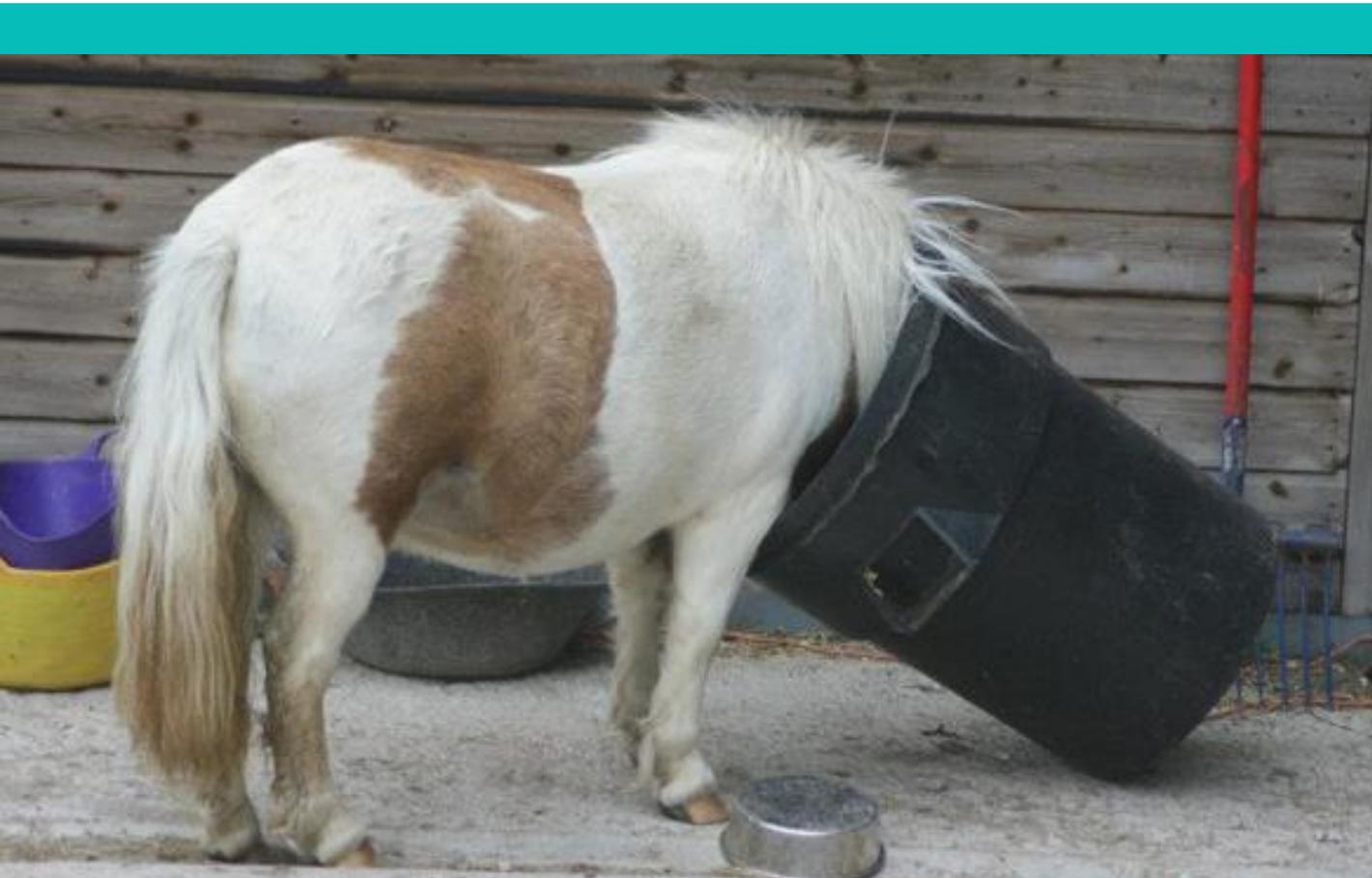


When the grass is greener:

The Equine Weight Management guide for every horse, every yard, and every owner



Equine Weight Management



Every horse is different, and every livery yard and every owner differ too. Because of this, there's no magic weight management strategy that will work for everyone – you need a tailor-made solution that works for you and your horse. You're the expert on your horse, your yard and your life, so you're the best person to create a weight management strategy which suits you, and this guide will help you to do so.

