ADVICE ON
Prevention and Management of Laminitis
WHAT ARE LAMINITIS, FOUNDER AND SINKERS?

The distal phalanx (coffin bone) is suspended in the horse’s hoof because of the bond between the dermal and epidermal (sensitive and insensitive) laminae. Laminitis is an extremely painful condition which puts this attachment at risk. If sufficient inter-laminar bonds are destroyed the animal becomes ‘Foundered’; without the correct attachment within the hoof, the weight of the horse combined with movement, forces the pedal bone to move within the hoof. A ‘Sinker’ is an animal whose foot has suffered complete destruction of the inter-laminar bonding and the pedal bone is totally loose within the hoof.

WHO IS AT RISK?

Laminitis is second only to pus in the foot as the most common cause of lameness in this country today. Many people still associate laminitis with fat little ponies going lame after gorging on lush spring grass. The truth is laminitis is a serious and very painful condition that can affect any type of horse, pony or donkey any time of the year. The disease has no respect for the breed, age, type or value of the animal. Hundreds of horse owners in the UK are living with laminitis and even the mildest of cases can cause immense anxiety but did you know that an estimated 80% of cases could be prevented with correct management? Knowing the triggering factors, early signs and what to do if you think your horse, pony or donkey has laminitis can help you firstly prevent laminitis and secondly deal effectively with the early stages.

TRIGGERING FACTORS

The causes of laminitis are still under investigation but there are numerous factors which appear to be involved in triggering an attack. Mechanical trauma can trigger laminitis, such as fast or prolonged work on hard surfaces, inadequate fitness or non-weight bearing lameness, whereby the contra-lateral limb may founder. The administration of corticosteroid drugs to susceptible or stressed animals can induce laminitis. We are also seeing an increased number of cases relating to Cushings Disease even in younger animals but obesity and over eating still remain the number once cause of laminitis in this country. Fat animals at anytime of the year fall into the high-risk category for developing laminitis; fat animals heading towards spring are walking a very fine tightrope.
EARLY WARNING SIGNS

Animals suffering from laminitis show an increased strength in their digital pulses and will characteristically stand on their heels in order to take the weight off their painful toes. It's important to note however that by the time the animal is showing the classical laminitis stance, damage has already occurred to the laminae. This is not the initial 'warning sign' of laminitis; action must be taken long before this point.

Many owners report that prior to the laminitis diagnosis their horse was 'just not right'. As with many other ailments, knowing your horse and how they behave when in good health will help sound the alarm bells when something is wrong.

Although many animals with laminitis have 'heat' in their feet, this is not a reliable diagnostic indicator, as foot temperature tends to vary throughout the day. Laminitis does not just affect the front feet. Only the hind feet may be involved or indeed it may only affect one foot.

Other signs may include:
- Reluctance to move, Lying down
- Altered character to the digital pulses
- Lameness, stiffness, foot sore, general change in gait
- Shifting of weight, Restlessness
- Sweating and blowing, may appear colicky
- Pus in the foot

ACT QUICKLY

Once the process has started it requires emergency action to prevent the cascade of metabolic events that can result in permanent and severe damage to the horse's foot. Even for those horses treated quickly enough, the animal may face a long and painful period of rehabilitation and may be prone to further episodes.

PREVENTION

Prompt action can help reduce the severity of this painful condition. Laminitis should be treated with the same urgency as colic - do not wait 'for the next farrier visit' before seeking veterinary help.
- Remove or treat the cause
- Provide the animal with a deep bed (ideally shavings as these are the most cushioning) and allow it to lie down if it wants to
- Never force the animal to walk
- Standing in streams or cold hosing may appear to offer temporary relief but prolonged cold will exacerbate vasoconstriction and reduce the already weakened blood flow - it is therefore not recommended once the animal shows lameness
- Fit properly designed frog supports immediately

Although the exact cause of laminitis is unknown, current research still points to the excessive intake of soluble carbohydrate (sugar, starch and fructan) as the nutritional trigger for laminitis. Therefore, it can not be stressed enough that limiting grazing and feeding a high fibre, low starch compound are the safest ways to manage horses and ponies at risk from the condition.
**DO:**

✓ Call the vet straight away if laminitis is suspected; laminitis should always be treated as an emergency.

✓ If your horse or pony has laminitis remove him from any grazing and confine him to a deeply bedded stable and follow veterinary advice.

✓ Make sure his diet is high in fibre and low in sugar, starch and fructan. Most working ponies do not need the various cereal mixes available on the market. They are able to work well on a balanced high fibre diet.

✓ Feed clean, low nutritive value hay in addition to any required laminitis trust approved feed.

✓ Use sheep to graze down spring and autumn grass. Alternatively, use a specially designed muzzle to prevent excessive grazing.

✓ If your horse or pony is overweight put him on an appropriate calorie controlled diet and exercise programme.

✓ Clean water should be freely available at all times.

**DO NOT:**

x Feed cereal or cereal mixes to a horse or pony susceptible to or with laminitis. These feeds are relatively high in soluble carbohydrates.

x Allow the horse or pony to become overweight. Signs of fat deposits on the crest and quarters signal a potential problem.

x Starve a horse or pony that is overweight, this may lead to a serious condition called hyperlipidaemia.

**FEEDING THE HORSE OR PONY PRONE TO LAMINITIS**

The Laminitis Trust has an approval scheme for feeds which can be used in the nutritional management of horses and ponies prone to laminitis. At the present time the feeds which have Laminitis Trust approval include, SPILLERS® High Fibre Cubes or SPILLERS HAPPY Hoof and Masham Micronized Feeds® Speedi-Beet.

Below are some simple feeding dos and don’ts to follow;

**PREVENTION**

Prevent laminitis by avoiding high risk situations. Obesity and a high calorie diet are the most common of these leading to insulin resistance, diabetes and Cushing’s disease. Learn how to condition score your animal and monitor its weight. Know what a healthy animal looks like; avoid feeding for added ‘condition’, manage for fitness not fatness. Restrict grazing if necessary or use a grazing muzzle and only feed Laminitis Trust Approved Feeds.

Research shows that nearly every week a horse, pony or donkey in the UK dies as a result of laminitis. Help make up the numbers and become one of the 80% of prevented cases.