

---

It is of even more importance to watch your cat if it has any low blood glucose episodes. These episodes may be due to less food being eaten in relation to insulin dose or incorrect insulin administration. Typical symptoms of low blood glucose are severe sudden onset lethargy, shaking, unsteadiness and even convulsions. This is life threatening. If this happens a small quantity of sugar solution or honey should be given by mouth immediately, then contact your veterinarian.

There is normally day to day variation in glucose levels so insulin levels are not usually changed on the basis of one test but rather after a series of consecutive tests called a glucose curve. The glucose curve gives a record of the high and low levels of glucose in the blood over an entire day and as such is a reasonably reliable indicator of stability. It is of even more importance to watch your cat if it has any low blood glucose episodes. These episodes may be due to less food being eaten in relation to insulin dose or incorrect insulin administration. Typical symptoms of low blood glucose are severe sudden onset lethargy, shaking, unsteadiness and even convulsions. This is life threatening. If this happens a small quantity of sugar solution or honey should be given by mouth immediately, then contact your veterinarian.

## Important points

- *Diabetes is a treatable condition, but requires a high degree of owner commitment to be successful long term.*
- *It is almost always necessary for the owner to be available and able to give insulin doses and feed twice daily every day at the same times without fail. This may greatly restrict lifestyle.*
- *Often the cats become tired of eating the same food all the time and it becomes a challenge to keep things on an even keel.*
- *It is important to keep accurate daily records or insulin doses, times, food eaten and water consumed.*
- *Regular veterinary check ups are essential for the rest of the cat's life.*
- *It is also important to be aware of the possibility of episodes of low blood glucose which may occur and have a form of glucose available to administer at any time.*
- *Constant alertness as to the cat's attitude and wellness may give early notice of an unstable condition.*

### Client information series

doyalson animal hospital  
423 Scenic Drive  
Doyalson NSW 2262

**Phone: 43 992129**

Web: [www.doyalsonvet.com.au](http://www.doyalsonvet.com.au)

---

## diabetes mellitus (sugar diabetes) in cats

---

### Client information series

doyalson animal hospital

Phone: 43992129

---

# diabetes mellitus (sugar diabetes) in Cats

Diabetes mellitus refers to the medical condition where there is an excessive quantity of sugar (glucose) in the blood. This is caused by a relative or absolute deficiency in the hormone insulin, which is secreted by the pancreas. The clinical signs of diabetes are largely due to the raised levels of glucose in the blood, and the inability of the body to utilize the glucose as an energy source due to the insulin deficiency. Diabetes is an uncommon disease in cats. It is seen most frequently in middle aged to older cats, males are more commonly affected than females. There seems to be a genetic predisposition to developing diabetes in brown Burmese cats.

**Clinical Signs:** The most common clinical signs seen in diabetic patients are an increase in the volume of urine produced, and to compensate for this, an increase in the amount of water drunk. Weight loss is a common feature, often in spite of a ravenous appetite. Sometimes recognition of these signs is delayed because of the outdoor lifestyle of most cats who will drink from puddles and pools rather than from bowls in doors. Often lethargy, weakness, loss of appetite and vomiting are the real indication that the cat is unwell. Other more uncommon

clinical signs include a peculiar hindleg stance and walk, and very occasionally, central nervous system signs of ataxia and shaking.

**Diagnosis:** The diagnosis of diabetes mellitus is made by finding the appropriate clinical signs and history together with a persistently elevated blood glucose concentration and the presence of glucose in the urine. It can be difficult sometimes to make a diagnosis of diabetes based on one single blood test, as other conditions such as decreased appetite and stress can also cause a transient rise in blood glucose. Diagnosis may require more than one blood test over a number of days, or special blood tests that average out blood glucose levels over the previous few weeks.

**Treatment:** Diabetes mellitus is a treatable condition. It is long term treatment and requires owner commitment at all times.

Initial steps in treating a cat may involve removal of predisposing causes, for instance, cats on some medications may develop diabetes as a side effect of the medication. Withdrawing the medication often leads to spontaneous improvement in the diabetes. Obese cats are prone to developing diabetes, and weight reduction can lead to improvement in clinical signs in some of these cats. If there are no apparent predisposing causes, or if the diabetic state does not improve then specific treatment is required. Most cats that require treatment will need to have insulin in the form of daily or twice daily injections.

During the initial stages of treatment, most cats are hospitalized, especially if signs of vomiting, dehydration or difficulty walking are evident. Some cats require intravenous fluids to correct fluid imbalance, antibiotics to treat secondary infections such as cystitis and determination of the

correct insulin dose for each individual cat. Once stabilized, most cats are sent home to continue treatment on an outpatient basis until the dose of insulin maintains a constant level for several weeks. The insulin injections given at home by the owner are given under the skin at the same times each day and feeding is at a given time after the injections. The procedure quickly becomes routine, however it must be consistently timed and this regulates any time owners have away from home. Diet often needs to be modified to be more highly digestible and must be kept as consistent as possible. There are several prescription diets which are successfully used in many diabetic cats.

It is important to monitor treatment to be sure everything is stable or whether adjustments in dose of insulin are required. Monitoring is done by periodic blood tests at your veterinary clinic. It is also important to keep a daily diary of insulin dose and time given, amount of food given and eaten and amount of water drunk each 24 hours. It is also good to keep a weekly record of the weight of the cat. Sometimes it is also useful to test urine daily to monitor glucose and ketones in the urine, however this is not always required and your veterinarian will tell you if you need to do this.

There is normally day to day variation in glucose levels so insulin levels are not usually changed on the basis of one test but rather after a series of consecutive tests called a glucose curve. The glucose curve gives a record of the high and low levels of glucose in the blood over an entire day and as such is a reasonably reliable indicator of stability.