This guide is designed to help you to plan a weight management that works for your horse, by helping you to think about what **changes** you can make to help your horse lose weight.

By picking up this guide, you've already taken the first few steps. Many owners don't recognise that their horses are overweight, but you've already started thinking about making changes.

This guide will help you to make weight management easier. We want to help you to manage your horse's weight in a way that benefits you both – planning fun activities together, ensuring your horse does not get bored, and so on.



The latest research:

Research has shown that people who **buddy up** with others are 45% more successful at achieving weight loss. Buddy-up with a friend whose horse needs to lose weight; you can discuss weight management strategies together and help one another condition score your horses, and also work together to track exercise, work towards goals (planning fun activities – agility? Trips to the beach?).



Recent research showed that there is a higher risk of laminitis for horses that are on weight management programmes which allow the horse to eat significant quantities in a short period; e.g. horses that wear a grazing muzzle and have it removed for a few hours on long grass, or horses allowed only a few hours' turnout – as compared with horses constantly on little grass. Horses can **eat 24 hours' worth of grass in just 4 hours** if they really want to! Therefore, strategies which do not allow your horse to binge may help to limit the risk of laminitis.

Never reduce your horse's feed intake to below **1.5% of current bodyweight without veterinary advice**; and if you're reducing it to this level, we strongly recommend veterinary assistance. Horses on restricted diets still need adequate nutrition, so we also recommend discussing with a vet or nutritionist and using a good quality vitamin and mineral supplement.

Ask for help

Ensure adequate amounts of forage to avoid the horse developing ulcers or colic.

If your soil is sandy, you may need to take additional care and use a supplement such as psyllium to ensure that you avoid sand colic; again ask your vet for advice.

Enrichment fun!

To ensure your horse isn't bored while on a weight management programme, there are hundreds of ways you can add "enrichment" into its environment, which will be fun for both of you. See page 13 for ideas.



Slow and steady changes

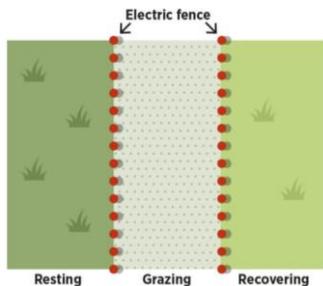
All changes must be made gradually, so build work up slowly to avoid injuries, and make any changes to feed slowly too.



