

Foreword

A killer disease is quietly spreading through the horse population of the United Kingdom. It has fatal consequences and causes severe, debilitating and painful symptoms. Next to colic it causes the most equine fatalities of any equine disease in the UK – yet it is 100% preventable.

The disease is obesity.



Richard Stephenson BVMS, Cert VR, Cert EP, MRCVS Pool House Veterinary Clinic



Could you tell if your horse was fat?

Not sure? You are not alone! Most people find it really hard to objectively assess or criticise their own animal.

This guide is designed to help you decide if your horse is in danger from being overweight and then give you the help you need to bring your horse back to good health.



"Obesity is a silent killer. There are thousands of horses and ponies suffering in the UK as a result of a worrying lack of knowledge from horse owners. We are a country of horsemen, help us put a stop to equine obesity."

Harry Meade



"In dressage, as with most equestrian sports, it's so important to have a fit and correctly-muscled horse. But many owners get confused about the visual differences between good muscle tone and fat. I'm delighted that Blue Cross is helping to educate people about the serious issue of equine obesity. Trim horses are often healthier, live longer, and find it much easier to perform at their best."

Carl Hester

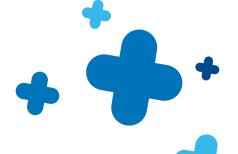


"Too much food and too little exercise is no good for people or horses. Keeping your horse or pony in the best condition for the job, whether it's hacking or competing, is part of the pleasure of horse ownership. Health and fitness are the backbones of responsible horse care and should be every rider's priority. Fat Horse Slim is an excellent source of practical tips for all horse owners."

Mary King







Fat Horse Slim

Contents

Chapter	Page
1 The increasing problem of equine obesity Why this is happening to horses in the UK	4-5
2 How to tell if your horse is a healthy weight Practical tools to help you assess your horse	6-10
3 Red alert – the obese horse: a serious health risk Diet, exercise and management for the 'Red' horse	11-15
4 Amber warning – the overweight horse: action needed Diet, exercise and management for the 'Amber' horse Tips to help with the different seasons	16-19
5 Green, your goal – the horse at a healthy weight and how to maintain it Diet, exercise and management to keep your horse healthy How other people have done it	20-23
6 Trouble-shooting – common problems and solutions	24-25
Glossary of terms Explanation of terms highlighted in purple when written within text	26
Further sources of information	27

For simplicity, throughout this booklet we refer to 'the horse' and 'he', however these terms should be taken to include ponies, cobs and mares.

The increasing problem of equine obesity

Being overweight is one of the most serious problems a horse can have. As well as the increased risk of arthritis, heart disease and lung problems, it is directly linked to laminitis and hyperlipaemia (fat in the bloodstream). Many equine vets recognise laminitis to be one of the most common causes of euthanasia in their practices. Veterinary medicine has made huge leaps in terms of diagnosis, yet cures for many common diseases still evade us. Our responsibility to the horse is to prevent these diseases where we can – and excess weight in horses is certainly within our control.

Why is this problem increasing?

Before domestication horses lived on extensive areas as opportunistic grazers, much as zebras still do today. Unlike most domesticated horses, in a wild herd a horse is either

Did you know?

Research has shown that people cannot see that their own children are overweight – until they are shown a picture of the same child with another face superimposed on it. Are you the same with your horse?

growing, pregnant and/or has a foal at foot, while stallions work very hard to mate with mares and protect the herd. Their main protection from predators is keeping on the move and rapid flight from danger – all needing a lot of energy. As such, they evolved to become efficient converters of low energy foods; we still see this in our native breeds which survive very well in barren, desolate landscapes.

The wild horse is designed to eat large amounts of grass during the summer when forage is plentiful and convert this to fat. This is in order to survive the lean period during the winter when there is no grass growth. Normally a wild



Wild horses in their natural environment (© iStockphoto.com/Linda Mirrol



A far cry from the life this native pony was designed for

horse would start the winter fat (body score four or over, see chapter 2) but by the spring will have lost weight and may be quite thin (body score two or under), ready to start putting weight back on. The whole metabolism of the horse is designed around this annual fluctuation in weight.

Today, most horses don't lose much weight in the winter yet the metabolic mechanisms that have developed over millions of years of evolution still operate. The Shetland pony for example, can thrive on the cold, windswept Shetland Isles. It is no surprise then, when given access to lush dairy pasture, that horses with native genes become obese and laminitic. Today we have fat horses entering the winter whose bodies are preparing for starvation yet the 'lean' period never arrives – indeed winter feeding and rugging means that in many cases horses continue putting on weight at a time when their bodies are designed to be losing it. The confusion that results contributes to an unfortunate trilogy of undesirable events often called equine metabolic syndrome: obesity, insulin resistance and increased circulating cortisol which can, in many cases, spark off a serious bout of laminitis.



Imagine this landscape in the winter (© iStockphoto.com/Luisa Azzolini)

Modern pasture

Grassland in the UK has changed along with modern agriculture. Ancient natural meadows are now rare; today's grazing is mostly scientifically developed ryegrass varieties. Modern ryegrasses were designed to quickly fatten cattle and sheep. They are not ideal for most horses due to their high sugar and low fibre content. As a result most horses that are not breeding need to have their grazing restricted during the growing season.



Modern ryegrass (© MAS Seeds)

Are you ready to really look at your horse?

To succeed in maintaining your horse at a healthy weight, you will need:

- Blue Cross Fat Horse Slim guide
- a body score chart
- a weigh-tape
- a progress chart

It will help if you can also:

- work with a partner or team
- be objective; that means taking off your rose-tinted spectacles
- remain focused on your goal of a healthier horse

Let's get started!

How to tell if your horse is a healthy weight

In order to maintain a healthy body weight all horses should be managed with a combination of the right diet, good health care and regular, suitable exercise (even if they are not in ridden work). This is particularly important for those horses which gain weight easily – the so-called 'good doers'. It is very difficult to know in advance the ideal weight for any horse. The chart below gives a guide, but there are so many variations of height and type, with muscle bulk and bone density making a difference too, it can only be a guide.

Horse approximate weight guide – in kilograms

Height In hands	Pony	Cob	Thoroughbred lightweight	Sport Horse middleweight	Draught heavyweight
10	170-200				
11	200-240				
12	230-260				
12.2	250-310				
13	250-340				
13.2	280-380				
14	320-380	360-450			
14.2	350-400	380-480			
15		470-530	400-470	450-500	
15.2		500-580	440-500	470-520	
16			480-560	560-630	630-680
16.2			520-590	590-650	650-720

The Animal Welfare Act 2006

...states that the person responsible for an animal either permanently or temporarily has a duty to ensure welfare. Section 9 breaks this down further to include the 'duty to provide a suitable diet'.

Therefore it is possible that a person may be breaking the law by not providing the right diet, which would include overfeeding as much as starving an animal.

To be sure that your horse is within a healthy weight range however, you need more tools.

Tools for assessing weight and condition Weighbridge

This is the only truly accurate method to measure a horse's weight, for most people it is not an option, but if you can use one it is worth it. You can then be totally accurate with wormer and feed calculations.

Weigh-tape

In the absence of a weighbridge, a weigh-tape is an essential tool to keep in your tack box. They are cheap to buy and used regularly will help you monitor weight gain and loss, and to be more accurate with feeding and medication. The weigh-tape is used around the horse's girth, where a roller would normally fit.



