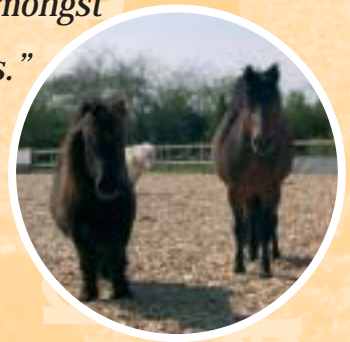


# Laminitis...

## Cause and Effect



*“One of the major issues which affects the number of laminitis cases in this country is lack of knowledge and awareness amongst horse owners.”*



*The Charity's purpose is to provide and promote the welfare, care and protection of horses, ponies, donkeys and mules.*

# Redwings Welfare



**Healthy Pedal Bone (left)**  
*This x-ray shows a healthy pedal bone, with the front of the bone parallel with the angle of the hoof wall.*

**Laminitic X-ray (far left).**  
*This x-ray shows the movement of the pedal bone within the foot, demonstrating severe laminitis damage.*

Laminitis is a devastating disease. It can cause damage that may affect a sufferer for the rest of its life. Laminitis is most commonly associated with overweight equines or episodes of binge eating, though there are many other factors which can increase the risk.

One of the major issues which affects the number of laminitis cases in this country is lack of knowledge and awareness amongst horse owners. It is vital that people understand the seriousness of the disease and are aware of the symptoms, even if their equine has not experienced laminitis before.

## What is Laminitis?

Laminitis affects delicate tissues, called the laminae, in the hoof. They hold the hoof wall and the bone at the bottom of the foot together. When laminitis strikes, the laminae swell causing pressure inside the hoof and extreme pain. If the condition persists, the laminae can start to weaken and die. As they do so, they can no longer hold the hoof and pedal bone together and the bone begins to

shift within the hoof, causing permanent damage to the whole foot.

## What causes Laminitis?

There are many circumstances which can lead to the onset of laminitis, but by far the most common is obesity. The exact process by which overeating leads to laminitis is not yet fully understood, but there is no doubt at all that overweight equines are much more prone to the condition.

Laminitis can also be caused by hormonal imbalance, particularly that associated with 'Cushings Syndrome' which is usually caused by a tumour of the pituitary gland.

An attack may also follow a sudden carbohydrate overload, usually the result of an unauthorised visit to the feedroom! Equines that are fed a high level of carbohydrate as standard are also more vulnerable to laminitis.

Toxins in the bloodstream, from an infection or retained afterbirth for example, can be responsible for triggering laminitis. Drugs containing steroids can also cause an

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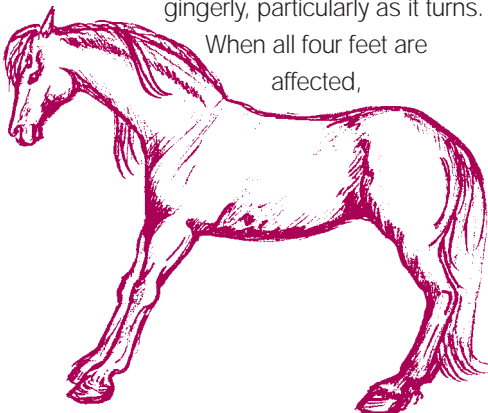
attack and should only be used under strict guidance from a vet. In such cases, treatment is made complicated by the fact that laminitis is a secondary problem and needs to be addressed alongside the primary condition which triggered it.

Trauma to the foot, such as that caused by overwork or carrying excess weight, affects the strength of the hoof structures and makes an equine more likely to suffer from laminitis. In cases where a leg is carrying more body weight because of lameness in other limbs, laminitis in just that one foot can occur. Again this results in the need for two concurrent treatments.

## How do I recognise it?

Laminitis usually affects an equine's front feet to a greater and more noticeable extent. To relieve the pain, an animal will often lean back so that the heels and hind feet take as much bodyweight as possible (as shown below). A laminitic equine will also be footsore, placing its painful feet very gingerly, particularly as it turns.

When all four feet are affected,



the animal can become 'rooted', finding it too painful to take a single step, or it may lie down for hours at a time.

## How do I treat it?

Laminitis is a potentially life threatening condition. If you suspect even mild symptoms it is vital to call a vet immediately. Damaged laminae may never function again and those that do will be far less effective. Any movement of the pedal bone is irreversible. With early diagnosis and treatment, however, permanent pain and damage to the foot can often be avoided.

