreased ability to make or respond to insulin. Risk factors for diabetes include obesity, decreased activity, and steroid therapy. Diabetes is one of the most common endocrine diseases affecting approximately 1 in 200 cats.

What are the clinical signs of diabetes?
Many of the signs of diabetes can mimic other disease but the most common clinical signs include:
• Increased thirst and urination.
• Increased appetite.
• Weight loss.

How is diabetes diagnosed?
• A full blood panel, including the thyroid hormone, and a urinalysis (urine examination) is recommended for cats with suspected diabetes.
• A fructosamine (which looks at the average blood glucose over the past couple of weeks) may be recommended depending on the blood work.
• Any cat diagnosed with diabetes should be screened for a urinary tract infection as high blood sugars can lead to sugar in the urine and a urinary tract infection.

How is diabetes treated/managed?
Diabetes is often a disease that requires treatment for the rest of the cat's life. Occasionally, in a newly diagnosed diabetic cat, who has not had the disease long, remission is possible. If remission is achieved it may or may not be permanent. Treatment for all diabetic cats includes a therapeutic diet and insulin therapy. The goal of treatment is to minimize fluctuations in blood glucose and the symptoms associated with diabetes thus improving the quality of life of your cat.
• Diet- diabetic prescription diets are recommend for all diabetic patients. These diets aim to keep carbohydrates low which better helps maintain a steady blood sugar. Diet alone is not enough to treat a diabetic cat.
• Insulin- Long acting insulin, most commonly Prozinc, is recommended. Insulin is given as an injection subcutaneously (under the skin) twice a day. We will have you and your cat come in for an insulin demonstration where we teach you how to give insulin prior to starting insulin therapy.

What monitoring is required?
The most intensive monitoring is with our new uncontrolled diabetics. We recommend blood glucose (sugar) checks every seven to fourteen days depending on your cat's sugar levels and insulin dose. Once our patients are stable we can teach owners to monitor blood glucoses at home or have patients return to the clinic every one to three months to monitor their blood sugar. We require yearly blood work and urine exam with a fructosamine every six months.

**What kind of complications can occur?**
- Diabetes can cause urinary tract infections as mentioned above.
- It can also lead to dandruff and increased severity of dental disease.
- A serious life-threatening complication called diabetic ketoacidosis can occur in untreated or poorly managed diabetics. Diabetic ketoacidosis occurs due to severe insulin deficiency causing dehydration, electrolyte imbalances, and change in the body’s acid/base status. Cats with diabetic ketoacidosis often require hospitalization during the critical period.
- Over supplementation with insulin can result in a cat with a low blood sugar (or hypoglycemia). Depending on the severity this can be a life-threatening emergency. Any cat suspected of having hypoglycemia should be evaluated by a veterinarian as soon as possible. If ever in doubt about if you should give insulin or not please call us!

**What if I don’t treat my cat?**
If treatment is not elected the weight loss will continue. If your cat does not have a urinary tract infection at the time of diagnosis your cat may later develop one. The clinical signs will continue to worsen and diabetic ketoacidosis becomes more likely. Ultimately a quality of life situation will occur as the disease progresses.

**Sources**
- Clinical Veterinary Advisor Dogs and Cats 3rd Edition 2015
- Client information sheet- Diabetes by Dr. Ernest Ward, DVM

Handout created by Dr. Zaya McSky, DVM