



## DIABETIC PETS

Your pet has been diagnosed with diabetes mellitus. Although this may have come as a shock, you will be pleased to know that it can be treated very successfully, but it does entail a significant commitment of time and effort.

### WHAT IS DIABETES?

Diabetes mellitus is a fairly common hormonal disorder, resulting from partial or total insulin deficiency. Insulin is needed to allow cells to absorb glucose. Without insulin, glucose stays in the bloodstream and the cells are effectively starved of fuel. When the blood level of glucose gets very high it overflows through the kidneys into the urine.

### WHAT ARE THE SIGNS?

If untreated, can cause diabetic ketoacidosis which is a combination of very high blood glucose and the build-up of toxins, ketones, in the bloodstream cause anorexia, vomiting leading to dehydration and, ultimately, unconsciousness and death.

### TREATMENT

Sign	Cause
Increased appetite	Cell starvation
Weight loss	Cell starvation
Increased urination	Water drawn out of body with glucose in urine
Increased thirst	Water loss
Poor coat condition	Long-term cell starvation
Generally off colour	Cell starvation and build up of toxins from abnormal metabolism
Cataracts	Abnormal sugar metabolism in the lens of the eye

Your pet will be treated by a combination of a strict feeding and exercise regime, as well as once or twice daily insulin injections. You will be taught to do this. You will also need to measure the level of glucose and ketones in the urine regularly.

Your veterinary nurse will provide you with everything you need. We will show you how to administer the correct dose of insulin and ensure that you receive plenty of continuing support. It is important not to change any feeding, exercise, or injection regimes without first discussing them with your veterinary surgeon or nurse. Likewise, you should only use the specific type of insulin prescribed by your veterinary surgeon. The veterinary surgeon and nurse will both be pleased to answer any questions you may have.

The initial phase of treatment is called **stabilisation**. During this period we give gradually increasing doses of insulin until we gain adequate control over the blood sugar level. In most cases stabilisation happens at home, but some cases are hospitalised, especially if they are ill when the diagnosis is first made. Stabilisation can take several days, but may take a few weeks. Once the patient is stable, then the **maintenance** phase is entered. The insulin dose should only need to be adjusted occasionally, and should only be altered after discussion with your vet or nurse.

Occasionally, unneutered bitches can become diabetic spaying can resolve this. Diabetes occurs because the progesterone present at certain times in the bitch's reproductive cycle can tip them over into diabetes, just as it can pregnant women. More generally, spaying a bitch leads to a more stable patient and may reduce the dose of insulin needed. Your vet or nurse will discuss this with you.

### PROBLEMS

Most cases are stabilised without complication, but various problems can arise. Most such problems require investigation by your vet in order to advise on treatment, but there is one problem, which may occur as an emergency, which every owner of a diabetic animal must be set up to handle.

**Low blood glucose (hypoglycaemia):** Insulin lowers blood glucose levels but sometimes they can drop too far.

Possible causes :-

- Too much insulin may be given by accident.
- A meal might get missed.
- The animal may be given too much exercise
- The current dose and type of insulin may not be suitable for the patient

If you are concerned that your pet is unwell and may not eat its meal, do not give the insulin injection until you have sought the advice of your vet or nurse.

Hypoglycaemia is a potentially fatal condition, so it is important to recognise the early signs :-

- Unrest
- Strange behaviour
- Shivering / muscle twitching / shaking / trembling
- Unconsciousness

## WHAT SHOULD YOU DO?

It is always safer to err on the side of caution. It would never be wrong to give some extra food or glucose if you are worried. If the animal is not hypoglycaemic, the worst this will do is upset the sugar levels for a few days, but if the animal is hypoglycaemic, then you have just saved its life!

If the animal is **conscious**, give food immediately. If your pet does not eat straight way, administer a sugar or glucose solution by mouth, using a syringe or small cup. A small amount of glucose powder dissolved in water will suffice.

If he or she is **unconscious**, rub glucose powder onto the gums: only a small amount needs to be absorbed into the blood to improve the blood sugar concentration (the total amount of sugar in a Labrador's blood is less than a teaspoonful).

It is best to keep a supply of glucose powder handy. If you have no glucose powder then sugar dissolved under the tongue is the next best thing. Golden syrup or honey can also be used. You should then telephone your veterinary surgeon straight away.

Diabetes Mellitus can be a confusing and frightening disease. However, we at House and Jackson are dedicated to ensuring that your pet receives the care that will let them lead a long and happy life. A well-controlled diabetic should be able to live as long and as actively as a normal animal.