Weigh-taping

Remember to follow the instructions carefully, use the same make of tape and keep a record of the readings.

If more than one person is using the tape, make sure you are using it in the same way, at the same time of day and in the same place each time.

The formula

Slightly more accurate than a weigh-tape is a calculation where you measure your horse with a tape measure (in inches), and work out the weight using a formula. The formula was developed at Texas University.

The calculation is (heartgirth x heartgirth) x body length \div by 330. This gives the weight of the horse in pounds (lbs).

The heartgirth measurement: Take a measuring tape and measure all the way around the horse's girth from the highest point of the wither going to just behind the elbows.

The body length: Measure from the point of shoulder in a straight line around to the point of buttock on one side.



Measuring for the weight formula

The result is in lbs (you can divide this by 2.2 to get kilograms).

However accurate the weight measurements are they cannot tell you if that weight is right for your horse. For that you need body scoring.

Body scoring

For most horse owners, this is the most practical method of assessing a horse's weight. Done correctly it is accurate, and it works for every type of horse. Body scoring can help you maintain your horse at a healthy weight.

It is essential that every horse's physical body condition is monitored often, either fortnightly or monthly. With practice you will notice small changes early and react quickly. While just looking at the horse can give you a lot of information, even the most experienced observer can be misled by appearance; for example winter coat can cover the actual body shape. To be really accurate you must get your hands onto the horse and FEEL for fat cover.



Body scoring

There are several different names for this system: condition scoring, fat scoring and body scoring, and thankfully these are all about the same in how they score. Some use a 0-9 system but the most commonly used systems in the UK are based on one produced by Carrol and Huntingdon and use scores from 0-5.

- **0** is emaciated this horse would barely be alive.
- **5** is an obese horse with significant health risks.
- **3** is generally agreed to be a healthy weight.

Half scores are used for greater accuracy, and so **2.5 - 3.5** gives a healthy range for most horses.

Unfortunately there are many horses that are way over score 5, like Jim, our case study in the Red chapter; he would have been a 7. Once a horse is a 5 it is obese; a dangerous condition. This danger only increases the fatter a horse becomes.

Fat Horse Slim uses the term 'body scoring' because the word 'condition' can mean different things to different people – sometimes it is used to describe muscle bulk, which is a different thing altogether.

For example a horse without much muscle bulk, especially on its topline, may look angular, bony and not very pleasing to the eye, but can still be a healthy weight. Similarly not many horses have perfect conformation; they may have a long, weak back for example. It is not a good solution to cover up a lack of muscle or poor conformation with fat, even if at first glance it might make the horse 'look better'. We need to get better at judging true health rather than being taken in by a sleek and rounded appearance.

Did you know?

For every kilogram of fat that you can see on the outside of your horse, there is another on the inside, around his organs. When a horse loses weight the internal fat is lost first. So don't despair if you cannot SEE much difference – keep weigh-taping and keep going.

How to body score your horse

Familiarise yourself with the body scoring chart and diagrams that follow, then with bare hands try to honestly and objectively score your horse.

It is easiest to split the horse into three areas:

- 1. The neck and shoulders.
- 2. The middle.
- 3. The quarters.

Many horses carry their fat unevenly on their bodies, so you will often have to average the scores of the different areas.

For example, you may see a horse that looks 'ribby' but is actually overweight because it carries a lot of fat on its neck and quarters.

Research is still being carried out to determine if fat in some areas of the horse is more dangerous than in others, but we do know that there is a real link between crest fat and a likelihood of laminitis.

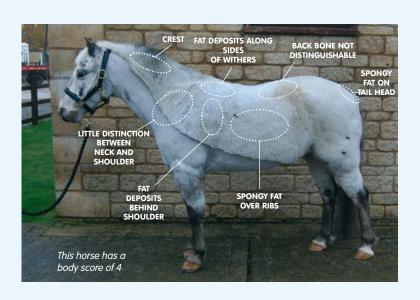
What to look and feel for:

- 1. Fat forming a crest and thickening the neck; you should be able to see muscles and feel where the bones are.
- 2. Fat covering the withers and backbone (the spinous processes of the spine). There should be barely any you should be able to feel the bones underneath a supple covering of skin. Fat will build up either side of the spine until it is higher than the spine itself creating a 'gutter'.
- 3. Fat behind the shoulder and where the shoulder blends into the neck. There should be clear definition around the shoulder blade; fat will fill in the hollow in front of the shoulder and build up a pad behind the shoulder.
- 4. Fat over the ribs there should be a little fat between the ribs but not over them. This way you can feel but not see them.
- 5. The definition of the bony points of the pelvis (croup and point of hip) a healthy layer of fat under the skin will not cover up the bones; you should be able to see where they are and certainly feel them.
- 6. From behind the quarters should slope down away from the croup. An 'M' shape with a gutter along the backbone will be due to a large layer of fat. Fat builds up on the inner thighs too lift up the tail to look.

Fat will feel spongy under your fingers and muscle more firm. Try on yourself or a friend. Dangerous crest fat will harden when it has been there for a while and often rocks from side to side when the horse walks.

Where to look for fat building up:

- The neck, especially the 'crest' just under the mane.
- 2. The withers and backbone; along either side.
- 3. The shoulder blades and how they meet the neck and ribs.
- 4. The ribs, how easily they can be seen and felt.
- 5. The bony points of the pelvis croup, point of hip and tail head.
- 6. The view of the rump from behind.



Body scoring six point scale 0 to 5

O = Emaciated	 No fatty tissue can be felt – skin tight over bones Shape of individual bones visible Marked ewe-neck Very prominent backbone and pelvis Very sunken rump Deep cavity under tail Large gap between thighs
1 = Very thin	 Barely any fatty tissue – skin more supple Shape of bones visible Narrow ewe-neck Ribs easily visible Prominent backbone, croup and tail head Sunken rump; cavity under tail Gap between thighs
2 = Very lean	 A very thin layer of fat under the skin Narrow neck; muscles sharply defined Backbone covered with a very thin layer of fat but still protruding Withers, shoulders and neck accentuated Ribs just visible, a small amount of fat building between them Hip bones easily visible but rounded Rump usually sloping flat from backbone to point of hips, may be rounded if horse is fit May be a small gap between thighs
3 = Healthy weight	 A thin layer of fat under the skin Muscles on neck less defined Shoulders and neck blend smoothly into body Withers appear rounded over tips of bones Back is flat or forms only a slight ridge Ribs not visible but easily felt A thin layer of fat building around tail head Rump beginning to appear rounded Hip bones just visible
4 = Fat	 Muscles hard to determine beneath fat layer Spongy fat developing on crest Fat deposits along withers, behind shoulders, and along neck Ribs covered by spongy fat Spongy fat around tail head Gutter along back Rump well rounded From behind rump looks apple shaped Hip bones difficult to feel
5 = Obese	 Horse takes on a bloated or blocky appearance Muscles not visible – covered by a layer of fat Pronounced crest with hard fat Pads of fat along withers, behind shoulders, along neck and on ribs, ribs cannot be felt Extremely obvious gutter along back and rump Flank filled in flush Lumps of fat around tail head Very bulging apple shaped rump, bony points buried Inner thighs pressing together

A young horse, fit and well muscled at body score 3 will look very different to an old or unmuscled horse at the same score.

