

# New Ways to Manage Diabetes

Alternative treatments help owners manage this serious illness in their cats.

By Joan Hustace Walker

**F**eline diabetes is not uncommon, according to the Winn Feline Foundation Association (WFFA), and estimates that more than one out of every 400 cats in the United States is afflicted with this disease. And the numbers appearing to be rising.

Joe Demers, DVM, a practitioner with Holistic Animal Clinic of Melbourne, Florida, says that he's seen an increasing trend in cats suffering from diabetes in his own practice. Demers now routinely checks blood sugar levels in all geriatric cats—and is finding elevated levels in many of the cats. Not all of these cats have blood sugar levels that are high enough to indicate diabetes, necessarily, but they are elevated above what is considered normal.

Unfortunately, the cause of diabetes is not clearly understood. The Cornell Feline Health Center at Cornell University College of Veterinary Medicine in Ithaca, New York, says that diabetes most often occurs in older cats that are obese, with males having a greater tendency of being affected than females. Diabetes can affect young cats too, however, and no breed is known to be immune.

Holistic practitioners put the blame primarily on the diets that are being fed today. "Free feeding a dry food diet is like trying to turn a carnivore into a carbohydrate grazer," says Susan Wynn, DVM, a holistic

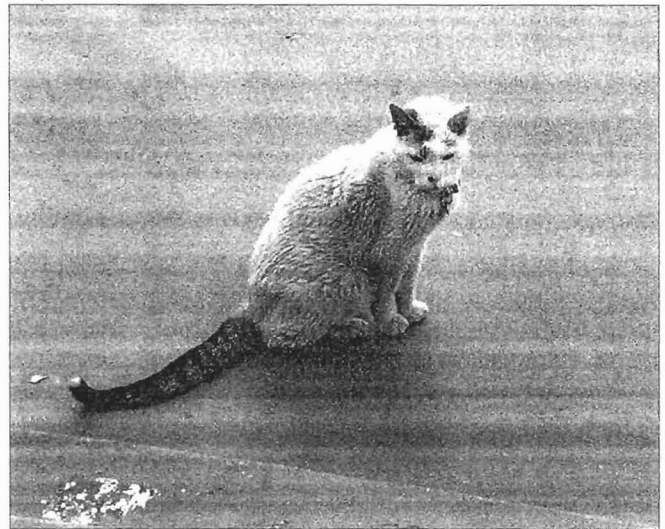
practitioner with the Greater Atlanta Veterinary Medical Group in Marietta, Georgia. "It doesn't work."

Regardless, Wynn feels that many veterinarians are recommending high-grade, carbohydrate foods for diabetic cats as part of the treatment plan. "They are treating the cat this way to prevent glucose levels from fluctuating. This question is: Does a diabetic cat really do best with this type of diet? I don't think so."

"Cats are the number-one meat eaters," explains Demers. "But people are feeding this carnivorous animal a high-forty to sixty percent-carbohydrate diet." The shift to prepared, high-carbohydrate food has been disastrous for the species, maintains Demers.

## What is Diabetes?

Diabetes mellitus (or "sugar" diabetes) can be caused by one of two (and some theorize three) conditions in a cat. Type 1 diabetes—what is known as "juvenile" diabetes in humans—is a form that is relatively rare in cats. This type of diabetes is caused by a lack of production of the hormone insulin by the pancreas. Insulin is needed to break down and metabolize carbohydrates, such as sugars and starches. Without the production of insulin, the cat can't "digest" carbohydrates. So no matter how much it eats, the cat cannot absorb and utilize the ingested car-



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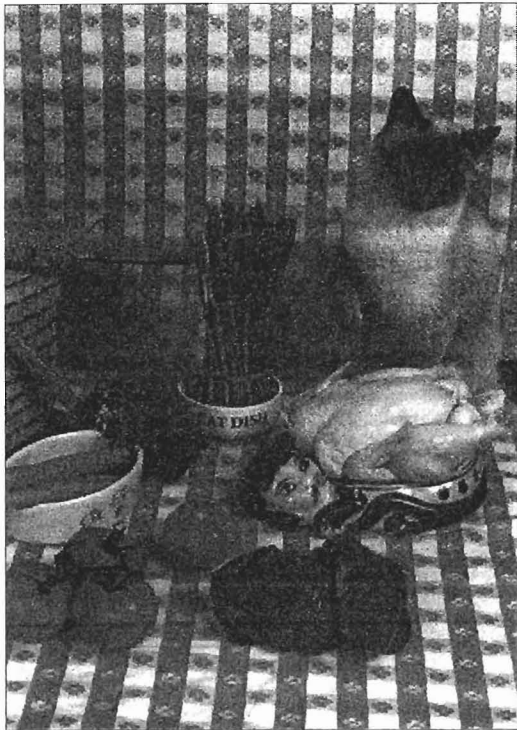
bohydrates.

With Type 2 diabetes, the cat can't metabolize carbohydrates either, but the reason is different from Type 1. This is a more common type of diabetes in cats, whereby the pancreas does produce insulin, but the body doesn't respond. "These cats are what we call insulin resistant," says Wynn.

If either type is untreated, the results are the same: The cat eventually develops hypoglycemia, or high blood sugar levels, because the body cannot process these sugars. The sugars are excreted in the urine at high levels, a condition called "glucosuria." This in turn causes excessive urination and unquenchable thirst. Diabetic cats often show an increase in appetite, but because they can't metabolize glucose very well, they lose weight. As the untreated disease progresses, cats often begin vomiting and become weak and dehydrated.