Equine Weight Management

Monitoring

Reduce Grazing



Alter supplementary feed



Use metabolism

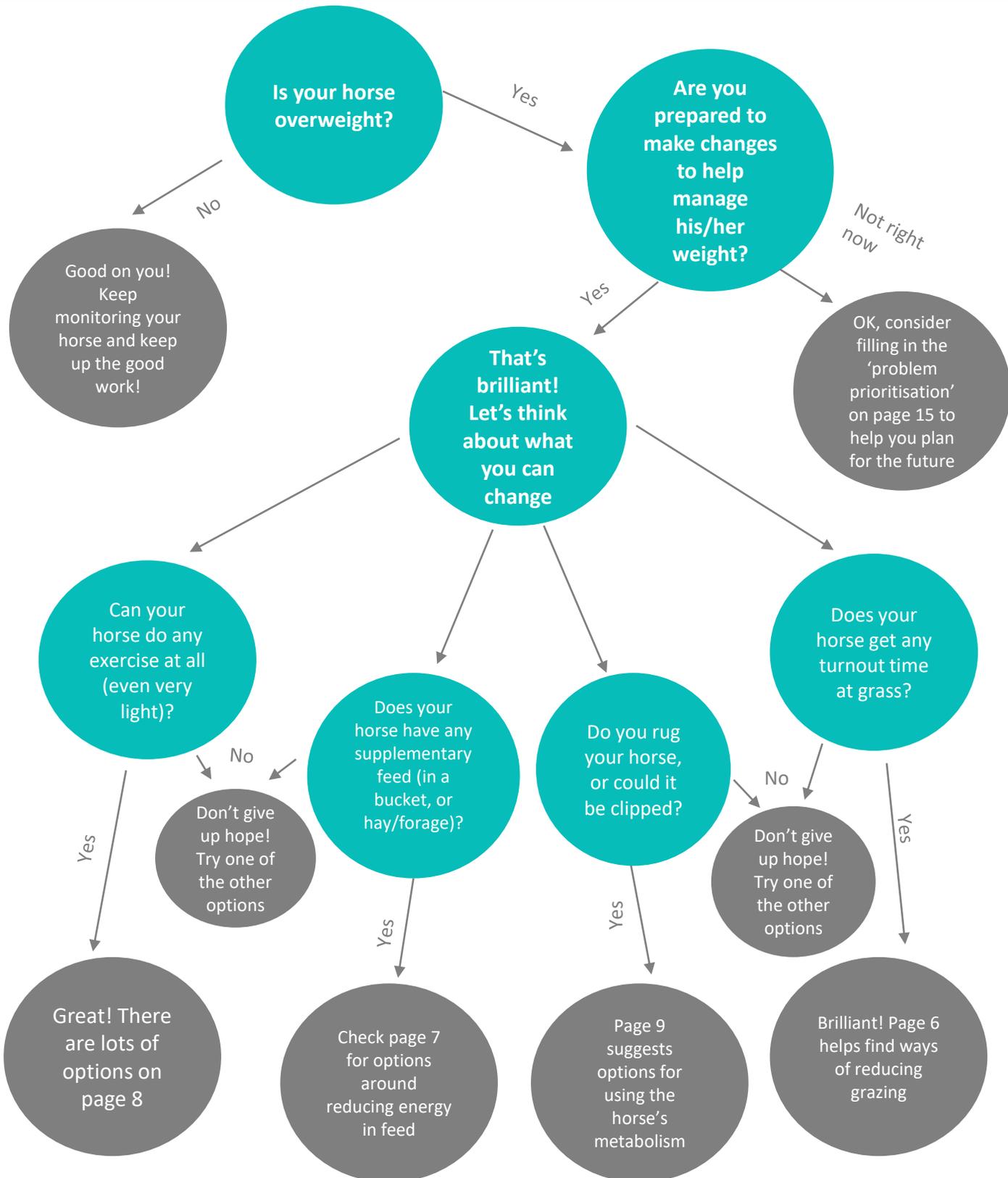


Increase exercise

To help owners decide on weight management strategies, we've split weight management into four key areas: the following pages will help you to consider each area in turn, and think about where you can make changes



What can you change?





Things I can change:

**Reduce
Grazing:**

**Alter
supplementary
feed:**

**Use
metabolism:**

**Increase
exercise:**

**How I will monitor
changes:**

As you go through the guide, use this page to write notes about things that you can change in your horse's set-up



Reduce Grazing:

what could you change?

What could you change?	Options	Things to consider
Paddock configuration (e.g. electric fence)	<ul style="list-style-type: none">• Strip graze• Limited grass paddock• Track system	<ul style="list-style-type: none">• Safety with electric fence• Supplementary forage needed (haylage/hay) if grazing low• Social isolation can be stressful; try to keep horses in the same field as friends if possible.
Choice of paddock	<ul style="list-style-type: none">• Rotating grazing by body condition	<ul style="list-style-type: none">• Multiple horses needed to ensure grass can be kept short• Ensure appropriate worming and poo-picking programme
Choice of non-grass paddock	<ul style="list-style-type: none">• Limited grass paddock, yard or dust turnout	<ul style="list-style-type: none">• Supplementary forage needed; leaving horses without forage can lead to ulcers or colic• Need to consider environmental enrichment
Number of horses in paddock	<ul style="list-style-type: none">• Increase number of horses to reduce grass	<ul style="list-style-type: none">• Ensure groups which get on with one another well, for safety• Ensure appropriate worming and poo-picking programme
Type of animals in paddock	<ul style="list-style-type: none">• Co-graze with other animals such as sheep	<ul style="list-style-type: none">• Ensure appropriate worming programme
Time at grass	<ul style="list-style-type: none">• Reduce grazing time (e.g. stabling, yard turnout)	<ul style="list-style-type: none">• Reduced turnout also limits movement; can be counter-productive, especially for arthritic or older horses• Consider enrichment• Replace grazing/grass with supplementary forage
None of the above	<ul style="list-style-type: none">• Grazing muzzle	<ul style="list-style-type: none">• May not suit some horses; it's important to assess your horses behaviour to ensure it is not stressed.• "Binge" eating behaviour when mask is removed could induce laminitis• Ensure horse can eat and drink effectively• Important to remove muzzle daily

Alter Supplementary Feed:

what could you change?

