

# Diabetes in Dogs

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Dogs with diabetes have high blood sugar (glucose) because they can't produce their own insulin. This means that your dog is "insulin dependent" and will need insulin injections twice a day, every day, for the rest of his or her life.

Managing diabetes is not a small undertaking. Along with giving insulin injections twice daily, strict rechecks with your veterinarian and close blood sugar monitoring are necessary, especially at the beginning of insulin therapy.

Diabetes cannot be cured, but with dedication and effort, it can be managed, and your dog can still live a long and happy life.

## Symptoms of Diabetes

Generally speaking, diabetic dogs drink a lot of water and have big appetites. Even with all that eating, some dogs start to lose weight because their bodies can't use the nutrients in their food.

If undiagnosed, diabetic dogs eventually lose their appetite. They may refuse to eat or even throw up. This is due to long-term high blood sugar and requires immediate medical attention.

## Diagnosis

Diabetes is diagnosed by symptoms and sugar levels in blood and urine.

## What Is Insulin?

Insulin is a hormone that allows the body to convert sugar from food into energy. It is produced by the pancreas (an organ also associated with digestion)

## Giving Insulin

Insulin is typically given every 12 hours with a meal. For example, insulin can be given at 8am with breakfast and then 8pm with dinner.

Keep insulin in the fridge. When you are ready to give a dose, take the vial from the fridge and gently roll it in your hand or on the counter. Do not shake the container.

Turn the container upside down and draw the liquid into a syringe. Be sure to push any air out of the syringe. Draw up to the prescribed amount. Insulin is measured in "units".

Using your thumb and index finger, gently pinch your dog's skin between the shoulders. Use your other hand to draw back on the syringe. If no blood comes into the syringe, then inject the insulin into this skin tent. If blood comes into the syringe, then you have hit a vein. Discard the syringe and draw up a new dose in a new syringe.



*A type of insulin used in dogs. (Also used in people.)*

Insulin needles are very small and dogs hardly notice their injections. In the beginning, if you are having trouble, then ask a helper to hold or distract your dog. You can give insulin while your dog is finishing his or her meal.

*Safety note: Always use the exact type of insulin and insulin syringe prescribed by your veterinarian. Different types of insulin and syringes exist. Using the wrong insulin or syringe could result in a fatal overdose.*

## Checking Blood Sugar

Developments in human monitoring have helped Vets too. The FreeStyle Libre may be right for your pet and Dr. Radford promises to use that technology for your pet if that is what is best! It will help lower your cost

A glucometer is an electronic device used to measure your dog's blood sugar. Dog glucometers are similar to human glucometers, but dog blood is different than human blood, so a dog specific glucometer must be used.

Just a drop of blood is needed to check blood sugar. Common sites to collect blood are from the ear, paw pad, elbow, or inside the lip. The AlphaTrak kit shown above includes disposable lancets, which are used to prick the skin.



*A glucometer for dogs and cats.*

The Creekside Team is happy to give unlimited free demonstrations for giving insulin and checking blood sugar. We know that managing your diabetic dog can be intimidating, but most owners find that after a little practice, it becomes easy and routine.

## Glucose (Blood Sugar) Curves

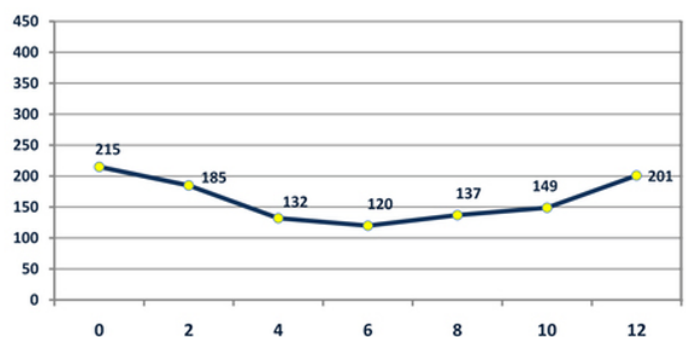
Glucose curves are diagrams of your dog's blood sugar throughout the day. They must be performed to check your dog is getting the right amount of insulin. A good curve should stay within a certain range. Changes to the curve can help your vet find the right dose for your dog.

In the early stages of diabetes, or when changing doses, glucose curves are performed as often as weekly.

Since stress can alter blood sugar, testing your dog's blood sugar at home typically gives more accurate measurements than testing in the hospital.

When a glucose curve is needed, you will check your dog's blood sugar before the first dose of insulin in the morning, then every 2 hours until the second dose in the evening. Your vet will analyze these numbers to find the right dose of insulin for your dog. Sometimes 3 or 4 curves are needed to find the right dose.

If you are unable to measure your dog's blood sugar at home, glucose curves can be performed at one of our hospitals.



*A glucose curve.*

## Changing Doses

It is extremely important that you consult with your veterinarian before changing your dog's insulin dose. Although you may check your dog's blood sugar and find that it is high, this is not enough of a reason to change the dose.

For example, giving too much insulin may actually cause your dog's blood sugar to temporarily go too high (confusing, right?). So if you took a glucose reading when it was spiking, then you might be tempted to give even more insulin, which could overdose your dog. (Situations like this are the reason why veterinarians are trained for 8 years or even longer...Dr. Google isn't going to cut it!)

Other factors may be making your dog's blood sugar harder to control, such as undiagnosed urinary tract infections (which diabetics are more likely to have).

## Feeding & Diet

Feeding your dog the same amount of the same food twice a day will improve the odds of controlling diabetes. Dogs should be fed every 12 hours when their insulin is given. Treats should be kept to a minimum.

Treating diabetes in dogs can be easier than in people because dogs can eat the same exact food every day. Ideally, dogs should be fed a prescription diet designed for diabetics. These foods are generally lower in carbohydrates to prevent spikes in blood sugar.



*Prescription diets help control blood sugar.*

## Cataracts

Even with well-controlled diabetes, most diabetic dogs eventually develop cataracts (cloudiness of the lens in the eye), which can occur suddenly or gradually. Cataracts can eventually cause blindness, and sometimes problems that require eyes to be surgically removed.

Cataract surgery may be an option for your diabetic dog. A veterinary ophthalmologist will be needed to evaluate your dog and perform this procedure, as highly specialized equipment is required, so please let us know if you would like to learn more.

## Talk to Your Vet

We understand that managing a diabetic dog can be challenging, but with a little education and dedication, your diabetic dog can live full and happy life.