

## Feline Diabetes Mellitus

Diabetes mellitus (DM) is an endocrine disease which affects one in every 200-300 cats. The most common type of diabetes in cats is the type 2 diabetes mellitus which occurs in adults; usually between 8 and 12 years of age. DM is two times more likely to occur in male cats, especially orange male cats, and four times more likely to develop in obese cats. Currently, 35-40% of cats are obese. A cat's body shouldn't be more than 30% fat.

Some early signs of DM are: polyphagia (excessive ingestion of food), obesity, inappropriate urination, lameness (difficulty jumping) and irritability. As diabetes worsens, other signs may appear such as: polydypsea (increased thirst), polyuria (increased urination), gait abnormalities, weight loss, anorexia, vomiting and diarrhea. When a cat with DM spills glucose into its urine, it causes the urine to be sticky. Therefore, cat litter may stick to the feet. Some cats with gait abnormalities wear the fur off of the hind feet.

If diabetes mellitus is suspected upon physical exam, tests such as blood work and a urinalysis should be performed to confirm the diagnosis. If a cat is diabetic, the blood glucose will be elevated and there may be glucose in the urine. A cat's blood glucose can be elevated due to stress. Therefore, if the blood glucose is elevated and there is no glucose in the urine, we can confirm the diagnosis by doing another test called a serum fructosamine. If this test is elevated, diabetes is confirmed.

When treating a cat with DM, a low-carbohydrate, high-protein, high-fiber diet is recommended. This type of diet is similar to a cat's natural diet (i.e. mice). Some cats being fed this type of diet may not need insulin injections. Canned food is preferable due to the fact that most dry cat food contains excessive carbohydrates. Suggested canned foods include Purina DM, Hill's M/D, Friskies, Iams Kitten, Fancy Feast and Figaro. The only dry formulas that have restricted carbohydrates are Purina DM, Hill's M/D and Iams Maximum Calorie.

Some cats with diabetes may do well with a medication called Glipizide, which is used to increase insulin secretion and improve insulin resistance. Other cats require insulin injections to be regulated. Glipizide can have side effects just like any medication. The cat should be observed for things such as hypoglycemia (low blood sugar), which is rare in cats, hepatitis and vomiting. Gastrointestinal side effects usually resolve when the drug is administered with food. Insulin may cause hypoglycemia, which can be avoided with regular monitoring.

Cats with DM should be monitored closely via blood work and owner observation. The best indicators as to whether or not a cat is adequately regulated are water consumption and how much urine is being produced. Underweight animals should gain weight, while overweight animals should lose weight. With under-regulation you may see polyuria, polydypsea, vomiting, diarrhea and anorexia. Over-regulated cats may gain weight and have signs of hypoglycemia (i.e. weakness or coma.)

If you suspect your cat may have diabetes, you should call us and schedule an appointment for a physical exam. At Northampton Veterinary Clinic, we have many diabetic patients who continue to live long and happy lives.