



A GUIDE TO: **FEEDING AN OVERWEIGHT HORSE**



Professional



Caring

WEIGHING HAY

It is important that you **WEIGH** your pony/horses hay nets and **DO NOT** go off the size of the net or number of slices! Digital luggage weigh scales are ideal and are not expensive.

SOAKING HAY

Hay should be soaked for a minimum of 3 hrs (3-12hrs) in plenty of cold or lukewarm water out of direct sunlight. This allows a significant percentage of the sugars it contains to leach out into the water. Do not soak in a bucket the same size as the hay net. It needs to be soaked in a bath or large container.

If soaking hay is not possible, you can feed a low sugar/starch chop hay replacer, such as TopSpec TopChop Lite, which contains no more than 3% sugar and starch combined. Research has shown this is more effective than feeding non soaked hay.

Because we are soaking hay and your horse/pony is not eating any grass it is vital that we feed a broad spectrum supplement to enable tissue repair and maintenance to take place. An example balancer commonly recommended is TopSpec AntiLam.

WEIGH TAPES

Weigh tapes can be used but it is important to note they are not accurate at giving a weight they should be used to monitor progress. Regular use of weigh tapes (2-3 times a week), and recording measurements are really useful for tracking progress. It is really helpful to speak to a nutritionist to have a diet plan created specifically for your horse/pony. The main factor in feeding laminitics is to minimise the levels of sugar and starch in the diet, but provide ample fibre.

FEEDING HAY & HAYLAGE

Feed restriction means that overweight horses and ponies might inevitably spend some time without anything to eat. To keep your horse eating as long as possible we would recommend feeding in small holed hay nets and, or if you do not have this using one hay net inside another, to make your horse work really hard for forage. If using a chopped fibre feed, feed in a large rubber bucket and put a football on top so that your horse has to manipulate to get to the feed. If your horse is a playful character, hanging up vegetables or chopping and putting in a foraging ball can also help to keep them entertained.



FEEDING AN OVERWEIGHT HORSE

To manage weight loss in an overweight horse feed to to the **IDEAL BODY** weight for their height/ breed. If you are unsure please ask us today. The below chart shows the weight of **DRY HAY** that should be fed to manage controlled weight loss; 1.5% of ideal body weight is advised for weight loss in horses.

IDEAL BODY WEIGHT	1.5%	2.0%
100kg	1.50kg	2.00kg
150kg	2.25kg	3.00kg
200kg	3.00kg	4.00kg
250kg	3.75kg	5.00kg
300kg	4.50kg	6.00kg
350kg	5.25kg	7.00kg
400kg	6.00kg	8.00kg
450kg	6.75kg	9.00kg
500kg	7.50kg	10.00kg
550kg	8.25kg	11.00kg
600kg	9.00kg	12.00kg
650kg	9.75kg	13.00kg



AVOID THOSE LITTLE EXTRAS

Does your horse really need that little bit of mix or cubes?

Chances are that, if you are feeding by the scoop, this is where 'portion distortion' can really come into play as the amount you give steadily creeps up. If you are the owner of an overweight horse or pony, it is important to think about what these little extras really provide and honestly assess whether you need to add them.

Generally, these 'sprinkles' of mixes or cubes are added because we feel that they make a meal more interesting and your horse finds them tasty. However, these extras provide quite a few calories and don't last very long. From a horse's perspective, it is far better to provide something that encourages longer chewing time, both for behavioural and digestive health.

One of the additional problems of feeding just a sprinkle of mix or cubes is that your horse will be missing out on valuable vitamins and minerals that these feeds would provide when fed at the recommended quantity.

One alternative to make your horse's feed appear more interesting and provide valuable vitamins and minerals without excessive calories would be to use a feed balancer.

HAYLAGE

If your yard provides haylage as the sole forage source, you need to think of a suitable alternative if your horse is a good doer. One option would be to replace a proportion of haylage with a much lower-calorie fibre source such as good-quality oat or barley straw if available. Alternatively we would recommend using feeds such as **TopSpec TopChop Lite** which can be used to replace forage partially or totally in a good doers diet.

FEED LITTLE AND OFTEN

There are several things you can do to try and reduce the risk of these problems occurring. The most important are the basic rules of feeding. We all think that feeding little and often just relates to the concentrate ration but with good doers it applies to the forage as well. For example, if your horse is a good doer and you put all it's hay in at 4pm and then don't return until 8am the next morning, the chances are that your horse will spend from 4.30pm until 8am without anything at all. This is really too long to be without some source of fibre and so if you know someone goes to the yard much later, ask them to put a haynet in when they leave. If there really isn't anyone else to help then try and put the hay in small holed nets, put several nets inside one another and put several nets around the stable so it takes as long as possible for your horse to extract the hay.