What could you change?

Options

Things to consider

Bucket feed (incl supplements)

- Discuss nutritional needs based on age, health, workload and condition with a nutritionist
- Regularly re-assess feed and supplements to ensure appropriateness
- Ensure that the horses gets an appropriate amount of food (over 1.5% current bodyweight at a minimum); ensuring regular access to forage helps to limit health problems such as ulcers and colic.

Volume of supplementary forage (hay/haylage)

- Discuss forage with a nutritionist
- Consider forage analysis
- Work out the appropriate volume of forage by weight
- Even dieting horses need adequately nutritious diets to avoid health problems, so it may be necessary to feed a vitamin and mineral supplement.

Type of supplementary forage

- Discuss forage with a nutritionist
- Consider forage analysis
- Some overweight horses benefit from swapping from hay to haylage or vice-versa, or using a low-calorie hay-replacer.
- Oat straw can also be mixed with other forage, as a very low-calorie option
- Commercial feed companies offer nutritional advice; independent nutritionists can advise on feed and supplements across different companies.
- Adjust weight of forage according to % dry matter (i.e. haylage weighs more than hay because of water content, so more weight needs to be fed in comparison to hay – ask a professional if you need help).
- Weigh your feed, use a luggage scales to weigh your haynet.

Soak hay

- Reduce sugar content in forage through soaking
- As above
- Research about length of soaking time varies; we recommend 6-12 hours if possible.
- Use fresh water for each net.

Slow intake of forage

- Double-net hay or use a trickle net
- Split forage into multiple sections and place in different areas to encourage foraging
- Use specially designed toys such as a Hayball
- As above
- Some horses can get stressed about difficulty accessing forage, as with a trickle net. Watch your horse to ensure it is comfortable.

Increase exercise: what could you change?

What could you change?	Options	Things to consider
Riding horse	<ul style="list-style-type: none"> • Plan fun things! Fun rides, farm rides, beach, etc • Set goals • Join #Hack100miles or #hack1000miles • Track exercise with app to see how fast and far you're going • Get a sharer or pay a professional to help with the horse • Equine boot camp – send to trainer for a period of time 	<ul style="list-style-type: none"> • Walking is considered very gentle exercise; it's better than nothing, but trotting and cantering will help to burn more calories. If you're not sure what your horse can do, talk to your vet about exercise and training. • Keep a record of the times you ride and duration, so you can track your progress. • Team up with a friend and plan activities together/share your riding-diary, for motivation.
Non-ridden exercise (medium-energy)	<ul style="list-style-type: none"> • Driving • Lunging • Long-reining • "pony" from another horse (ride & lead) • Equine agility (advanced) • In-hand dressage (more advanced movements) • In-hand hacking or jogging with horse 	<ul style="list-style-type: none"> • Buddy up with others for transport-sharing • Build fitness slowly • Get help from an instructor • Check with a vet what your horse is capable of • Wear a hat and hi-vis (even if you're doing activities from the ground)
Non-ridden exercise (gentle)	<ul style="list-style-type: none"> • Horse-walker • Agility (basic) • In-hand dressage (basic) • In-hand hacking with horse (gentle) • Long reining (basic) 	<ul style="list-style-type: none"> • Join online clubs such as online agility club for monthly challenges, #hack100miles
Increase field movement	<ul style="list-style-type: none"> • Track system • Increase enrichment in field to encourage movement (e.g. poles) • Turnout with youngsters or bossy horses 	<ul style="list-style-type: none"> • Ensure safe field set-up • Ensure herd gets on well with one another to minimise stress and risk of injury

Use Metabolism: what could you change?

What could you change?

Options

Things to consider

Allow the horse to thermo-regulate

- Don't rug the horse, or rug less than usual to encourage the horse to use its own calories to keep itself warm
- Consider giving the horse a trace or hunter clip

- Take into account the horse's age, type, hardiness, body condition, and amount of natural shelter/artificial shelter when deciding whether to rug less, clip or not rug your horse. It's important that the horse has some shelter from the elements.
- Ensure the horse has enough forage to keep warm

Allow the horse to lose weight over winter

- It's natural for horses to lose weight over winter. A useful rule of thumb is to be able to see the slight outline of ribs in spring, so that you have leeway for when the grass comes through.

