

All about

DIABETES

Don't sugar coat it!

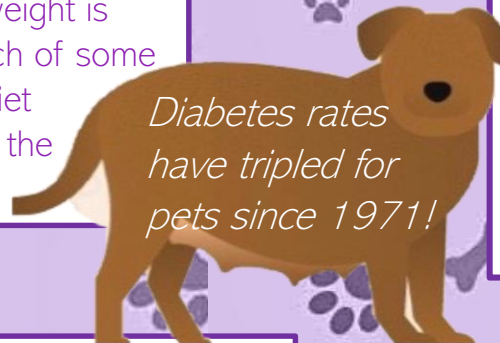
What causes Diabetes in animals?

Type I diabetes is caused from the body's own immune system attacking the pancreas, leading to the destruction of insulin producing cells. Genetics, viruses and other environmental factors can also be causes. Dogs can also develop gestational diabetes, where blood sugar levels become too high during pregnancy.

An exact cause for Type II diabetes has not been defined but being overweight is the biggest factor that puts the animal at risk, as its body secretes too much of some hormones and not enough of others. Alongside this, a high carbohydrate diet increases their blood sugar levels even further. Both these factors allow for the cells' receptors to develop resistance against the insulin.



Diabetes rates have tripled for pets since 1971!



Which animals are affected by Diabetes?

Like humans, animals of all species are also prone to get both types of diabetes. For example, cats, dogs, and horses are the most common animals to get Type 2 diabetes, which is usually caused by a poor diet and lack of exercise. Type I diabetes mostly affects dogs, especially senior dogs. Cats are more likely to develop Type II, although obese dogs and dogs on certain medications are also at risk. Male cats are more prone to developing Type II cancer, as well as cats and dogs have other diseases (e.g. Cushing's disease, cancer of the pancreas). Campbell hamsters are also commonly known to get Type 2, as their tiny bodies are unable to break down glucose as well as the other species can. Some animals that are more prone to get Type 1 include mice and rats, however not many species are likely to get Type 1.



Stress can increase your pets blood sugar levels!

What treatment is available?

As Diabetes affects many species, treatment varies for each case. Unfortunately, there is no cure, so instead a combination of treatments can be used to help the animal. There are three main methods of treating Diabetes in animals: Insulin Injections, Controlled Feeding and Controlled exercise.

- **Insulin:** Suitable for Type 1 and Type 2 diabetes if prescribed by a qualified vet and should be taken twice per day. (it is important this is at the same time with the injections 12 hours apart every day).
- **Monitoring the animals feeding and exercising habits:** Make sure they eat small amounts regularly (with little sugar) and regular exercises e.g. long walks depending on the type of animal.

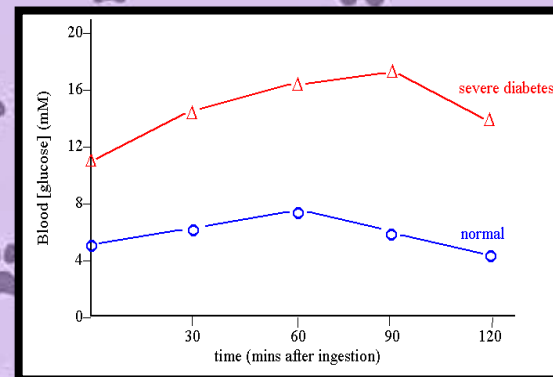
What is Diabetes?

Diabetes is a lifelong medical condition that causes blood sugar levels to become too high in an affected body.

Insulin is key to allowing glucose (sugar) from the food we eat pass from our blood stream into our body cells to convert to energy. Insulin acts as a "gatekeeper", controlling what glucose enters the cells to be processed into energy. If diabetes is present this insulin is either not made at all or not produced correctly. When either of these situations arise *hyperglycaemia* occurs, the medical term for high blood glucose levels, as the insulin is no longer doing its job correctly.

This can lead to damage of the affected body including failure of organs and tissues.

There are two types of diabetes; Type 1 and Type 2. Type I diabetes can be described as an 'insulin deficiency', where the body doesn't produce enough insulin. And Type II diabetes is where the body's cells stop responding to insulin, so no glucose is absorbed for energy conversion.



How can you prevent Diabetes?

You can't prevent Type 1, but you can prevent Type 2. For any animal, giving them the correct diet and making sure they have enough exercise each day, will mean they maintain a healthy weight, and this reduces the risk of developing Type 2 diabetes. Here are some tips:

- Spay female dogs to prevent diestrus diabetes
- Manage your pet's weight
- Plenty of exercise
- Healthy, balanced diet - as recommended by your vet
- Use a weight tape to monitor horse's weight
- Always ask your vet if you're unsure!