The retired old horse is likely to have less muscle bulk and little or no topline. If he carried a lot of fat he may look rounder but he almost certainly would be less healthy for it.



This horse is just under body score 3. He is 20 years old, no longer ridden and has poor back conformation



By contrast this horse is just at body score 3, but is younger and has better conformation and muscle development

What is a healthy body score for your horse?

Now that you know what body score your horse is, look at the *body score guide* to assess if he is in a healthy range. Decide which category he is in from the list on the top of the chart and look down to see how he's doing.

It should not make a difference if the horse is in work or not. **Body score 4 and over is still fat!** If a horse goes up to 4 in the summer, or when he is on holiday, but always loses the weight again, then it is less dangerous than a horse who stays at body score 4, or is gaining weight.

Body score guide

	Chronic laminitis	Had laminitis	Prone to weight gain	Not prone to weight gain
0				
0.5		SERIOUS	HEALTH RISK	
1				
1.5		UNDI	erweight	
2	OK but no leaner	OK but no leaner	Very lean	Very lean
2.5	OK lean healthy weight	OK lean healthy weight	OK lean healthy weight	OK if part of total weight range
3	Getting fat	OK if part of total weight range	OK if part of total weight range	OK healthy weight
3.5	Danger too fat	Getting fat	Getting fat	OK if part of total weight range
4		Danger too fat	Danger too fat	OK if part of total weight range
4.5			Danger too fat	Danger too fat
5		SERIOUS	HEALTH RISK	
5+				

Horses that have had laminitis should not ever be allowed to get fatter than a body score 3 – you should be able to **feel** their ribs.

Chronic laminitics, those prone to repeated bouts of laminitis should be no fatter than condition score 2.5 – you should be able to **see** their ribs.

This does not mean that these animals are starved or in poor health. In fact they should be in great health, just not carrying any excess fat.

If your horse's body score is 4.5 or more you must take immediate action, you are on Red alert! If your horse has not already suffered laminitis he is getting close to it. Go to the Red chapter on page 11 to find out how to diet your horse – get your fat horse slim!

If the body score is 3.5 or over then warning bells should be ringing; have a look at the *body score guide* and if necessary go to the Amber chapter on page 16.

If your horse's body score is steady and from the body score chart you know he is at a healthy weight for his type, go to the Green chapter on page 20 to find out how to maintain this.





Jim – July 2008 Body score: far in excess of 5 Weight: 351kg





Jim – September 2008 Body score: 5 Weight: 309kg

Red alert – the obese horse: a serious health risk

This chapter is for any horse with a body score of 4.5 and above, and laminitics with a body score of 3.5 and above – their health is in serious danger.

Seriously overweight

Any horse which has a long term body score of **4.5 or more** is putting a strain on limbs, heart and breathing. Early arthritis, heart disease or COPD can develop.

The fat itself can produce chemicals which set the body up for laminitis, diabetes and equine metabolic syndrome.

Laminitic

A laminitic is always susceptible to another episode while carrying too much a fat.

For a chronic sufferer body score **2.5** is enough fat; **3** is dangerous.

Some extreme cases need to be kept at body score 2.

For a horse which has had one or two episodes of laminitis, body score **3** is enough – no more!

"Controlling the diet of a laminitic or laminitis prone horse is essential to successful treatment. No matter how extensive the veterinary care of a laminitic is, it will not work without correct dietary management."

Richard Stephenson MRCVS

Here's a typical story – a 12hh pony whose owners did not have the heart or willpower to make him lose weight. This meant the pony had endured 11 painful episodes of laminitis over nine years. Finally their vet insisted on a very strict diet; the pony lost 45kg (which was 20% of his body weight) and came down to a body score of 2.5. Happily he has now been sound and free of laminitis for two years.

Dieting must be done carefully. 'Starving' a laminitic too severely can lead to the rapid mobilisation of fat reserves in the bloodstream. This is called hyperlipaemia and can be fatal. The objective is to provide a diet based on

Donkeys and mules

Donkeys and mules suffer from the effects of obesity as much as horses, BUT they are much more sensitive to problems caused by over-dieting and you must be especially careful. If you are concerned about the weight of a donkey or mule, consult a specialist vet before embarking on any strict weight loss programme. Be aware they need a different weight calculation.

long fibre, this gives the bacteria in the gut plenty to work on but is low in soluble carbohydrates (sugars) to minimise the potential for adverse bacterial fermentation and endotoxin production (poisonous chemicals in the gut).

How to do it

Step 1: Goal setting

Check the body score using the six-point scale. For overweight laminitics, the aim is to reduce the affected horse to body score 2.5. For non-laminitics aim for body score 3.

You can set a target body weight but this is guesswork even for experienced people. It is more important that the horse ends up at a healthy body score.

Step 2: No grazing

You cannot monitor how much a horse is eating when it is turned out in the field so grazing on pasture MUST NOT be permitted whilst the horse is at a high-risk weight.

Does this sound drastic? It is! Your horse's health is at risk!

See later on in this chapter for some ways to make this process easier on your horse.

Step 3: What to feed

For a healthy diet made up from long fibre you can use hay and/or a low energy fibre chaff (or chop). A good place to start is to use two thirds hay and one third low energy chaff. You can alter the ratio if it suits your circumstances. A low calorie chaff is very useful because the energy content is known to be low. Some hay has a high energy value; if you know from analysis or suspect this to be the case it can be soaked after it has been weighed to help remove the sugars and reduce its energy content.

When a horse is not grazing, especially if it is on restricted food, then it is sensible to add a high specification vitamin and mineral supplement or balancer.

If the horse is working, salt can be added to the diet to replace salts lost through sweating.

Size of horse Daily amount of sal	
Large horse: 500-700kg	Tablespoon (up to 30g)
Medium: 300-500kg	Dessert spoon (up to 20g)
Small pony: up to 300kg	Teaspoon (up to 10g)

Step 4: Calculating the diet

To lose weight the total dry matter intake of all feed should not exceed 1.5% of the horse's current weight.

For a laminitic it is more serious. It is essential to soak the sugars out of any hay fed, and if the horse is not losing weight it may be necessary to feed a daily ration of 1.3% of the current weight.

Estimate the current weight of the horse using a weigh-tape.

The feed calculation - done for you!

Weight of horse	Total daily weight of food in kilograms, by percentage of body weight					
	1.2%	1.3%	1.4%	1.5%	1.7%	2.0%
200kg	2.4	2.6	2.8	3	3.4	4
250kg	3	3.3	3.5	3.8	4.3	5
300kg	3.6	3.9	4.2	4.5	5.1	6
350kg	4.2	4.6	4.9	5.3	6	7
400kg	4.8	5.2	5.6	6	6.8	8
450kg	5.4	5.9	6.3	6.6	7.7	9
500kg	6	6.5	7	7.5	8.5	10
550kg	6.6	7.2	7.7	8.3	9.4	11
600kg	7.2	7.8	8.4	9	10.2	12
650kg	7.8	8.5	9.1	9.6	11.1	13
700kg	8.4	9.1	9.8	10.5	11.9	14

How many feeds?

