# My **Cat** has **diabetes** —now what?

With proper care, this common disease is actually quite manageable and cats can maintain a good quality of life. Here's what you need to know.

### What is it?

Diabetes mellitus is a condition that develops when the body doesn't produce enough insulin or the insulin that is produced isn't sufficient enough to regulate blood sugar levels. As a result, the body doesn't function as well as it should.

# What are the clinical signs?

Cats with diabetes tend to drink a lot of water, urinate frequently and in greater volumes, have a ravenous appetite and, despite the fact that they're eating more, can often lose weight. In some cats, if the disease isn't diagnosed soon enough, a serious condition known as ketoacidosis can develop and vomiting, diarrhea, dehydration, lethargy and anorexia can occur.

## How is it diagnosed?

The good news is that diabetes is easy and relatively inexpensive to diag-

nose. With a simple blood and urine test, your veterinarian can determine whether there's an elevated amount of sugar in your cat's body.

#### How is it treated?

With prompt and correct treatment, many cats will go into remission and no longer be diabetic. To do this, your veterinarian will make recommendations about a proper diet and feeding regimen and start your cat on insulin therapy once to twice a day.

# What about follow-up monitoring?

After about a week of insulin therapy at home, your veterinarian will want to perform a glucose curve at the hospital. Over the course of the day, the veterinary team will take blood samples to test your cat's blood sugar levels. Your pet's dose of insulin may need to be adjusted, depending on these results.

Because many cats can go into

remission, your veterinarian may take a more aggressive approach initially to try to return your cat's blood sugar to a normal level and prevent lifelong treatment. Your veterinarian may also speak to you about monitoring your cat's blood sugar levels at home to reduce the stress of going to the veterinary hospital.

# What is the prognosis for my pet?

Almost 80 percent of cats go into remission with aggressive therapy immediately following diagnosis. Those that don't go into remission do very well and have a good quality of life with treatment. Cats don't get diabetes-induced cataracts like dogs, so the goal with treatment is keeping the clinical signs of disease under control.

Information provided by Dr. David Bruyette, a board-certified veterinary internal medicine specialist.

## From your veterinarian

# Your cat has diabetes now what do you do?



Diabetes is one of the most common feline endocrine disorders, but caring for a diabetic cat isn't as hard as it sounds. Here's the lowdown on how to keep your feline friend healthy.

Gaining for a diabetic cat takes a strong commitment from both you and your veterinarian. Every day, you'll need to give your cat insulin injections, watch his or her diet, and monitor his or her behavior. But don't get the impression that you're a prisoner in your home—you're not. You will, however, need to find someone to care for your cat when you're away for a day or longer. Our practice offers boarding services for diabetic cats, and we can also recommend a cat sitter if you prefer to have your cat cared for at home.

Treating diabetes involves medication and special diets. Most diabetic cats receive insulin injections. A very few can be managed with oral glucose-lowering drugs. In most cases, insulin injections are the best choice and are actually much easier to administer than pills. It has also been shown that a high-protein, low-carbohydrate diet is ideal for diabetic cats. We'll recommend a therapeutic diet that has been designed specifically for diabetic cats.

#### Insulin and your cat

Here are some basic tips on preparing and giving insulin injections to your cat.

1. Keep insulin refrigerated at all times. It must never be frozen.

2. Before withdrawing insulin for injection, gently mix the contents of the bottle so that the insulin looks uniform. But don't excessively shake the bottle since this can damage the fragile insulin molecules.

**3.** Draw up a large amount of insulin into the syringe, flick the syringe a few times with your finger to dislodge any air bubbles, and then push any air

bubbles and excess insulin back into the vial, stopping when you reach the number of units that have been prescribed.

4. Insert the needle under the skin, pull back on the plunger to make sure you're not injecting into a blood vessel, and then inject the insulin without having to adjust your grip. Some people put the needle under the skin, and then let go of the syringe for a second so they can get their finger over the plunger. This makes the needle bounce around, which can sometimes hurt the cat. It's best if one finger is poised over the plunger when you insert the needle into the skin.

