



PET HEALTH



Diabetes

Diabetes mellitus is a condition that affects both dogs and cats and is caused by one of two things;

- A lack of production of insulin and/or
- Insulin resistance.

Insulin is a hormone secreted by the pancreas that allows the body to absorb sugar into the cells for energy production. When there is less insulin in the body or it is not allowed to work properly this leads to excessively high levels of glucose circulating in the body.

How is pet diabetes diagnosed?

Diagnosing diabetes can be a little tricky as patients can be presented as either normal or unwell.

Signs suggestive of diabetes in our pets include:

- Increased thirst and drinking more water than usual
- Increased and more frequent urination
- Change in weight
- Change in appetite



The increased thirst is caused by the increase in sugar (glucose) in the urine, dragging excess water with it, as well as the blood metabolic derangements. With the body unable to absorb sugar into the cells, protein stores and muscle are broken down and this can sometimes result in weight loss. In advanced cases of diabetes the abnormal breakdown of different metabolites in the body can lead to products called ketoacids building up. These ketoacids are toxic to the body and excessive build up can lead to a ketotic crisis state. These patients will often be very unwell with panting, vomiting, lethargy and inappetence. In these situations immediate emergency treatment is required to help stabilise these animals and this often involves hospitalisation and intensive care and treatment.

Diagnosis of diabetes is generally achieved via a simple blood and urine test to check for glucose and ketone levels. If these are very high in either sample then this is generally a good indication that a patient has diabetes.

How is pet diabetes treated?

Treatment initially varies depending on how unwell your pet is when they are presented. If your cat or dog is well, insulin therapy can generally be started as an outpatient. If your dog or cat is unwell, and in a ketotic crisis state, then more intensive treatment and admission into hospital is generally required.

Insulin is generally started at a standard dose rate and this dose can then be adjusted depending on how the patient's body responds to this level of insulin. The response to insulin is ascertained by regular glucose measurements taken throughout an 8-12 hour time period. Sometimes this day of glucose readings needs to be done several times in the initial few months of treatment to make sure the desired levels are achieved. It is important to not change the insulin amount recommended by your vet without consultation as too much insulin can sometimes be just as detrimental as not enough insulin.

The insulin dose required is administered by a needle given underneath the skin and it is a simple procedure that is well tolerated by both cats and dogs. It can take some getting used to when first starting this method of treatment and it is important to ask your vet if you have any concerns about administering this medication.

With correct and regular insulin doses diabetic dogs and cats can be well managed and live happy and full lives similar to many diabetic humans.