The daily ration should be spaced as much as possible over the 24 hour period with the largest quantity fed before the longest stretch, which is usually night time. This prevents the horse being without food for long periods.

If you cannot arrange four feeds, add the lunch quantity to the breakfast feed. If you can only feed twice daily, and especially if your horse eats quickly, he will be without food for long periods. Either increase the quantity fed (this means the horse may not lose weight) or you will have to enlist some help for the extra feed times.

Example 1: A horse which has not had laminitis, but has a body score of 4.5 or over needs to lose weight without delay.

Total ration per 24 hours is **1.5%** of the current weight: Current weight 535kg

535kg x 1.5% = **8kg TOTAL DAILY RATION**

3/4 as hay = 6.4kg

1/4 as low energy chaff = 1.6kg

Vitamin and mineral supplement to be added at the manufacturer's suggested rate.

Divided into four feeds per day this gives:

	Hay	Low energy chaff	Supplement or balancer
Morning	1kg	0.4kg	Fed as per manufacturer's instructions
Noon	1kg	0.3kg	
Afternoon	1kg	0.3kg	Tablespoon salt
Evening	3.4kg	0.6kg	

Example 2: A laminitic pony which has a body score of over 3.5 needs to lose weight without delay, but general food and grazing restrictions have not worked.

Total ration per 24 hours is **1.3%** of the current weight:

Current weight 385kg

 $385kg \times 1.3\% = 5kg$ TOTAL DAILY RATION

2/3 as hay = 3.5kg (soaked after weighing)

1/3 as low energy chaff = 1.5kg

Vitamin and mineral supplement to be added at the manufacturer's suggested rate.

Divided into four feeds per day this gives:

	Hay	Low energy chaff	Supplement or balancer
Morning		1kg	Fed as per manufacturer's instructions
Noon	1kg		
Afternoon		0.5kg	Dessert spoon salt
Evening	2.5kg		

Weighing feed

It is very important to be precise in your measurements. Use a good scale to weigh your haynets. You need scales that can accurately weigh up to 10 kilograms, and units of tenths of kilograms. A digital one is best; they can be found in angling shops. The kitchen scales can help you measure chaff, you can then mark the correct level on a container so you don't have to weigh the chaff every time.

A traditional round scoop holds 333g (0.33kg) of Dengie Hi-Fi LITE, so the 535kg horse will have a rounded scoop in the morning, a flat scoop for the noon and afternoon feeds, and 2 flat scoops in the evening.



Weighing feed

Step 5: Monitor weight and condition

The Fat Horse Slim progress chart will help you monitor your progress.

Weekly – measure your horse's weight with a weigh-tape or on a weighbridge.

Fortnightly – review your progress and decide whether you need to adjust the diet.

If the horse has lost weight – re-calculate the diet based on his new weight. If the horse has not lost weight at all you will probably have to reduce the diet. See 'Not losing weight' on the next page.

Monthly – assess the body score and enter this and the weight on the progress chart.

How much can the horse lose?

An obese horse can be carrying more that 20% of his weight as fat. As a very rough guide obese horses over body score 5 can lose on average up to 1% of their body weight weekly. Those over 4 can safely lose 1% of their body weight fortnightly. Horses, like people, lose weight in an uneven pattern, for no obvious reason. They may lose a lot

one week or fortnight then none the next. The main thing is that there is a general progress in weight loss. You have to stick at the diet, be patient, and see the overall picture. Once the horse gets down to near a healthy body score they should lose weight at a slower rate. Often this happens naturally.

Not losing weight?

If there is little or no change, check you are not being generous with the measurements. Or is somebody 'feeling sorry' for the horse and slipping him extra food? If you are being accurate the first thing to try, if you are not already doing so, is to soak the hay for at least an hour – or try soaking it for up to 12 hours. It is better to feed soaked hay than to reduce the ration unless you have to. Next, consider reducing the diet by a percentage point at a time; ie from 1.5% to 1.4% of the horse's body weight.

Some horses, like people, take a while for the weight to shift, you may have to stick at it for a month to see a noticeable difference. Don't give up though! Remember your horse is at risk.

If you have reduced the daily ration to 1.2% and no significant weight loss has occurred, consult your vet and he will advise whether you can reduce the food even more. If you can, rather than reduce the food further, it would be better to increase the energy used up by exercise or for keeping warm.

How long will it take?

The time taken to achieve a healthy weight will depend on the individual animal and many factors.

Firstly time of year; it is more difficult in warm seasons when the horse does not have to use much energy to keep warm. If your horse is body score 5+ it might take six months or even a year if you are dieting over the spring and summer.

It will also depend on the size of the daily ration you use. Grossly fat animals and laminitics need to lose weight without delay and it may be essential to have a harsher regime for a shorter time. Once the weight is off, the horse's diet will still have to be managed very carefully but the hardest work is over.

Extreme diet

It is possible to feed at 1.25% of the TARGET WEIGHT, ie the weight the horse should be, but for that you would need to be working with your vet, and you would need to weigh the horse accurately on a weighbridge. It would be an emergency measure; perhaps for a horse with, or on the brink of, laminitis. You would have to balance the negative effects of less food against the goal of a healthy horse. This sort of minimal diet would require many small feeds to keep the horse's intestines from suffering.

Exercise for the Red horse

Exercise will increase energy used and so speed up weight loss. However, for an overweight and unfit horse levels of activity must increase gradually to prevent unnecessary extra strain on an already burdened body.

For a sound and otherwise healthy horse, exercise is one of the best means of assisting weight loss and improving physical health and fitness. If the horse is physically capable of working, then regular exercise should form an active part of the weight loss programme.

If the horse has had laminitis the amount of exercise allowed is more likely to be limited. If there has been some rotation of the pedal bone exercise may not be possible, or limited to only soft ground. Check with your vet as to how much your horse is able to do at this stage. If he can be exercised, go to the Amber chapter for some ideas on how to introduce exercise.



Exercising for weight loss

Management for the Red horse

When a horse is not allowed access to any grass and has to be stabled this gives you total control over food intake but reduces natural behaviours and exercise. It can be very boring for the dieting horse and there is the risk of behavioural problems if any horse is stabled for more than 12 hours a day, especially when not in work.

Try to vary the day; let your horse spend some time in a yard, corral or an all-weather area. If you can, use a different stable or pen for day and night, to give the horse a change of outlook.



Large stones in the bowl will slow down eating time

Feeding: To make a meagre hay ration last longer you can try:

- hanging the haynet in the centre of the stable rather than against the wall
- using a small mesh rack
- using two small-holed haynets, one inside the other.

Several large smooth stones or a plastic football can slow down eating time of chaff.

A few pieces of vegetable hidden in the bedding will give the horse foraging time.

Company:

- Human; spending time with the horse stimulates him and breaks up his day.
- Equine company becomes even more important when there is less for the horse to do, but expect to separate them at feeding time, or one of them will lose out to greedier companions.

Stable mirror: These can help anxious horses to feel more relaxed.

Don't forget

In their natural habitat horses are either growing or breeding, and cover many miles in a day. Most leisure horses do none of this so it makes sense to control their diet to keep them at a healthy weight.

Toys: These can help some bored horses, as long as they know how to play with them.

