

New Hope for Diabetic Cats

Advances in veterinary medicine will help owners provide better care for cats with diabetes.

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Diagnosing feline diabetes is usually straightforward. High blood sugar accompanied by sugar in the urine confirms the diagnosis. Some cats are very stressed while at the veterinarian's office, which can result in high blood sugar or hyperglycemia. However, these stressed cats rarely have sugar in their urine. In cases where a cat has high blood sugar and a trace amount of sugar in the urine, a blood test called fructosamine is available that allows veterinarians to differentiate stress-induced hyperglycemia from diabetes.

Dietary issues have played an important role in the management of feline diabetes. For years, high-fiber diets were recommended in the initial management of diabetes. More recently, research has shown that for cats, as pure carnivores, diets low in carbohydrates and high in protein are more appropriate. According to research, the use of such diets can lower the insulin requirements of most diabetic cats.

In some cases, the diabetes can be managed using diet alone. It is impossible to predict which cats will respond to a high-protein diet and to what degree the insulin dose can be reduced. Diabetic cats transitioning to these new diets need close monitoring during the first few months to ensure that hypoglycemia (low blood sugar) doesn't occur. Cats with kidney disease also must be watched closely, as high-protein diets can increase the progression of kidney failure.

Cats with diabetes have been encouraged to eat several small meals throughout the day, to minimize fluctuations in blood sugar. However, a recent study suggests that although cats naturally like to nibble on food 10 to 20 times a day, those nibblers experience higher insulin concentrations than those that get fed once daily. Therefore, letting diabetic cats nibble throughout the day may increase the demand on their already-impaired pancreas to secrete insulin - contributing to pancreatic cell burnout. Cats predisposed to poor glucose tolerance or diabetes may do better if fed once daily. Further studies are necessary to determine the optimal feeding strategy for diabetic cats.

A Dose of Hope

Most diabetic cats require insulin injections to control their diabetes. Years ago, most veterinarians administered a type of insulin called protamine zinc insulin (PZI), which is derived mainly from cattle. Cats respond well to bovine insulin, because the molecular structure of feline insulin closely resembles bovine insulin.