



# Caring for your diabetic dog

Diabetes mellitus is a common problem in both dogs and cats. Caring for a diabetic animal requires some effort, but most pets remain happy and comfortable. Successful patient management requires a team effort between you and your veterinarian. This information is intended as a guideline only; always follow any specific instructions from your veterinarian and always ask if you have questions.

## What is diabetes mellitus?

Diabetes mellitus is a condition in which the body either doesn't properly produce or use insulin. Insulin is necessary for the movement of glucose from the blood into the cells of the body, so patients with diabetes have high blood sugar levels (also referred to as glucose concentrations).

## What are the signs of diabetes?

Excessive thirst, frequent urination, increased hunger, sudden weight loss and weakness or fatigue are seen in dogs with diabetes. These changes can be minimized when the blood sugar levels are under control.

## Why is my dog a diabetic?

Most likely, dogs become diabetic because of genetic factors, combined with environmental triggers. Many dogs with diabetes are overweight, or were previously, and this may also play a role.

## Is there a cure for diabetes?

No. With very rare exceptions, diabetes in dogs is a permanent condition and life-long therapy is necessary.



### Will my dog need insulin?

Yes. Most diabetic dogs are insulin dependent, which means that they need regular insulin injections to control sugar levels.

### What does the insulin do?

Insulin moves glucose from the blood into the cells. Glucose is an essential fuel for most of the tissues in the body, and without insulin, cell metabolism is severely compromised. So, insulin causes blood glucose levels to move down. Insulin needs to be dosed very carefully, as too much insulin will cause dangerous hypoglycemia (low blood sugar).

### How do I give insulin?

Your veterinary team will show you exactly how to give insulin injections, but it's really very simple. The insulin dose is pulled up into a special syringe, and injected under the skin. Most people find it easiest to inject between the shoulder blades or along the back.

### Do the insulin injections hurt?

Insulin syringes have very small needles, and usually dogs do not notice the injection. It can help to distract your dog with a treat or toy when you give the injection, and be sure to offer lots of praise afterwards.

### Why do I need to check glucose levels at home?

Firstly, information collected at home is a reflection of what's happening day to day in your dog's normal living environment. Your veterinarian can use the values you provide to adjust insulin therapy more appropriately. Secondly, if your pet seems unwell, you can quickly determine if blood sugar levels are dangerously high or low. Low blood sugar (which means that too much insulin is present) can cause weakness, seizures and even death.

### How do I check the glucose?

One way is with the AlphaTRAK® Blood Glucose Monitoring System. It just takes one drop of blood to measure blood glucose. A lancet can be used to easily collect a sample from the ear tip, lip, paw pad or leg callus and then simply hold the test strip against the blood drop. The blood is quickly drawn into the test strip, and the AlphaTRAK meter does the rest. The AlphaTRAK unit is a portable blood glucose monitor validated and calibrated for dogs and cats, and displays a measurement in just a few seconds. The AlphaTRAK Instructional Video provided will show you exactly what to do. If you need further information, you can also visit [www.alphatrakmeter.com](http://www.alphatrakmeter.com) for more suggestions.

### How often should I check blood glucose levels?

Your veterinarian will give you specific instructions on when to check sugar levels. However, it is always a good idea to check sugar levels if

- Your dog seems weak or confused – these can be signs of low blood sugar
- Your dog doesn't want to eat
- You gave insulin as usual but your dog vomited his food
- You notice a sudden increase in thirst or urination

Your veterinarian may recommend a routine glucose curve every 4-6 weeks, or approximately 7 days after a change in insulin dose.

### What is a glucose curve?

This is a series of measurements, generally taken every 2 hours, over the course of a day. Your veterinarian will provide specific instructions and use this information to see if the insulin dose is appropriate.

### What is a normal blood glucose concentration?

The healthy glucose concentrations in your dog should be determined by your veterinarian. The targeted glucose range for diabetic dogs is usually somewhat higher than healthy dogs to prevent problems associated with insulin induced hypoglycemia (low blood sugar levels).

### Should I give more insulin if the glucose is high?

If you suspect hypoglycemia, contact your veterinarian. Never increase your dog's insulin dose or give an extra dose unless your veterinarian tells you to do so. If you measure glucose and it's high (your veterinarian will determine this value), make a note of the time of day and update your veterinarian. As long as your dog is eating and alert, a high blood sugar level is not an emergency.

### What should I do if the glucose is low?

If the glucose is low (your veterinarian will determine this value), offer your dog something to eat immediately. Canned food is a good choice, as it is tasty and contains simple carbohydrates which are quickly absorbed and raise the blood sugar. Recheck the glucose level in 30 minutes, to be sure it's moving up. If your dog is confused or doesn't want to eat, rub maple syrup or dextrose syrup over the gums. The sugar in syrup gets to the blood stream almost immediately. Your dog may also need intravenous glucose, so call your veterinarian and let them know what's going on.

### Should I reduce the insulin dose if the glucose level is below 65 mg/dl<sup>1</sup>?

In general, the insulin dose should be decreased if hypoglycemia is confirmed. However, it is important to talk to your veterinarian and get his or her advice, as every pet is different. Low blood sugar (from too much insulin) is much more dangerous than high sugar levels.

### Important points

- At-home glucose monitoring with a device such as the AlphaTRAK® Blood Glucose Monitoring System is easy and helps your veterinarian monitor your dog's diabetes
- Never increase the insulin dose unless directed to do so by your veterinarian
- Contact your veterinarian as soon as possible if glucose falls below 65 mg/dl<sup>1</sup>
- Offer food or rub syrup on the gums if glucose is less than 65 mg/dl<sup>1</sup>
- If you suspect hypoglycemia contact your veterinarian
- A high glucose level is not an emergency, but make a note and update your veterinarian within 48 hours
- Regular glucose curves are the best way to assess an insulin dose and decide about dose adjustments
- Always let your veterinarian know if your dog is thirsty, weak, not eating, losing weight or vomiting

### Veterinary Clinic Contact Details

Name of Doctor: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Emergency Telephone Number: \_\_\_\_\_

Note: The health information contained herein is provided for informational purposes only and is not intended to replace a discussion with a veterinarian. All decisions regarding patient care must be made with a veterinarian and unique characteristics of each patient should be considered.

<sup>1</sup> Ettinger SJ, Feldman EC. Textbook of Veterinary Internal Medicine. Vol 2. WB Saunders Company. pp 1529-1534. 1995.