Licks: AVOID molasses-based licks, they have too high a sugar content for a dieting horse. Any self service supplement needs to be monitored in case the horse gorges on it.

Hanging swede: These can entertain a stabled horse, but not if they eat it all in one go, or are scared or frustrated by it.

How you manage a horse that is on a Red diet or box rested for any reason will depend on the set-up of the yard, your time and the character of the horse. For example some horses will love to be in the thick of it, watching horses coming and going, others will need to be somewhere quiet where the view does not change. Take all the information available into consideration and do what works best for your horse. You will almost certainly have to compromise.

When your horse is no more that half a body score above a healthy weight he is no longer at such a high-risk and you can go to the Amber chapter for advice on progressing more gradually to his ideal body score.

If your horse has reached his ideal healthy body score go to the Green chapter to find out how to maintain his weight and condition score at safe and healthy levels.



Woodchip corral with mobile field shelter





Jim – November 2008 Body score: 4 Weight: 282kg





Jim – December 2008 Body score: 3.5 Weight: 260kg

Amber warning – the overweight horse: action needed

This chapter is for horses that are overweight but not at as much risk as Red horses. Any horse at body score 4 or more is overweight.

You may like the look of this body score, and you may still choose to keep your horse like this, but don't fool yourself that it is a healthy condition for any prolonged period of time.

The only time a body score of 4 may be acceptable is if it is the top of a range of weights the horse goes through, and you are CERTAIN that the weight will come off later.

Just come from the Red diet? Well done for getting this far – you have to hold your nerve; it would be easy to slip back into your old ways and lose all the progress you have made.

Reintroducing grazing

When your horse is no longer a high-risk weight you can either continue on the Red diet until the horse is at his healthy body score or you can now start to reintroduce grazing. However, if you introduce grass while he still needs to lose weight you must reduce the rest of the diet or weight loss will slow down or stop.

First graze in hand for about a week, so that the gut bacteria can adjust. Next, over a month, build up to one or two hours a day (it depends on what you can practically arrange). This may not seem much time, but remember your horse is still on a diet!

For the first two hours of grazing try reducing the daily food ration by 0.25% of the body weight. Eg a 400kg horse will need 1kg less food per 24 hour period. You will have to monitor the situation, to see if you need to reduce the food more as you increase the grazing.

If you need to turn out for longer periods use a grazing muzzle. See page 18 for some information on their use.

Whatever you do keep weigh-taping and body scoring or all your hard work may be undone.

If your horse is a body score 4 or over you will be planning to reduce to a healthier weight – here are some methods to get you started.

1. The Red diet – for a short time as a kick-start

2. The Amber approach; leave nothing to chance This involves several measures. You can take all or some of these to gradually reduce the kilos.

Increase exercise

Exercise is a big aid to weight loss and can take many forms.

For the non-ridden horse:

- Leading to and from the field walk briskly!
- All in hand exercise go for a jog or power walk.
- Lungeing or loose schooling if your horse is sound and sensible. You do need a safe area and an experienced person to do this safely.



Exercise in hand

For the ridden horse:

If you can, still do extra in hand work – especially if you do not ride every day. But ridden work uses up much more energy.

- No ambling walk briskly to raise the heart rate.
- Mild puffing shows you that the horse is working.
- Lengthen spells spent trotting and cantering but do not overdo it; galloping is likely to injure an overweight and unfit horse.
- Find a hill that you normally walk up and over a period of weeks see if you can trot a bit further each time.
- Even once a week ride for longer than normal. Most horses that do up to an hour in their usual work can do two hours once a week.

 Aim for an event. If you do not compete, build up to a sponsored ride or invent your own 'Big Ride' once a month. If several of you join together it will be good fun for you and the horses.

Reassess the diet

Are you feeding hard food – ie mixes and cubes? If so, and your horse is overweight, it is always better to cut out hard food and maintain the fibre part of the diet. Speak to a nutritionist to guide you on what you can cut down.

Reduce rugging

An overweight horse has plenty of fat to keep warm, and the fat is fuel for when it is cold. Many horses are overrugged. Shivering is a sign that fat is being burned off by the horse to keep warm exactly as it should be. In a fat horse that is good news, now and again. Horses in a field will often canter about to warm up too.

In the UK it rarely rains solidly for 24 hours, and if a horse has good shelter it is less of a problem. Wind is the real issue, especially if it is wet as well. If rugs go on then, remember to take them off when the rain and wind stop.

Stabled horses cannot move to warm up, so rugging can be more necessary – especially if the horse is clipped.

Reduce grazing

This is vital for weight control. Most horses with native genes will need to have their grazing restricted at some time, especially in spring.

There are many ways to cut down the amount of grass being eaten:

- Reducing time spent at grass.
- Increasing herd size in the growing season.
- Fitting a grazing muzzle.
- Strip grazing.
- Mixed grazing with sheep.

Reduce the daily ration

If you have removed the hard food and grazing, and increased the exercise but the horse is still not losing weight then look at reducing the total ration as well.

Check the rules of the Red diet to see how much you can reduce the ration and still give the horse enough fibre.

Managing a stabled horse

When a horse is stabled to help restrict his grass intake it will reduce natural exercise, and standing still for long periods is not good for any horse.

The Amber horse will certainly need to have limited grazing so you will need to use a bit of imagination to keep him happy.

Look back at the management tips in the Red chapter, and below are some more ideas.

- Dry paddocks or corrals with company. This allows horses freedom to move and interact. If you can, use an outdoor arena for an hour or so.
- Electric fence a small paddock this works well in dry weather but is not great for the pasture.
- Turn out all the dieters together, this allows you to use a larger area which is better for the land and horses.
- Strip grazing the best method is to move the fence a little every day, so they don't gorge for so long.

Grazing muzzles

Once a horse is slim enough to go out to grass for longer periods, which is usually when he is only a half a body score away from a healthy weight, grazing muzzles can be really useful.

Some people don't like the idea of them but introduced sensibly and when well fitted they can mean the difference between health and illness for your horse. The horse is very adaptable; a grazing muzzle is no more strange than the idea of riding, stabling or wearing a rug.



Grazing muzzle in action



Grazing muzzles

When you introduce it to your horse be matter-of-fact, and when he has it on offer him a treat though the hole to give him the idea. Do this several times so that he gets used to it being put on and off. Fit the muzzle correctly, and then the time spent wearing it needs to be built up gradually to prevent rubbing. Half a day is usually enough but some ponies wear them for longer. For the horse's wellbeing use 24 hours a day is not advisable. Grass needs to be at least two inches long for ponies to be able to draw up some grass and not get too frustrated.

Grazing muzzles can cut down the amount a horse can eat by 50% or more.

Working with the seasons

The Amber horse is not in serious danger but he has some way to go before he is a healthy weight. Each season brings its challenges and weight loss opportunities!

Winter

Use the cold to your advantage and let overweight horses, cobs and ponies burn off fat to keep warm just as nature intended. The only rug a fat horse needs is a lightweight waterproof one to keep him clean, so your life is easier when you come to ride him! If the horse is not ridden, providing that there is access to shelter from long periods of rain, the horse probably does not need a rug. Most horses will grow a good winter coat, and they can control their temperature far better without a rug. It is far more dangerous to over-heat than to be cold, and rugs can fit poorly, rub, rip, and you always need a spare.



