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## Common Pet Diseases: Diabetes

Just like in humans, pets can also contract diabetes. Let's learn about common clinical signs of diabetes, as well as treatment options for dogs and cats!

### What Is Diabetes?

Diabetes (also known as diabetes mellitus) is the lack of insulin within the body. Many cells within the body require sugar (glucose) in order to obtain energy to function. Insulin is secreted by the pancreas, and is needed in order for glucose to be transported from the bloodstream into tissues. However, in pets with diabetes, there isn't enough insulin available to transport the glucose into tissues. This causes an increase of glucose being built-up in the bloodstream, and many tissues go without energy, causing dysfunction. There are two main types of diabetes: Type I (no production of insulin from the pancreas) vs. Type II (not enough insulin is produced). Dogs tend to contract Type 1 diabetes, whereas most cats tend to contract Type II diabetes. With Type II diabetes, the diabetes can resolve if the pancreas begins producing more insulin, meaning that these diabetics may revert back to a normal, insulin-sufficient state. One of the clinical signs first seen with diabetes is an increase in drinking and urinating. This is because all the glucose in the bloodstream (and later the urine) acts as an osmotic agent, pulling more water (blood) with the glucose. This causes the patient to drink and urinate an excessive amount in order to try and dilute the glucose in the body in the attempt to flush the glucose out. Later on, as the tissues become starved for energy, you may see weight loss and dehydration. Eventually, the body can shut down from lack of the appropriate energy sources, causing diabetic ketoacidosis, which can be deadly.

### Treating Diabetes

The main treatment for diabetes is giving insulin injections. These insulin injections help supply the pet with insulin that they are either not able to make or are not making enough of. For dogs, these injections will be something that they will need for the rest of their lives. Cats are a little bit trickier: while some cats remain diabetic for life, sometimes the pancreas will begin producing normal amounts of insulin and will no longer need injectable insulin. These cats can go into and out of "remission," which requires careful monitoring on the pet parent's part! Keeping your pet on a high protein, low carbohydrate diet can also help prevent complications with treatment. Furthermore, making sure your pet is an appropriate weight can also help with the regulation process as well. Diabetes is a tricky, yet manageable, disease. With careful monitoring, your diabetic pet can continue to live a full, healthy life!

Best regards,  
*Rachel Rielinger, DVM*



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