

SO YOUR PET HAS DIABETES...

Now What?

TWO TYPES OF DM

Type 1: Insulin Dependent

Type 2: Non-Insulin Dependent

Dogs are typically Type 1

Normal Blood Glucose:
80-120mg/dl

HYPOGLYCEMIA:

Low blood glucose, BG <50mg/dl

Clinical Signs of Hypoglycemia:

- Tremors/shivering
- Change in appetite
- Seizures
- Weakness/Dullness

DIABETIC KETOACIDOSIS (DKA):

Hyperglycemia (high blood glucose), and other blood and urine imbalances.

Clinical Signs of DKA:

- High BG
- Vomiting
- Anorexia (not eating)
- Lethargy
- Dehydration

Diabetes Mellitus (DM)

DM is an endocrine disease of the pancreas where the body is no longer able to regulate its blood glucose (BG) level due to a lack of insulin. The signs of this disease are increased water intake and urination. A diabetic pet's BG may rise to as high as 700-800 mg/dl but most will be in the 400-600 mg/dl range. The goal of treatment is to maintain a BG level as close as possible to the normal range while avoiding periods of hypoglycemia.

Treatment

Consistent, timely, daily insulin injections are given under the skin. Treatment is life-long. Establishing a strict schedule of feedings and insulin administration is essential. It is important that your pet is eating. Do NOT administer insulin dose if pet does not eat. Call your vet for instructions if they are not eating or if you suspect your pet's BG is too high or too low. Establishing the correct dose of insulin for a pet is an individual process, requiring frequent blood glucose checks and curves (often in hospital) to get your pet well-regulated. Getting your pet regulated usually takes a minimum of a month. Glucose

monitoring, no reoccurrence of clinical signs are useful indicators of the success of diabetic management. Diabetics frequently get cataracts in their eyes, monitoring for this change is another indicator for how well their BG is controlled. You can learn more about DM, administering insulin and other tips at

www.vetsulin.com and

www.veterinarypartner.com.



Diet

Feeding a specific veterinary diet is helpful in regulating DM because these foods help to limit post prandial (eating) spikes in blood glucose. Diabetic dog diets are typically higher in fiber and lower in fat.

Insulin

There are several different forms of insulin. The most common types of insulin used to treat canine DM are Vetsulin and NPH. When getting a new insulin bottle it is very important to make sure that you are giving the same insulin that you have been prescribed by your vet and that you are using the correct unit syringes (U40 vs U100). Insulin should be kept in the refrigerator. Vetsulin should be gently shaken; NPH should be gently rolled in the hands before pulling up your pet's dose. Insulin should be regularly checked for any changes in color or evidence of any precipitants floating in vial. Insulin is given under the skin (NOT in the muscle or in a vein). The needle is very small and short and most pets easily adjust to receiving insulin injections. Make a small tent with the skin and insert the needle into the middle of the tent insuring that the needle has not punctured through the opposite side of the skin tent.

Monitoring At Home

At home monitoring devices can be purchased. We recommend the *FreeStyle Libre* (<https://bit.ly/2GJrI23>) or an *AlphaTRAK* (<https://bit.ly/2EGQnIA>). If you decided to use an at home monitoring device please discuss use, monitoring schedule, and vet checks with your veterinarian. There are also some great apps available for keeping track of your pets BG levels, and some of these apps can share your data directly with your pet's veterinarian. Try the "RVC Pet Diabetes App" or the "Pet Diabetes Tracker" by Merck. See a video of how to check BG in pets at www.zoetis.com under "Pet Owners".

Prognosis

Once well-regulated most diabetic dogs have a good quality of life, with limited symptoms. Their prognosis for longevity and quality of life are good as long as treatment and monitoring are consistent.

VETSULIN:

Intermediate acting insulin specifically for pets. Comes from porcine origin. Uses U40 syringes.

NPH (NOVOLIN N OR HUMULIN N):

Intermediate acting Insulin. Comes from recombinant human DNA. Uses U100 syringes.

REGULAR INSULIN

(Novolin R, Humulin R): Short acting insulin. This insulin is typically only used in hospital when managing diabetic pets.

There are also long acting insulins such as PZI and Lantus (Glargine). These are more commonly used in cats.

If you have any questions about your pet's treatment do not hesitate to call your veterinarian.