Encourage foraging behaviour on low-calorie forage

- In the wild, horses would walk many miles to seek out forage. Be creative to encourage more movement and foraging behaviour at home.
- Use rougher grazing land, woodland (if trees are safe), tracks, or yard areas to encourage movement while foraging
- Split supplementary hay into multiple portions and hang from bushes, trees, in hay-balls, etc.

- Dieting horses are often limited in forage choice, which can cause boredom and depression. Creativity over food sources can help – for example, some owners split 2lb of hay into six haynets and hang in different areas – some are hay, some straw, soaked, some not, some have peppermint tea poured on, etc!

Common barriers: what could you change?

What is the barrier?

Options

Things to consider

I have hardly any time!

- Find a sharer
- Pay a professional to help school or hack your horse
- Pay someone to help with yard chores, giving you more time to exercise your horse
- Alter your horse's routine to allow more time; for example sharing chores with another owner, altering turnout times, etc

- It can be hard to find people you trust, but don't give up hope! Ask for references about professionals and sharers

I can't restrict grazing on my yard in any way, and I can't exercise my horse either because he/she is old or injured

- There is such a thing as the wrong yard, even if it's perfect in every other way. If the yard can't help you manage your horse's weight, moving may be the best option for your horse's health.

- Seeking other horse owners with overweight or laminitis/EMS horses in the local area may help, since you may be able to work together on one yard, creating a set-up that suits you all.

No matter what I do, the horse doesn't seem to lose weight

- Speak to your vet; it may be that your horse suffers from a metabolic condition such as EMS; this will require veterinary assistance to manage

- Horses are often tested for Equine Metabolic Syndrome (EMS) by using a blood test

I find it hard to assess my horse's weight

- That's completely normal – you're not alone!
- Work with a friend to condition score each others' horse
- Ask your vet, farrier, instructor, saddler, nutritionist, physio, or other professionals to help you to condition score your horse.

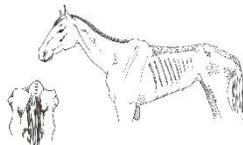
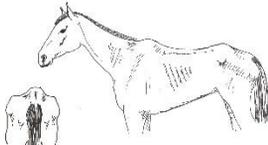
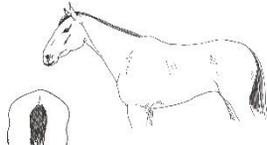
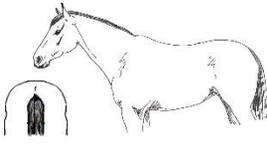
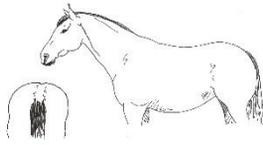
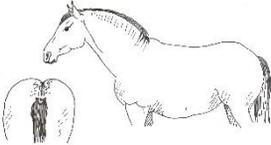
- Make sure that whoever is assisting you, whether professional or friend, knows that you want an honest opinion! People sometimes find it hard to talk about weight. However, try not to be downhearted – realising there's a problem is the first step to fixing it!

Measuring Changes

To track your success, measure your changes at a time you'll remember each month – for example the 1st of each month, on payday, every Saturday – and write them down in a diary or on the “notes” section on your phone to keep track. You can find a free Excel weight tracker spreadsheet at <http://www.careaboutlaminitis.org.uk/>

