

FACTSHEET: OWNERS

HYPERLIPAEMIA IN DONKEYS

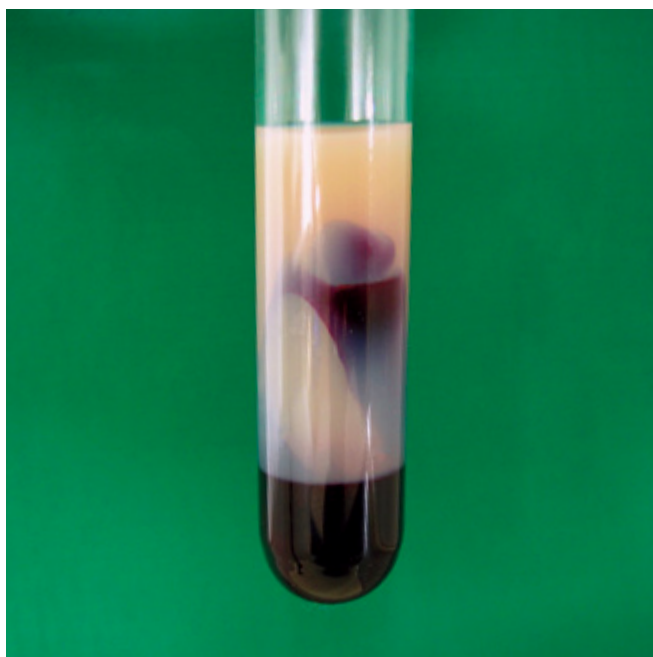
What is Hyperlipaemia?

HYPER = too much LIP(ID) = fat AEMIA = in the blood

Hyperlipaemia is a metabolic condition that occurs when donkeys stop eating or when their appetite is significantly reduced.



All donkey owners should be aware of hyperlipaemia. It is a devastating condition that carries a high risk of death, even when recognised and treated promptly.



Hyperlipaemic blood sample



Normal blood sample

Donkeys are particularly susceptible to hyperlipaemia. They have adapted to live in harsh environments with sparse, poor-quality vegetation, and would naturally walk for up to 16 hours a day in search of food. As a result, donkeys living on relatively lush pasture with limited exercise tend to gain excess fat. If these animals stop eating for any reason, hyperlipaemia may develop.

When a donkey stops eating enough to fulfil its needs, it goes into a state of 'negative energy balance'. This means it is using up more energy than it is taking in. The body requires energy for the vital organs and so it starts to break down fat, mobilising fatty acids into the blood stream. These are transported to the liver to be broken down into glucose for energy. If the release of fat continues, fatty acids build up in the blood and eventually saturate the liver and kidneys. The resulting damage to the organs will lead to organ failure and eventually death.

HYPERLIPAEMIA IN DONKEYS

WHAT CAUSES HYPERLIPAEMIA?

Any form of stress can cause a donkey to reduce its feed intake, potentially resulting in hyperlipaemia.

SOURCES OF STRESS THAT CAN CAUSE HYPERLIPAEMIA INCLUDE:

- pain
- loss of a companion
- sudden dietary change
- transportation
- social mixing
- bad weather
- sudden weight loss
- underlying illness

A number of risk factors have been identified as contributing to hyperlipaemia:

- Female donkeys are at higher risk than males, especially if they have an increased need for energy because they are pregnant or lactating.
- Overweight and obese animals are at higher risk than those in average condition, but even thin donkeys can develop hyperlipaemia.
- Donkeys that have lost significant weight in the previous weeks are at a much higher risk and should be monitored carefully. Donkeys should never be put on a sudden and strict diet.
- Any underlying disease can trigger hyperlipaemia, e.g. dental problems, colic, liver conditions or choke.

WHAT ARE THE SIGNS OF HYPERLIPAEMIA?

ALERT

A dull donkey is a veterinary emergency. Delays in treatment can reduce your donkey's chance of survival.

The signs of hyperlipaemia are very vague to begin with. The key to spotting the condition is to know how your donkey normally looks and behaves so you can identify any subtle changes.

INITIAL SIGNS OF HYPERLIPAEMIA MAY INCLUDE:

- dullness
- reduced appetite or just a lack of interest in certain foods
- bad breath (halitosis)
- reduced production of dung or mucus-covered dung

THIS MAY PROGRESS TO INCLUDE:

- excessive build-up of fluid in the body's tissues (swelling under the belly)
- signs of liver and kidney failure, such as:
 - reduced or absent urine production
 - head pressing
 - circling
 - lack of coordination (ataxia)

SIGNS IN LATER STAGES INCLUDE:

- collapse
- seizures

If the condition progresses to this stage these signs are often followed by death.

HOW CAN HYPERLIPAEMIA BE PREVENTED?



Hyperlipaemia may not occur for some time after a stressful event.

Hyperlipaemia is a very serious condition and prevention is undoubtedly better than cure. Steps you can take to reduce the risk include the following:

- Where possible avoid or minimise stressful events. Make changes slowly. Try to plan ahead and prepare or train your donkey for new situations. *See Factsheet: Travelling Donkeys for more information.*
- Do not let your donkey become overweight. Monitor feed intake carefully, especially with pregnant and lactating females. If your donkey is overweight, follow a gradual weight loss routine. *See Factsheet: Feeding and Managing the Overweight Donkey for more information.*
- Try to maintain your donkey in a healthy condition and use fibre-based supplementary rations where possible. *See Factsheet: Feeding and Managing the Underweight Donkey for more information.*
- Provide access to shelter in bad weather and provide rugs for old or thin donkeys. *See Factsheet: Caring for the Older Donkey for more information.*
- Watch closely when new members are introduced to the group. Make introductions gradually, over several days or weeks to avoid bullying and minimise stress. This is particularly important if introducing other species; donkeys are frequently bullied when living with horses, ponies or mules.
- The death of a companion is very stressful for a donkey and requires careful management. Observe the surviving donkey very closely for at least three weeks after the loss of their friend. *See Factsheet: Dealing with Death for more information.*

WHAT CAN BE DONE FOR A DONKEY WITH HYPERLIPAEMIA?

The key to dealing with hyperlipaemia is to reverse the negative energy balance before the fat released into the bloodstream has time to cause organ failure. If you suspect your donkey is unwell, you must ask your vet to visit. Hyperlipaemia can develop as the result of other medical issues so treating these promptly may help reduce the risk. In the meantime, offer your donkey some clean water to drink and most importantly encourage them to eat.

TO ENCOURAGE YOUR DONKEY TO EAT TRY:

- fresh grass
- taking your donkey to a hedgerow where it can be allowed access to non-poisonous plants
- grated apple or carrot
- ginger biscuits
- any other foodstuff you know your donkey enjoys – this is one time when sweet treats may be called for

To test for hyperlipaemia your vet may take a blood sample to check for visible fat in the serum. If your donkey will not eat they may need to be fed liquid food via a tube, passed up their nose and into their stomach. In severe cases your donkey may require an intravenous fluid drip. Depending on the cause of the hyperlipaemia, your vet may give anti-inflammatory or antibiotic medication.

If your donkey needs to be hospitalised their companion must go too. This is to avoid separation stress for either donkey. It is a good idea to have sufficient insurance to cover this possibility.