A severe case of laminitis will affect the way the hoof grows for the rest of the equine's life. The toe grows slower than the heels leading to a 'slipper' shape if not trimmed regularly. It is essential to use an experienced farrier who can use specialist trimming and shoeing techniques to keep bringing the foot back into balance.

## Can I prevent it?

Never think that laminitis is something that can't or won't affect your equine. It can strike any horse, pony or donkey at any time. The



*Severe laminitis causes permanent distortion to hoof growth. This overgrown hoof is pushed forward and up as a result of irreversible laminitis damage.*



*Strip grazing can be an effective way of controlling grass intake for overweight equines or those prone to weight gain.*

best way to reduce the risk of laminitis is to be vigilant by not allowing an equine to become overweight. Restricted rations may seem hard for an ever hungry equine, but the excruciating pain of laminitis is far worse. If you think your equine is overweight, consult a veterinary surgeon or nutritional specialist for advice on how to establish a safe and effective weight-loss programme as dieting carries its own health risks. Donkeys in particular can be fatally affected by change to their feed routine and should only be dieted with professional guidance. The key is to feed a balanced, nutritious diet in sensible, controlled amounts.

It is also important to prevent binge eating. Both laminitis and colic can easily be triggered by sudden increases in the amount of food in an equine's digestive system. Monitor a horse, pony or donkey's gait everyday, particularly on a turn, to make sure it is not showing early signs of pain or reluctance to move.

Some equines will suffer laminitis however carefully they are managed, but owners who make no effort to protect their animals and do not seek veterinary treatment once symptoms become obvious are guilty of neglect and in severe cases can even be prosecuted for causing unnecessary suffering.

#### **Remember:**

- Laminitis is a serious condition.
- Allowing any equine to become overweight is irresponsible.
- Dieting should be undertaken with guidance and as a long term project.
- Be aware of the symptoms of laminitis and vigilant in watching out for them.
- If you suspect even a slight case of laminitis, call a vet immediately.
- The damage caused by laminitis makes the hoof vulnerable to more attacks in the future.

# Redwings Welfare Contacts

The following are useful sources of further information:

## **The Laminitis Trust**

Mead House Farm  
Dauntsey  
Chippenham  
Wiltshire SN15 4JA  
[www.laminitis.org](http://www.laminitis.org)

## **'Explaining Laminitis and Its Prevention'**

by Robert Eustace (Arrowsmith)

## **'All About Laminitis'** by Karen Coumbe

(Allen Photographic Guide No. 4)

## **The Farriers Registration Council**

Sefton House  
Newark Road  
Peterborough  
PE15PP  
01733 319911  
[www.farrier-reg.gov.uk](http://www.farrier-reg.gov.uk)

## **British Equine Veterinary Association**

Wakefield House  
46 High Street  
Sawston  
Cambridge CB2 4BG  
01223 836970  
[www.beva.org.uk](http://www.beva.org.uk)

## **Spillers Feeds**

Feed Mill  
Old Wolverton  
Milton Keynes  
MK12 5PZ  
Helpline: 01908 222888  
[www.spillers-feeds.com](http://www.spillers-feeds.com)

## **Redwings Horse Sanctuary**

Hapton  
Norwich  
NR15 1SP  
Horse Care and Welfare 01508 481008  
General Enquiries 01508 481000  
[www.redwings.co.uk](http://www.redwings.co.uk)

# Redwings Welfare Information

Redwings' Welfare Team is proactive in the promotion of equine care and welfare, believing that access to accurate and up-to-date information is vital if owners and carers are to meet the needs of their animal.

Redwings' welfare leaflets are designed to provide an overview of many important issues which are encountered regularly in welfare cases with which the Sanctuary is involved. The series includes information on the following topics:

- **Laminitis**
- **Hoof Care and Farriery**
- **Worms and De-worming**
- **Food, Digestion and Energy**
- **Veteran Horses and Retirement**
- **Horse Psychology**
- **Donkeys**
- **Equine Welfare and the Law**

To request copies of leaflets or to speak to one of the team about any equine welfare issues, please feel free to contact the department by post, phone or email.

## **The Welfare Team**

Redwings Horse Sanctuary  
Hapton  
Norwich  
NR15 1SP

Tel: 01508 481008 (8.30am - 5pm, Monday to Friday)

Email: [info@redwings.co.uk](mailto:info@redwings.co.uk)



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