## Holistic Treatments

Traditional veterinary medicine typically treats diabetes by carefully con-



**Not surprisingly, good nutrition plays a key role in managing diabetes in cats.**

trolling the cat's diet, reducing the cat's weight if it's obese by no more than three percent of the cat's total body weight per week. The cat will also receive insulin shots, either once or twice a day as needed. Cats are sometimes given an oral hypoglycemic medication, such as glipizide, which works like insulin to help lower blood glucose. Holistic treatment of cats suffering from diabetes is not that much different, except homeopaths have more "tools" in the toolbox. In addition to using traditional methods, holistic practitioners can utilize a variety of alternative modalities, such as acupuncture, Chinese herbs, homeopathy and a variety of nutritional supplements. Though complementary modalities cannot cure diabetes, holistic veterinarians say that these treatments lessen a cat's dependence on insulin and make the animal feel more comfortable. "Our goal in confirmed diabetic cats is to reduce the dose of insulin and stabilize the blood sugar levels," says Wynn.

Depending on the overall health

of the cat, the type of diabetes and the severity of the disease, a holistic practitioner may incorporate one or more of a variety of holistic treatments in addition to traditional ones, such as insulin injections.

Though holistic therapies are generally regarded as safe because they typically have few (if any) side effects, cat owners are still well-advised to leave the "doctoring" to their holistic veterinarians. Owners need to realize that any remedy that has the power to change the health of an animal also has the power to adversely change the health if used in an inappropriate way. Below are the most common treatments employed by holistic vets.

### Three A's for Diabetes

An ancient treatment used in China and other Eastern countries for centuries, acupuncture is gaining recognition in the veterinary medical field. Using very thin, sterile needles, the veterinary acupuncturist targets certain points just below the surface of the cat's skin, which in turn trigger the release of natural painkillers. With diabetic cats, acupuncture is used to increase the strength and immune system of the cat, and to improve kidney and liver function.

Demers says that by treating the "internal disease, you may be able to lower the level of insulin" given to the cat. Though acupuncture is considered gentle, Demers describes it as a hands-on modality that is very intense. For this reason, he says, some cats won't tolerate it.

Alpha-Lipoic acid is an antioxidant nutrient that works on a cellular level-effectively "zapping" free radicals, which are known to damage cells. Two short-term studies at the University of California at Berkeley indicate that Alpha-Lipoic acid improved the numbness and pain that accompanies diabetic neuropathy.

thy. Lester Packer, PhD, theorizes that this substance may have applications in prevention and treatment of diabetes. "This holds a lot of promise for diabetics," says Wynn. "But you have to be very careful because, at elevated levels, it's toxic."

Ayurvedic remedies are not as well-known as Chinese herbs, but these Indian herbal preparations are used to treat diseases and other health conditions. Demers says that ayurvedic remedies include "a whole different set of herbs" and their use has been helpful in treating diabetes in cats.

### Other Helping Hands

"Chinese herbal formulas are used as maintenance drugs, usually," says Demers. "The formulas that are generally used are those that are associated with the kidney and they treat a 'kidney ying' deficiency." The herbs, such as Six Flower Tea (*Rehmannia Six*) and *Yu Quan Wan*, are often prescribed to treat dry red tongues, increased thirst and increased urination, according to Demers.

**Chromium** is an essential trace mineral that can be found in drinking water and in many foods. It helps cells to metabolize blood glucose. If a cat is deficient in chromium, it is believed that the deficiency itself may exacerbate the cat's diabetes.

"In my hands, chromium hasn't worked at all," says Dr. Wynn, adding that a major pet food manufacturer recently completed a study that indicates that chromium showed no results in diabetic cats. However, other practitioners, such as Demers, do feel that the mineral can be beneficial when used in combination with other holistic modalities.

**Fish oil supplements** have been used with some success in decreasing insulin resistance, and helping with other diabetic conditions such as diabetes neuropathy, says Dr. Wynn. In research involving humans, the results have been mixed, with glucose tolerance improving in some

studies and worsening in others.

A trace mineral that mimics insulin in a cat's system is vanadium, and it's theorized that it might reduce the need for daily insulin injections. Vanadium is being researched in human studies, as well as ones involving cats. "It's my favorite," says Wynn. "It stabilizes blood sugar and allows lower doses of insulin."

The dosage required for vanadium compounds to work is the subject of concern among some researchers, however, who predict that the large doses that might be required to achieve the desired effect may also prove to be unsafe. At this time, no long-term studies can confirm or dis-

prove the results.

### **Nutrition, As Always**

Holistic practitioners feel that returning a cat to a well-balanced diet that's high in fiber and low in carbohydrates is the first line of defense in treating diabetic cats.

"The diet is much more meat and less carbohydrates—no more than 10 to 15 percent carbs," says Demers. The diet should also consist of substantial fiber, in the form of pureed vegetables, bran flakes or psyllium husks.

"It's a home-prepared diet that is customized to the diseased patient," he explains. If an owner is hesitant

about home-prepared meals for a diabetic feline, Demers says that a quality commercial senior or weight reduction food can be used by adding meat to it.

### **The Key to Success**

Vigilance by the human caretaker can make a cat's diabetes a manageable situation as opposed to a terminal decision. "Cats as a rule are very unstable diabetics, making them particularly challenging to treat," says Demers. But one of the best ways to come to grips with the disease depends on the owner carefully monitoring the patient's blood glucose levels. **WCJ**