Method	How	Useful for?	Pros and Cons
Weight tape	Use a weight-tape (or piece of string) to measure the girth area of your horse (ensure horse is standing squarely!)	<ul style="list-style-type: none"> Measuring change over time; use in conjunction with BCS 	<ul style="list-style-type: none"> Very quick and useful tool for measuring change over time.
Body Condition Scoring	<p>Use a formalised system to assess the amount of body fat on the horse (ensure horse is standing squarely!)</p> <p>The Cresty Neck Score (CNS) can be useful for considering the neck area specifically; the link in the green box above explains how to use the CNS.</p>	<ul style="list-style-type: none"> Assessing appropriate body condition at one point in time Measuring change over a long period of time (months not weeks) 	<ul style="list-style-type: none"> Gives a useful overview of the amount of <i>fat</i> on the horse, as opposed to its weight. Can be difficult to judge, especially on heavier breeds/those with PPID (ask a friend to help you be objective!). It can take a while for changes to be visible at BCS level
Photographs	Take regular photographs of your horse from the side, back and front on flat ground, to compare over time. (ensure horse is standing squarely!)	<ul style="list-style-type: none"> Measuring change over a long period of time (months not weeks) 	<ul style="list-style-type: none"> Insensitive method, and only shows major changes. However, still a useful tool.
Weighbridge	Use a weighbridge at the vets, with a nutritionist, or at shows to determine the exact weight of your horse	<ul style="list-style-type: none"> Measuring change over time; use in conjunction with BCS 	<ul style="list-style-type: none"> Useful if you know the ideal weight of the horse, or can compare with previous or future measurements. Most sensitive method
Weight Calculation	Measure the body length and neck and girth circumference with a tape measure $(\text{kg}) = (\text{heart girth}^2 \times \text{body length}) / (11,880 \text{ cm}^3)$	<ul style="list-style-type: none"> Measuring change over a long period of time (months not weeks); use in conjunction with BCS 	<ul style="list-style-type: none"> Useful if you know the ideal weight of the horse, or can compare with other measurements. More accurate than a weight-tape, more convenient than a weigh-bridge Need two people to measure length of horse!
Other (girth measurements, etc)	Keep a record of current girth hole	<ul style="list-style-type: none"> Measuring change over a long period of time (months not weeks) 	<ul style="list-style-type: none"> Extremely inexact, but used by many for convenience. If you do this, make sure all your girths are the same length!

Condition scoring

Score	Pelvis	Back and Ribs	Neck	
0 Very Poor	Angular, skin tight. Very sunken rump Deep cavity under tail	Skin tight over ribs. Very prominent and sharp backbone.	Marked ewe neck. Narrow and slack at base.	
1 Poor	Prominent pelvis and croup. Sunken rump but skin supple. Deep cavity under tail.	Ribs easily visible. Prominent backbone with sunken skin on either side	Ewe neck, narrow and slack base.	
2 Moderate	Rump flat either side of back bone. Croup well defined, some fat. Slight cavity under tail.	Ribs just visible. Backbone covered but spines can be felt.	Narrow but firm.	
3 Good	Covered by fat and rounded. No gutter. Pelvis easily felt	Ribs just covered and easily felt. No gutter along the back. Backbone well covered but spines can be felt.	No crest (except for stallions) firm neck.	
4 Fat	Gutter to root of tail. Pelvis covered by fat. Need firm pressure to feel.	Ribs well covered - need pressure to feel.	Slight crest Wide and firm.	
5 Very Fat	Deep gutter to root of tail. Skin distended. Pelvis buried, cannot be felt.	Ribs buried, cannot be felt. Deep gutter along back. Back broad and flat	Marked crest very wide and firm. Fold of fat.	

*(Based on the Carroll and Huntington Method)
To obtain a body score, score the pelvis first, then adjust by half a point if it differs by one point or more to the back or neck.*

Enrichment

Enrichment means making your horse's environment more interesting, keeping your horse mentally stimulated and limiting boredom. It's particularly important for horses on weight management strategies which limits their access **to the 3 Fs – Forage, Friends and Freedom**. It's really important for your horse's psychological wellbeing to try and maximise their access to these three resources, whilst also trying to improve their health by reducing their weight. Some ideas are below, but you can find more by searching online.

Stable enrichment (all of these can also be used in field!)

Scratching pads can be bought from many online stores, or improvised with old broom heads (but ensure safety!)



Stable toys such as treat balls, carrot garlands, etc are good enrichment for some horses. However, make sure the treats are low calorie, and watch your horse to ensure that it is not becoming overly frustrated; food frustration is not fun for your horse!



If your horse is stabled but allowed a little movement, provide choice by making a small yard area in front of the stable which allows the horse to choose whether to be inside or outside.

If possible and safe, a larger stable or barn shared with a friendly horse can help improve your horse's stabled time. If this isn't possible, ensure that the horse has some time to interact with other horses, for example grooming another horse over a fence.

Create a 'hedgerow haynet' with cow parsley, sticky-weed, hawthorn etc. (be careful to choose accurately – consult a book if necessary to identify edible plants, and never feed large quantities of any one item).