The frost on these ponies shows their good natural insulation

With good shelter most horses should be able to stay out day and night to use extra energy, which is helpful for those doing little or no work. Beware of frosts for the laminitics, though. It is normal for a field-kept horse to become leaner during the winter, perhaps down to body score 2.5 by March, so that when the grass comes he can eat the richer grass and only go up to 3.5 by September. This would be safe provided he loses it again the next winter.

However, Thoroughbreds and old horses can lose weight very quickly in the winter and may need to be rugged, stabled or have extra feed. Be careful they do not gain weight year on year, an old horse should not carry too many extra kilograms.

Spring

As soon as the grass starts to grow in the spring the chronic laminitic horse should be taken off the grass. Most native ponies and cobs should have their grazing restricted unless their weight has come down to body score 2 or 2.5 (see the body score chart). Thoroughbred-types and old horses may be able to cope if they are not overweight but watch out for digestive upsets.

Summer

A hot, dry summer is good for dieting, as there is little grazing! The British summers have become wetter which means that the grass keeps growing. The chronically laminitic horse must have only carefully limited grazing. The safest time to graze a laminitic horse is early morning around dawn. In reality this means turning out as late as possible and bringing in early – but only if the horse is recovered from any attacks and is body score 2.5 or less, otherwise that may be too long a time. Alternatively, a few hours with a muzzle on may work best. Sometimes the only option is a completely bare patch of land with hay.

It is not good for the land but if you have no yard or corral it may be the only way to take your horse off the grass.

Native ponies and cobs need to keep their body score below 3.5. They are naturally good doers and nearly always need to have their grazing restricted in some way.

Older horses and Thoroughbred types **may** be able to graze unrestricted allowing their body score to rise to 4 – because they generally lose this extra weight in the winter. Watch out for flies though – horses need some protection in the form of shade or shelter and may have to be brought in during the day.

With the longer days you can exercise more. The more exercise, the more turnout you can allow, which is good for everyone.

Autumn

The 'autumn flush' of grass growth can be just as dangerous as spring grass and horse keepers need to treat this season carefully, as if it were spring. For as long as you still need to mow your lawn you know that horses are still getting new grass to eat.

All year round

The growing season for grass is getting longer and the British weather is changeable, so stay alert.

Frost, sudden warm spells in winter or spring, rain in a dry spell, very sunny days in cold weather; all of these will change the sugar levels in the grass. If your horse is overweight, it may be the trigger for laminitis.

Very cold weather in the winter and very dry weather in the summer will stop the grass growing. This will help with the Red and Amber horse but the older or underweight horse will need extra nutrition.

When there is deep snow horses living out will need hay, but it may be more nutritious than the winter grass, so be careful not to overdo it.

Don't forget

A horse's central heating system is brilliantly designed – they digest lots of long fibre; grass, hay, haylage and chaff, and in doing that keep themselves warm.



Jim – February 2009. Rather fluffy but now, seven months later, a fit body score 3, at 254kg.



Remember our weigh-taping model (page 6)? Puzzle, here body score 3.5 (562kg), lost 200kg. That is equivalent to 10 bags of feed, or two adults and a child!



Carla, a chronic laminitic, was dieted down to body score 2(201kg), pictured here. This was necessary to lose the crest fat. She now enjoys an active life and is maintained at body score 2.5.

Green, your goal – the horse at a healthy weight and how to maintain it

Check the body score table to see the healthy range for your type of horse.

If you have reduced from an Amber or a Red body score you deserve to be proud of your work! By now you will be:

- feeding a low energy, high fibre diet
- only rugging your horse if it is really necessary
- restricting your horse's grazing when necessary
- monitoring body score carefully
- reacting quickly when your horse's weight fluctuates

You are keeping one step ahead and reacting to changes.

Do's and don'ts for successful weight control

- Do keep using the weigh-tape.
- Do record the score and weight so the weight does not creep up year-on-year.
- Do keep up the exercise, especially in the summer.
- Do use the experience of knowledgeable people, especially your vet and farrier, to help you monitor any changes.
- Do take regular photos and compare them with old ones.
- Do use low energy, high fibre foods.
- Do keep using a high specification balancer if you are restricting grazing.
- Don't just monitor weight you need to check body score as well.
- Don't listen to people who tell you that your horse is thin if you know he is a healthy weight.

Always a work in progress

These pictures show that horses do not magically arrive at a healthy weight and stay there. Weight does fluctuate but in time you will be able to manage the horse within a healthy range. Jim and Puzzle are shown at the top of their ranges and Carla is towards the lower end of hers.



Mixed sward (@ Frances Clayton,

Planning for the future: healthy horse pasture

The modern pasture which most horses graze today will always be too rich for horses with native genes. Most 'off the shelf' seed mixes contain high percentages of ryegrasses which out-compete meadow grasses, especially if the land is fertilised with nitrogen.

Horses ideally need a mixed sward, which means a mixture of plants including meadow grasses and herbs. This is more like the traditional meadows of the past.

Meadow grass seed mixes are available to grow from scratch, or you can overseed your pasture. This works best if the field is as bare as possible; for example after it has been highly poached in winter. Talk to a specialist for advice; these seed mixes are more expensive, but the long term benefits could be worth it if you want your horses to graze more freely and remain a healthy weight.

The dangers of 'starvation' paddocks

Overgrazing (where the grass is grazed below 2cm) damages pasture and can leave the horse hungry and at risk of colic. This sort of 'stressed' grass is also surprisingly high in sugars as it struggles to grow, making it a potential danger for laminitics. On top of that these paddocks will look poor as grasses die off and weeds take over. This will not make you popular with neighbours and the local council.

If your only option is a small paddock grazed right down to bare earth, make sure the horse does get enough fibre in the form of hay or chaff. If you can, have two or more small summer paddocks where one is reseeded with meadow grasses and recovers each year, and think about saving up for a permanent all weather corral which will have many uses.

A few words on hay

Hay - how do you know what to give your horse?

- Ask your supplier he should have a good idea of how nutritious the hay is in terms of energy.
- All horse hay should be well made so that it is 'clean', ie dust and mould free. This needs no rain while the hay is cut and drying, which is difficult with British summers. Most of the nutritional energy it has is in the form of sugar.
- Old-fashioned meadow hay is generally lower in sugar but there are few old-fashioned meadows. Most hay growers seed a hay field or 'ley' with high sugar ryegrass mixes.
- If you're watching your horse's weight your best bet is to get late-cut hay (cut after the grass has seeded) which has lower nutritional value; some would call this hay low quality – this hay will be stalkier to look at and less green.
- If you have an overweight or laminitic horse which desperately needs low sugar hay then you can send a sample of your hay to a feed company to give you a nutritional analysis.
- Any hay over eight per cent sugar/carbohydrate is too high for this type of horse.
- If you cannot get lower sugar hay then soaking the hay for at least an hour will draw out much of the sugar. The longer it is soaked, the less sugars it will contain; unfortunately it will probably also taste less appealing. You will have to experiment with this.
- A dieting horse ideally needs meadow hay (no ryegrass or clover) cut in August, made in a long dry spell and, if luck is on your side, it will have been cut on a dull day for ultra low sugar... or just soak what you have!



Horse hay in rows for baling (© Frances Clayton)

How other people have done it!