**5.** Food rewards often help. Give your cat a treat right after an insulin injection to teach it not to fear the injections.

6. Give insulin at the same time every day. Most cats receive insulin twice daily. Choose times that work best for you. If you're most likely to be home at 6 a.m. and 6 p.m., give the injections then. If 9 a.m. and 9 p.m. work better for you, that's fine. Be consistent, and you'll avoid problems.

7. Use a new needle for each injection. After one use, needles are no longer sterile, and bacteria from the cat's skin can contaminate the entire bottle of insulin when a used needle is inserted back into the vial. Also, needles become dull quickly, and dull needles cause pain when they're inserted into your cat's skin.

# Watch for warning signs of diabetic problems

Without insulin, your cat can't survive. But too much insulin is just as deadly as too little. A potentially dangerous condition called hypoglycemia

## From your veterinarian

(low blood sugar) can result from an insulin overdose. You must watch your cat carefully for signs of hypoglycemia, which include:

- > weakness
- > lack of coordination
- > acting confused
- > unconsciousness or coma.

If your cat experiences any of these signs, contact a veterinarian immediately. While waiting for veterinary assistance, give your cat corn syrup or honey, slowly, using a syringe to squirt it into the mouth. If your cat is able to eat, offer normal food. If your cat is having seizures or is semicomatose, rub a tablespoon of corn syrup or honey onto the gums. You should see a noticeable effect within five minutes of administering the syrup.

Insulin overdoses can happen with an incorrect dose or a duplicated dose because one family member didn't know another family member already already gave an injection.

> If more than one person is caring for a diabetic cat, good communication between family members is essential to avoid this situation.

> If you have a longhaired cat, it can be difficult to tell if the injection went beneath the skin or merely beneath the hair. If, after you administer the injection, you see that some insulin has escaped the skin and you're not sure how much (or if any) went in, it's safest to skip that dose and proceed normally at the next scheduled injection time. An occasional underdose is much less dangerous than an overdose.

On occasion, your cat's diabetes may become uncontrolled, or another illness may arise. These setbacks may feel especially stressful and heartbreaking considering the extra effort and commitment you've been giving. The frustration, anger, sadness, fear, and guilt are normal feelings one experiences when caring for a cat with a chronic health condition. Don't ignore these feelings, but don't dwell on them either. Reach out to friends, family, and our doctors and team here for emotional support.

Although most diabetic cats remain reasonably healthy, some can develop a condition called ketoacidosis, in which the cat becomes extremely depressed with signs such as vomiting, diarrhea, loss of appetite, dehydration, and coma. Ketoacidosis is a potentially life-threatening emergency, and any diabetic cat with these clinical signs should be evaluated by a veterinarian immediately. Diabetics are also more prone to infections, with kidney, bladder, and oral infections being most common.

## We're here for you

Friends, relatives, and coworkers may make insensitive comments that you must be crazy to care for a chronically ill pet that requires daily injections. Try not to let unsupportive comments sway you. These people obviously do not understand the special bond that you share with your cat. Only another pet lover will understand your choice to give such dedicated care to your cat. Your good friends will understand your choice and will be supportive, and one of them may even be suitable to be a backup caretaker.

At first, you may wonder if you're upsetting your cat when you give the injections, or whether changing diets bothers him or her. These changes are difficult at first, but they're necessary and lifesaving, and will soon become a routine part of daily life for both of you. In fact, you and your cat will most likely develop an even stronger bond due to all of the extra attention and care that you will be giving. Although the initial shock and fear that you feel upon learning that your cat has diabetes can be stressful, keep in mind that the prognosis for diabetic cats is good. Diabetes can be successfully managed and your cat can have a good quality of life for many years.

Adapted from Dr. Arnold Plotnick, DACVIM (feline), Manhattan Cat Specialists, New York, N.Y.