

## Pets and Diabetes

### What is diabetes?

Diabetes mellitus, the medical name for diabetes, is a disease caused by a lack of insulin production or by a resistance of the receptor cells to use insulin that affects the level of glucose in your dog or cats' blood. The glucose comes from the food that your pet eats. The food is broken down into very small components by the pet's digestive system so their bodies can absorb and use the components for energy. Glucose is absorbed from the intestines into the bloodstream where it travels to cells throughout the body. Insulin is required for the cells to absorb glucose. Insulin is produced by the pancreas in response to the amount of glucose in the bloodstream. Healthy pets produce insulin easily, but pets with diabetes do not. In canine and feline diabetes, unused glucose builds up in the bloodstream.

### Is diabetes common in dogs and cats?

Diabetes is reported to affect anywhere between 1 in 100 to 1 in 500 dogs and cats; but experts believe that this disease is on the rise.



### Can diabetes lead to other health problems?

Yes, dogs and cats with diabetes can develop other health problems. Pets with diabetes are more susceptible to infections, metabolic diseases and urinary disorders. For dogs, persistently high blood glucose levels make the lens of the eye become opaque, causing blindness. For cats, persistently high blood glucose levels may damage nerves, causing weakness and muscle wasting.

If your pet's diabetes goes untreated, they could develop a life threatening condition called Diabetic Ketoacidosis. This occurs when the body breaks down protein and fats to make another energy source. The by-product of the protein breakdown are ketones. Ketones are not tolerated by the body well, leading to weakness, lethargy, refusal to eat, depression and possibly death. For both dogs and cats, avoiding high blood glucose levels should help prevent or delay these complications. For this reason, early diagnosis of diabetes in your dog or cat is especially important.

### What is the life expectancy of dogs and cats with diabetes?

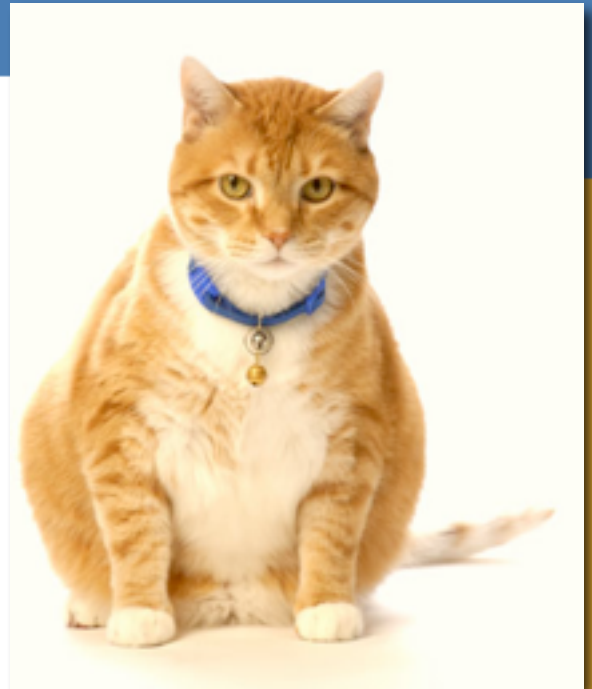
Nowadays, with effective treatment and monitoring, a diabetic dog or cat should have the same life expectancy as a non-diabetic dog or cat of the same age. Early diagnosis and appropriate treatment helps diabetic pets maintain a good quality of life.

### What are the risk factors in dogs?

- Age (middle-aged to older dogs are more affected)
- Un-spayed females
- Genetics
- Obesity (even a couple of extra pounds in a small dog can pre-dispose him to diabetes)

### What are the risk factors in cats?

- Age (older cats are more susceptible)
- Neutered males
- Genetics
- Other insulin-resistant disorders or diseases, such as chronic pancreatitis (inflammation of the pancreas) or hyperthyroidism (overproduction of thyroid hormones)
- Obesity (even a pound or two increases susceptibility)
- Physical inactivity



### What are the signs for diabetes?

Common signs of diabetes in dogs and cats are:

- Excessive thirst
- Excessive urination. Your pet produces more urine per day or has "accidents" in the house (dogs) or outside the litter box (cats)
- Excessive hunger while losing weight
- Lethargy (less active/sleeps more)
- Cloudy eyes (dogs)
- Thinning, dry, and dull coat

### How is diabetes treated?

Insulin is generally the first treatment in all diabetic animals. Insulin allows the pet to break down excess glucose and use it as energy for the cells.

Most dogs are type 1 diabetics meaning they do not produce enough insulin and need supplementation. Most cats are type 2 diabetics, meaning they have receptors on the cell resistant to insulin. By giving them extra insulin, there is an increased chance for the good receptors to use the insulin. By careful diet control, some cats can go into remission.



A high quality, consistent source of protein is an essential part of any diabetic diet. High-protein, low-carbohydrate foods are currently recommended for diabetic cats because they provide the extra energy cats need to get through their active days, without the extra carbs that can turn into excess sugar.

For dogs, low carb and high fiber diets help balance energy needs and prevent excess glucose production. It is important

to feed your pet based on its ideal body weight. Consistent timing and size of meals is also very important.

Exercise can help dogs with diabetes, but it needs to be regulated because activity affects blood glucose levels. It's best to create a consistent exercise routine for your diabetic dog and stick to it.

There is no clear recommendation for exercise in diabetic cats because their activity is difficult to regulate. Managing dog's or cat's diabetes will require some effort, but the rewards are well worth it.