

**Less stress for you and your pet**



## **Diabetic Cats & Glargine Insulin**

### ***Starting information:***

- Glargine insulin is available with a prescription at local human pharmacies. Insulin syringes are also available for purchase at the pharmacy. Buy the 3/10cc syringes only. If there is a question, bring the purchased syringes to your veterinarian to verify that the correct unit syringes have been purchased prior to using them.
- Glargine insulin can be stored at room temperature for 30 days or can be kept refrigerated for 6 months. If your insulin is not clear in color and consistency then discard it and purchase a new vial immediately.
- Glargine insulin is given subcutaneously, which means under the skin via injection. You will receive a demonstration of how to do this by a doctor or technician, but may ask for assistance if uncomfortable initially.
- If your cat does NOT EAT, then do NOT GIVE insulin, as this may induce Hypoglycemia, which is explained below. Otherwise, if your cat is eating normally, you can continue administration normally.

\*Before beginning your cat's new Diabetic Treatment Regime, read the following information. We encourage you to call or make an appointment to have any questions that you may have answered.

### ***Background***

When a cat is diabetic, it means that their naturally occurring insulin hormones are either not being produced or not working efficiently to utilize glucose. Glucose is the main energy source of the body and controls your cat's basic metabolism. When the natural insulin is dysfunctional, you must use an artificial form to keep your cat's body functioning normally. Glargine is one of the common insulins used in cats to perform this function. Glargine is also sold at pharmacies under the trade name Lantus. Glargine is a long acting insulin, meaning that it is absorbed by your cat's body slowly over the course of the day. For this reason, the amount of Glargine insulin injected into your cat each day must be very specific to his/her individual requirements.

### ***Hypoglycemia***

An overdose of Glargine insulin can result in a dangerous condition called Hypoglycemia. When too much insulin is given to your cat, the body's glucose is unrelentingly absorbed, dropping the blood glucose levels to dangerously low levels. Hypoglycemia is the medical term literally

meaning Low Blood Glucose levels. Since Glargine is a long acting insulin and absorbed slowly, the state of Hypoglycemia can be prolonged and create serious complications.

***Symptoms of Hypoglycemia include:***

- abnormal appetite, excessive hunger or sudden disinterest
- restlessness; staggering or uncoordinated movements
- problems with vision, glassy eyed appearance
- head tilt to one side
- disorientation (crying oddly, walking in circles, sudden hiding)
- shivering, convulsions, or seizures
- drooling or vomiting

If your cat exhibits any signs of Hypoglycemia, you should immediately intervene by attempting to raise their blood glucose levels at home. To do this, you simply need to have a bottle of ***Karo Syrup, Honey, Maple Syrup, or Cake Decorating Gel*** on hand at home at all times. Each of these liquids contains a very high amount of sugar, which upon ingestion will immediately raise the blood glucose levels of your cat. To administer, dip your finger in the syrup and rub along your cat's gum line, or place a few drops under the tongue. This administration to the mucus membranes will result in the quickest absorption and does not require actual swallowing. The amount that you administer should equate to less than ½ teaspoon. Either syrup can be found for purchase in the baking aisle of your local grocery store.

***However, remember that if your cat is Hypoglycemic and you administer one of these syrups, you must still seek immediate Veterinary care!***

Call Mobile Pet Vet at 410-544-8300 immediately for a physical evaluation and subsequent treatment. Do not wait or continue to administer increased amounts of syrup without medical advice, as prolonged Hypoglycemia can result in fatal complications. If we are closed, you should call the Anne Arundel Veterinary Emergency Clinic in Annapolis at 410-224-0331 for further instructions. Subsequent hospitalization for continued treatment will likely be necessary.

- Remember: Just as your cat can develop dangerously low blood glucose, they can also develop high blood glucose if their insulin is *underdosed* or not metabolized properly for other reasons, known as Hyperglycemia. The exhibiting symptoms of **Hyperglycemia** are the same symptoms that you initially brought your cat in for, when you found out he/she was diabetic.

These symptoms include:

- \*excessive thirst
- \*excessive urination
- \*ravenous appetite
- \*weight loss
- \*dry, oily hair coat
- \*fruity, odd smelling breath

***If these symptoms occur, contact Mobile Pet Vet or the emergency clinic listed above. Do NOT administer any of the syrups if you suspect your cat is Hyperglycemic.***

## **Blood Glucose Curves**

Due to the risk of both Hypoglycemia and Hyperglycemia, it is important to maintain your newly Diabetic cat with frequent visits for Blood Glucose curves. Your doctor will have you make follow up appointments to monitor your cat's glucose levels and body metabolism. Do not feed your cat on the morning of an appointment for a Blood Glucose Curve.

We will obtain a ***Fasting Blood Glucose*** level, then feed him/her and take several blood glucose levels at various intervals throughout the day. This allows us to monitor the response to food and the body's utilization of the insulin, so that we can adjust your cat's insulin dose if needed.

## **Other Blood Tests:**

You may also be asked to schedule randomly for a technician to check blood glucose levels, depending on the responses to insulin therapy. In this instance your doctor will give you specific instructions. Always ASK if you have any questions before an appointment so that your instructions are clear and you do not improperly perform any tasks.

Another test that is routinely done every 3-6 months (or per doctor's discretion) is a ***Fructosamine Level***. Fructosamine is a protein complex found in the blood that reflects the amount of glucose present in the blood over the previous 3 to 4 weeks. This level is obtained via a blood sample, but is drawn and sent out to an outside lab for evaluation within 24-48 hours. This is a useful diagnostic test in cats especially, as they are extremely prone to "stress hyperglycemia." Some cats will show falsely high blood glucose due to increased metabolism from stress. Not every cat enjoys a visit from the vet or the subsequent blood draw. This test is thus performed as both a verification for Hyperglycemia and a maintenance evaluation of long-term blood glucose values. There are no special instructions or alterations to your insulin routine for this test and you will simply be instructed to make an appointment for the blood draw.

## **Long Term Management:**

Diabetes can be easily managed, although it may seem intimidating at first. Cats do very well with treatment once they, and you, become accustomed to a routine.

For additional information look at <http://www.petdiabetics.org> or call our office anytime.