Here are some case studies to give you some ideas. Everybody's situation is different so the methods will not necessarily suit you, but hopefully they will inspire you to keep working at it.

Strip grazing

Mrs J loved to feed her two 12hh ponies and did not believe the vet or farrier when they told her that they were overweight – until one got laminitis. Now she has a system that allows the ponies to gain a little weight in the summer and lose the same amount in the winter.

She has only one acre of land. From March she fences off a section for summer grazing. Every day she moves both lines of the fence a little giving new grass on one side but bringing in the fence on the other side. This way the ponies have no more than one third of an acre all growing season, and the grass gets a chance to recover. Then at Christmas they have the whole field until March. They do have hay in the winter if the grass runs out, but never hard food.

Mrs J weigh-tapes in the summer and if they gain too much the grass is reduced until their weight levels out again. She keeps records of the spring and summer weights so that they don't gain year-on-year. The ponies have been free of laminitis for three years.

Mrs W in Surrey manages three laminitic ponies (a Shetland and two Dartmoor crosses) on what would seem to be a lot of pasture. She has four acres split into five sections.

The ponies were overweight and cresty, but a year of weightaping and a carefully measured diet got them to a safe weight. They have stayed free of laminitis at body score 3 for five years!



Strip grazing

Her system? Weekly weigh-taping, each pasture is strip grazed and then rested. The grass does not get overgrazed. The winter paddocks are topped in summer to control docks and thistles. Mrs W moves the fence every day, sometimes only six inches if the ponies have gained weight. She keeps a record of their summer and winter measurements so that the weight does not creep on.

Muzzle success

Mrs S has two horses and two ponies who share 25 undivided acres with sheep. To begin with the ponies suffered terribly from laminitis and when she was advised to use starvation paddocks they still had episodes.

Finally she found her own solution. Now, during the growing season the ponies wear grazing muzzles for five hours a day and come into a yard for the rest of the time, with soaked hay overnight. No more laminitis, and the horses and ponies get plenty of time to socialise.

Encouraged by her success Mrs S also uses a muzzle on the horses during the summer for a few hours a day, which prevents them becoming overweight too.



Corral

Lateral thinking

Mr J successfully keeps his horse laminitis free by reversing the natural feast and famine. Because the horse is sensitive to the sugars in summer grass he is kept in a dry paddock with no grass in spring and summer. He is fed hay, and keeps lean.

In the autumn he is carefully managed with a few hours turnout at grass.

In the winter he then lives out at pasture on longer, less nutritious grass which was not grazed in summer. As a result the grass is long, yellow and stalky and is more like standing hay.

He sometimes gains a little weight over the winter but he is taken off the pasture in spring as soon as the grass starts to grow.

This system suits his busy owner and keeps him healthy.



Company is especially important for dieting horses

Miss P has a 14hh cob who likes his food, is naturally rather lazy and even grazing with the fatties he was still overweight.

The solution for him was to restrict the grass by fencing a long narrow strip down one side of the paddock. The water trough is at one end of the strip and the field shelter at the other end. The pony has to walk for a drink and back again. This method, combined with plenty of ridden exercise seems to be doing the trick.

Mrs G keeps two Shetland ponies as companions for her competition horse.

They all graze the same pasture in the winter by day but are stabled with measured amounts of hay at night.

In the summer they cannot graze unrestricted so Mrs G has fenced four small paddocks within the big field for the Shetlands. The paddocks are about 20 metres square and all the horses can see each other.

If the grass is too long in the paddocks she mows it with a lawnmower on a high setting, being careful not to leave cuttings. When the ponies have eaten the grass short, before the grass starts to suffer she moves them onto the next paddock. This system suits Mrs G; she has tidy paddocks for any of her horses or visitors and the ponies are healthy.

Mr and Mrs T have found a system which suits their busy lives and their two cob crossbreds. The cobs come into a stable by day from spring to autumn, this reduces the grass they eat and means they are clean and dry to be ridden after work. At weekends they either compete or box the horses to the beach for some fast work. This way they work off the extra energy from the summer grass.

Once the evenings are too dark to ride, the horses are turned away and live out all winter. They wear rugs when it is wet and windy otherwise they use up their summer fat to keep warm. One of the horses is not such a good doer so wears a rug more often that the other, this means that they both go into the summer season at just under body score 3, and that they can graze overnight in the spring and summer.

All these case studies and success stories are the result of caring yet determined people trying out ideas and working at perfecting a system. They probably did not get it right immediately, but with a little trial and error they have found a way to keep their horses healthy.

Cresty necks

This fat is notoriously hard to shift (but it will go from most horses). Sometimes a horse needs to diet down to a body score 2.5 or 2 to get rid of the crest. Then he can gain weight back up to his healthy body score.



Trouble-shooting – common problems and solutions

No one said keeping your horse at a healthy weight would be easy!

Some people are in denial that their horse is overweight. These are some actual excuses...

"He's not fat, just well covered."

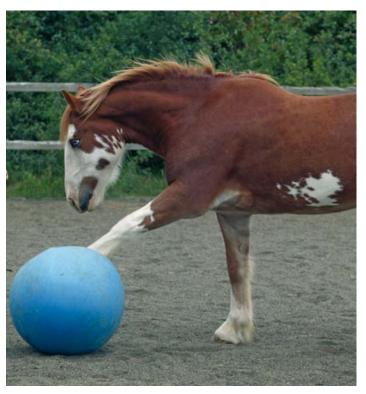
"It is the cough mixture putting the weight on."

"I lie awake at night thinking of them with no rugs on in the rain (in June!)."

"But he's a cob! They're supposed to be big."

"He's not fat, he's got short legs."

It can be difficult to change your habits – so to help here are some typical problems and solutions.



Play can prevent boredom

Bored horse	There is plenty you can do: see the management tips in the Red chapter. If you are doing most of these, the horse will not be bored.
Guilty feelings	This is what probably caused the problem to begin with!
and sympathy for the horse	Remember that a horse does not think like a human.
me norse	If you understand the horse's needs, how it was designed to live and act accordingly, you can provide a better life.
	How bad will you feel if the horse is unwell because it is overweight?
Don't have the time	If you don't have time to introduce the extra measures necessary to keep your horse healthy you need to make a change, or enlist a helper.
Everyone else is feeding	If you want to give your horse something when the rest of the yard is being fed, stick with a handful of low energy chaff.
It is too expensive	While a horse is on the Red diet it may be more expensive while he is off grass 24 hours a day. But much, much less than a vet's bill.
	When the weight is off, offset the money you are tempted to spend on hard food, rugs and accessories against the cost of a well horse.
The escapee	The horse may be genuinely short of fibre. Double check in the Red chapter.
	If the horse panics if left alone you will have to be organised to make sure this does not happen.
	Make sure the fence is up to the job: sturdy, high and if electric, always working.
Muzzle failure	Keep trying with different makes. If it comes off try different headcollars, or a brow band.
	A grazing muzzle can give the horse added quality of life at grass and don't underestimate the horse's adaptability – this is no more strange than wearing a rug or being ridden!