Split your hay into different sections, and then soak each with a different herbal tea in the water – peppermint, chamomile, etc, to allow your horse choice and provide interest.



If your horse is allowed exercise and it is safe to do so, in-hand hacking can be a nice way to spend time together as well as giving your horse a very light work-out. Explore new hacking routes and practice the things which you struggle with on ridden hacks – bridges, gates, wheelie-bins, white lines etc!

Enrichment

Field enrichment

Horses in typical UK paddocks often have nothing to do but eat. Making the paddock more interesting could encourage your horse to interact with its environment, spending less time eating and more time playing, moving and resting.



Diversifying your horse's environment by giving them access to woodland areas, rough grazing, or extra space (as on a track system) can help to provide natural enrichment which encourages the horse to move around more.

Some owners also plant special bushes and horse herb-gardens to encourage foraging (of course, you need to limit intake of any one food, and also check to ensure you're not giving your horse anything poisonous).

Some owners enjoy placing hay in the bushes so the horse has to forage for it!



Placing obstacles in the field can be interesting for the horse; some owners place logs, trotting poles, sand-pits, ponds, gravelled areas, scratching posts etc around the field.



Horses love different smells and herbs. Some owners create herb pastes with a little water and herbs such as peppermint, chamomile, or turmeric, and paint them on logs to encourage the horse to smell and forage (ensure logs are safe for horses).



If hay is supplemented, feeding it in a hayball (or similar) or trickle net on the floor (barefoot horses only; haynet must be safely secured) can help mimic foraging behaviour.



Supporting your horse

There are lots of different ways to manage weight, but no matter which methods you choose, the important thing is to ensure that you keep a close eye on your horse's welfare. What works for one horse, might well be very stressful for another horse or in another setting.



Every time you monitor your horse's weight, it is a good idea to track the methods you're using to manage weight (on page 18) and then monitor how your horse is doing, in terms of their weight but also their physical and mental wellbeing. If you're not sure, ask an equine professional who knows you and your horse well, such as your instructor, vet, or farrier.

Problem prioritisation

You may have concerns about different aspects which affect weight management; for example your own time availability, conflicting health concerns with your horse, and so on. Use this page to write down the problems, prioritise them, and consider how you could make changes. An example has been completed to assist you.

What is the problem?	How big a problem is this (out of 10)?	Ideas for overcoming the problem
<p>Example:</p> <p><i>The horse's current weight</i></p> <p><i>Concerns about sand colic because I know my land is very sandy</i></p> <p><i>Lack of time for exercising horse</i></p>	<p>Example:</p> <p><i>8/10 – I'm worried about long term health risks as he's young</i></p> <p><i>9/10 – I know other horses have had sand colic here and this is potentially a more serious immediate problem than the weight</i></p> <p><i>4/10 – I could make more time but it's tricky!</i></p>	<p>Example:</p> <p><i>Top priority is the sand colic, but the horse's weight is also a big issue. Therefore I need to use weight management strategies that do not work by having the horse on very short grazing. I will strip graze but allow plenty of grass and will supplement soaked hay, and my main weight management strategy will be increased exercise by more intense hacking; I can ask a friend to lunge the horse 2x a week to help me.</i></p>

Your horse:

The horse's current weight

Your horse:

Your horse:



Weight management strategies I will use:

Reduce Grazing:

Alter supplementary feed:

Use metabolism:

Increase exercise:

How I will monitor changes:

Write the strategies you plan to use on this page, as well as how you will monitor your horse's progress.

Number the changes – which one will you start with, and when will you do it?





Weight management progress:

Month	Weight or BCS	What's worked well	What's worked less well	Ideas for future:

Use this page to record your progress each month, and plan ideas for future weight management strategies





Authors:

**Tamzin Furtado, Elizabeth Perkins, Cathy McGowan, Francine Watkins,
Gina Pinchbeck, Rob Christley**
University of Liverpool (2018)

If you have feedback or questions about this guide, please email:

tfurtado@liverpool.ac.uk

With thanks and gratitude to:

- *All the study participants who have taken part in the “horse health and wellbeing” study*
- *Danica Pollard and Alexa Marks for assistance developing this guide, as well as the multiple reviewers who gave their advice*
- *Donators of photographs for this guide*
- *The Horse Trust for funding this project*