

What do you know about Hyperlipaemia?

All donkey owners should be aware of the condition that is known as Hyperlipaemia as it carries a high risk of fatality even when recognised and treated promptly.

Donkeys, including miniature donkeys and small pony breeds are especially susceptible to this devastating condition, which has been recognised since the late 1960's. These types of equines are designed to live in harsh environments –deserts, moorland etc. with poor grazing and little food available. As a result they tend to put on weight and gain excess fat reserves when pastured and fed supplementary feeds. Unfortunately when these animals stop eating for any reason, this triggers the condition known as hyperlipaemia.

So what is happening in the body when this condition occurs?

When the donkey stops eating enough, the essential organs still require a food supply, so the body tries to use the energy that is stored as fat deposits. The result is that *free fatty acids* are circulated to the liver to be converted to glucose for use by the body. This system is controlled by complex hormonal events, which should shut down the amount of fat released from fat stores as the liver produces the glucose for the body.

Sadly donkeys and small ponies are not able to efficiently turn off the fat release and the blood soon fills up with excess fat in circulation. This circulating fat can be measured in the blood as *triglycerides* by your veterinary surgeon. Large amounts of fat cause the liver and kidneys to degenerate and fail, and eventually all the organs in the body fail, this results in irreversible damage and death follows soon after.

What are the causes of hyperlipaemia?

A number of risk factors have been identified as contributing to this condition. It is known that a female donkey is at higher risk than a male, especially if she is pregnant or lactating when there are high-energy demands. Overweight and obese animals are at much higher risk than those in average condition. "Stress" will cause an animal to reduce its feed intake and stress can be very variable- transport, social mixing, bad weather, loss of a companion, many things can upset a donkey!

Any underlying disease can set off the process heavy worm egg burden, dental problems, colic, choke etc.

How can I recognise if my donkey has hyperlipaemia?

You need to know your donkey well and react to any subtle behavioural changes and reduced appetite. The signs shown by hyperlipaemic animals are non-specific and include dullness, lethargy, poor appetite, rise in temperature, and weakness. Later there may be ventral oedema, and signs of liver and kidney failure such as head pressing, circling and ataxia. Lastly animals collapse and have seizures before death.

Because the signs are so vague initially donkey owners must act upon even minor signs.

What can my vet and I do to help?

You can help prevent the condition if you are aware of its importance. Do not let your donkey get over-fat, monitor feed intake carefully, especially with pregnant and lactating Jennies. Where possible avoid or minimise stressful events- provide shelter in bad weather, put rugs on old thin animals, watch when new members are introduced to the

group. **The death of a companion is very stressful; we recommend that the live companion/companions are left with the body until they show no further interest.**

If you are concerned call your vet and ask for your donkey to be examined and a blood sample to be taken.

If your donkey is diagnosed with the condition it pays to nurse them well, try a variety of delicious feedstuffs and if necessary syringe orally with glucose or even "Ready Brek" under veterinary supervision. If your donkey is very sick your vet may need to provide energy to the donkey via a stomach tube or intravenous therapy. This will be combined with anti-inflammatories and antibiotics and other medications, your donkey may require hospital treatment.

Where can I find out more?

At the Donkey Sanctuary in Devon we are used to seeing and treating a large number of cases of hyperlipaemia, if your vet would like to speak to us about the condition we are contactable at 01395-578222 or vets@thedonkeysanctuary.com. We also offer a free laboratory service for donkey blood samples and are willing to discuss results with your vet and can accept referral animals.