The only pleasure left for the horse	If a horse is too lame to exercise, is very overweight and his only life is to eat then you must be aware that you may be speeding up his decline through painful disease. For an old horse laminitis often means euthanasia. A responsible owner will not wait until that happens.
Miserable horse	When a horse is on a strict diet he may be less happy. Think of it as treating an illness – obesity is a potentially dangerous disease. If he were lame of course you would box rest if necessary.
Can only visit once a day	This is not ideal in any situation. A horse is better off in a field than stabled if visited only once. But if he is getting dangerously overweight it could be classed as a form of neglect. All horse keepers need to have back up and a helper who can turn out or bring in. In summer strip grazing and smaller paddocks can help too. See the case studies.
Livery woes	Try to find livery where the other horses need similar management to yours.
	A livery owner who is used to good doers will be much more sympathetic to your situation.
	Work with a group of owners and support each other.
	If your horse is the only good doer try to work with the livery owner to set up an arrangement to keep your horse healthy; you may need to buy your own electric fence or use a muzzle. If this cannot be done you may be at the wrong yard for your horse.
	Not allowed to put up an unsightly electric fence? Try dark posts and electric rope, then keep it tight.
Rugs – do they need them?	If the horse is underweight or fully clipped then yes, rug. If it is overweight definitely rug less. Clip as little as is necessary, not for cosmetic reasons, then rug as little as is necessary.
	A full-coated horse is unlikely to get too cold in a stable so long as it has enough fibre to digest. However, prolonged rain and wind does need guarding against when turned out.
	A clipped horse will need a rug in cold weather, indoors and out.
	Thoroughbreds need more protection against the elements than native breeds.
The horse is shivering	Shivering is not in itself a welfare issue – the horse is designed to live outside and all horses will shiver now and again to warm up. Expect it in cold wet weather, but when the horse is dry it should stop.
	A horse shivering in the stable does need checking.
Other people tell me I am mean	This is where you need a network of professionals to guide and support you. If you are sure your horse is on an appropriate regime you will have to rise above negative comments.







Living as nature intended

Glossary of terms

Chaff or chop: this is a fibre feed usually made from dry straw, hay or alfalfa chopped into pieces less than two inches long.

Condition: This term is used differently by different people. Be sure when you talk about it you know what the other person means. It can mean overall health, or fitness and muscle development, or how much fat is carried, or a mixture of all three!

Dry matter (DM): When describing the amount of food a horse needs scientists and vets talk about DM to keep it accurate, so the food must be weighed dry. For example, to weigh wet hay or sugar beet would be a mistake as you would be weighing the water as well as the actual food.

Corral: A fenced small paddock with an artificial all-weather surface (sand, woodchip, hard core) in which a horse can walk around freely.

Dry paddock: A larger area of all-weather turnout usually a quarter of an acre or more.

Energy: The fuel the horse's body runs on. Too much causes weight gain. (Calories are the imperial measure and joules are the metric measurement.)

Equine metabolic syndrome (EMS): This describes a disease commonly diagnosed in native breeds suffering chronic laminitis. It is a disease vets and scientists are still learning about, but it is similar to type 2 diabetes.

Ewe neck: This is an old-fashioned term for a horse's neck that is weak, concave and almost 'u' shaped. It has absolutely no crest.

Fibre: This is essential for the horse's gut health. What are good sources of long fibre?

- A wide range of grasses and herbs avoid ryegrasses where possible
- Hay meadow hay is preferable to high-energy seed hay
- Haylage late-cut low energy haylage is best
- Chopped chaff and alfalfa feeds always go for the 'lite' options
- Clean oat straw is a good tummy filler; it is high fibre and low energy. It can be a substitute for some of the hay.

Growing season: When the grass is actively growing – it used to be April to September but is now getting longer.

Good doer: This type of horse is a good food converter, ie puts weight on easily when being fed a standard amount.

Poor doer: This type of horse loses weight easily, even when being fed as much or more than a 'good doer'.

Hay analysis: The energy and nutrient content of hay can be tested by sending a sample to a horse feed company.

Hay soaking: To reduce the sugar content of hay it must be soaked for at least an hour. The water must not be re-used; it is full of sugars and it will go off. Hay can be soaked for 12 hours or more, which removes more of the sugars. You will have to find a balance with what you can arrange and what the horse will eat.

Hyperlipaemia: Too much fat in the bloodstream

– this occurs when the body releases fat as an emergency
measure as a reaction to starvation. It is potentially fatal and
the reason why weight reduction diets must be carefully
calculated.

Laminitis: A disease often caused by carbohydrate overload (too much sugar) which damages the hoof of the horse and causes much pain.

Laminitic: A horse that has suffered from laminitis and will be prone to further episodes.

Chronic laminitic: A horse that has a history of repeated laminitis.

Obesity: A condition in which excess body fat has accumulated to such an extent that health may be negatively affected.

'Poverty lines': The expression describes high muscle definition on the quarters and thighs either side of the tail. There is no spare fat so the horse **may** be underweight **or** fit, lean and very healthy.

Topline: This is as it sounds, it describes the shape of the top of the horse when seen from the side. The topline should be made up with strong muscles giving a full shape. A lack of muscle could be disguised with fat cover.

And finally

We hope this guide has made you more aware of the dangers of obesity and able to assess your horse more objectively.

If you are about to embark on a weight loss programme for your horse; remember to get a good team around you for support.

Fat Horse Slim web pages on Blue Cross website www.bluecross.org.uk/fathorseslim will offer more tips and you can watch other horses' progress too.

How often...

...do you hear that a horse looks "well", when a person actually means "fat" and is too polite to say so?

Further sources of information

Blue Cross (Pet Care horse care leaflets):

www.bluecross.org.uk

Dengie Horse Feeds: www.dengie.com

Managing Grass for Horses by Elizabeth O'Beirne Ranelagh

Horse Pasture Management Project (SEEDA)

Good practice guidance: frances.clayton@hotmail.com

Cotswold Seeds: www.cotswoldseeds.com

Garry Holter at Demeter Grassland Management

c/o MAS Seeds: www.meadowmania.co.uk

Farming And Wildlife Advisory Group:

www.fwagsw.org.uk

The Donkey Sanctuary: www.thedonkeysanctuary.org.uk

World Horse Welfare Right Weight Campaign:

www.worldhorsewelfare.org.uk

National Equine Welfare Council: www.newc.co.uk



Sonny had a long history of laminitis and his future looked bleak. He was dieted to lose his cresty neck and now, kept at a body score 2.5 to 3, is having fun again.

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Blue Cross

Blue Cross has been dedicated to helping poorly, injured and abandoned pets for over 100 years. We opened the world's first animal hospital in 1906 and since then our doors have never closed to sick and homeless animals.

Today we run four animal hospitals and 12 rehoming centres across the UK, which provide treatment and seek happy homes for thousands of cats, dogs, small pets and horses every year.

We help horses and ponies who have been neglected or abandoned, or whose owners can't look after them anymore. We rehabilitate and retrain them before finding them loving new homes. We also give talks and tours to promote responsible horse ownership.

For more information about our work with horses, please contact your nearest centre:

- Burford rehoming centre,
 Shilton Road, Burford, Oxon OX18 4PF
 Tel: 0300 777 1570
 Email: burford@bluecross.org.uk
- Rolleston rehoming centre,
 Hilda Archer Sanctuary, Dovecliff Road,
 Rolleston-on-Dove, Staffs DE13 9AU

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