EQUINE METABOLIC SYNDROME

Equine Metabolic Syndrome (EMS) can affect any horse, but it is more commonly seen in overweight animals. Equine obesity is a major issue with around 50% of pleasure horses, ponies and donkeys having a body condition score of 4 or above. EMS is not a new condition but the term Equine metabolic syndrome has been used in the last 10 years to describe a common syndrome of obesity and predisposition to laminitis that affects horses and in particular ponies. The condition shares similarities with the human condition and Type II diabetes. The prevalence of EMS in our horse and pony population is around 25%.

WHAT CAUSES EMS?

An abnormal/reduced response to insulin (insulin resistance) is the key issue in EMS. Other contributing metabolic derangements include altered energy metabolism, changes in fat composition, clotting disorders, inflammation and damage to blood vessels. It is the blood vessels in horse's feet that are thought to be VERY susceptible to these metabolic changes subsequently giving rise to LAMINITIS. The precise mechanisms of how insulin resistance results in laminitis is complex and not fully understood.

IMPORTANCE OF INSULIN?

Insulin controls the glucose levels in the blood. When insulin resistance occurs the relationship between glucose and insulin is changed.

WHAT BREEDS ARE MOST AT RISK?

There are some breeds that are recognised to be at greater risk of EMS. These include native breeds such as; Welsh, Dartmoor and Shetland ponies, but also Morgan, Arabian and Warmblood horses. It is important to remember ANY breed can be affected if management and diet are inappropriate.

CLINICAL SIGNS

OBESITY: Is the classical sign of EMS and is often the only clinical sign present. It might be generalised or localised and commonly seen as regional fat deposits around the eye, surrounding the nuchal ligament in the neck "cresty neck". Behind the shoulder and in the prepuce or mammary gland region.

LAMINITIS current or previous laminitis. **LETHARGY AND REDUCED FERTILITY**

It is really important to understand the difference between EMS and equine Cushings

- EMS horses are typically young or middle aged while horses with PPID (equine Cushings) tend to be 15 years and above.
- Horses with PPID have specific clinical signs not seen with EMS. Such as, Hirsutism = curly coat, sweating and lethargy, weight loss from muscle wasting, Increased drinking and urine production, increased susceptibility to infection and poor wound healing

DIAGNOSIS

The suspicion of EMS is based on clinical signs. To confirm the diagnosis of EMS insulin resistance has to be identified. There are different ways your vet is able to test for EMS.

RESTING INSULIN LEVEL

- This is a single blood sample taken to assess insulin and glucose concentrations. The blood sample is taken after starving for > 6 hours. Often taken first thing in the morning after been starved the night before.
- A normal level does not exclude EMS. Some horses with EMS may have a normal level of insulin therefore making this test unreliable.

An oral Glucose challenge test

- This test is used to assess the insulin response to a meal of glucose and is therefore more accurate than a single blood test.

EQUINE METABOLIC SYNDROME

•Horse is starved overnight, feed glucose and then 2 hours later your vet takes a blood sample.

PREVENTION AND TREATMENT

DIETARY RESTRICTION AND EXERCISE ARE KEY!

Its really important to remember that EMS is a potentially reversible condition provided that permanent management changes are implicated. If your vet suspects or has confirmed your horse has EMS, then they may advise starting a diet to encourage long term weight loss. If your horse has EMS, then treatment is primarily diet and exercise so you may not need any medication at all!

DIET

- Low in soluble sugars and starches. In many cases feeding forage with a high fibre and low sugar level ONLY
- Most native breeds do not require hard feed to maintain condition
- Access to pasture should be limited and avoided when grass is lush and growing. Some horses with EMS may not be able to tolerate any access to pasture
- Important that horses get all their essential vitamins and minerals, if soaking hay, it is advised to feed a low-calorie balancer (e.g. TopSpec AntiLam)
- Please see weight loss sheet for more information

EXERCISE

- Where possible (laminitis permitting), the horse should be exercised. This can be done via ridden work, lunging or in hand walking.

In humans with metabolic syndrome there are a number of drugs that are used to increase insulin sensitivity. These have been tried in horses but results are mixed. Metformin is one such drug that is popular in the UK used to assist in weight loss. It is a useful drug that can be used when exercise is not possible.

Please talk to one of vets for any further information of EMS or for any advice on diet and or exercise programmes if you feel like your horse/pony could be at risk.

