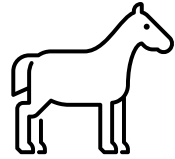


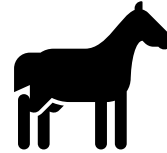


Equine Wellbeing at the Heart of Riding Schools – Nutrition and Nutritional Management

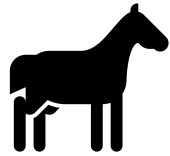
What we are going to cover



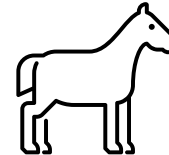
Forage



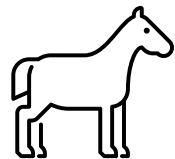
Importance of Sugar and Starch



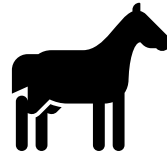
Monitoring weight and body condition



Weight management



Enrichment and positive behaviour



Take home tips



The Importance of Water

- Water is the most crucial yet often the most overlooked component of a horse's diet.
- Sudden changes (e.g., box rest) can drastically affect water intake.
- Fresh, clean water must be available at all times to help prevent dehydration and impaction colic.
- Average water intake for a 500kg horse at rest is often said to 25 litres BUT intake/requirements vary widely...

A stabled horse on an all-hay diet may drink up to



40 litres
of water per day!

Monitoring Water Intake

- Automatic drinkers make it difficult to track water consumption.
- Use buckets to monitor intake.
- Feeding a mash can support hydration and encourage drinking



Forage: The Backbone of the Diet

Forage should be the foundation of every adult horse's diet!

- A high fibre diet is essential for maintaining digestive health
- Fulfills the need to chew - supports gastric health & mental wellbeing
- Provides a significant source of energy (calories)



Choosing the right forage



	Approx. DE MJ/KG*
Haylage	6-11
Hay	8-10
Grass	7-12
Straw	4-6 (approximate)
Hay replacer	8-12

Sugar and Starch!



Lots of terms,
lots of
confusion



WSC = Mainly
simple sugars
and fructans



Fructans being the
storage form of
sugar in grass



NSC =
Starch +
WSC



Grass can be up to
15% simple sugar
and 35% WSC DM



Even on 'poor' pasture
ponies and some horses
could be consuming far
more calories than they
require



High sugar and starch
levels should be
avoided especially for
those at risk from
laminitis



Feed in the bucket is the biggest
source of starch, forage is the
biggest source of sugar



Sugar in practice!

The amount of starch and sugar provided by **ANY** feed will depend on how much of it is eaten!

250g balancer
5% sugar



12.5g sugar

6kg of hay
15% sugar



900g sugar

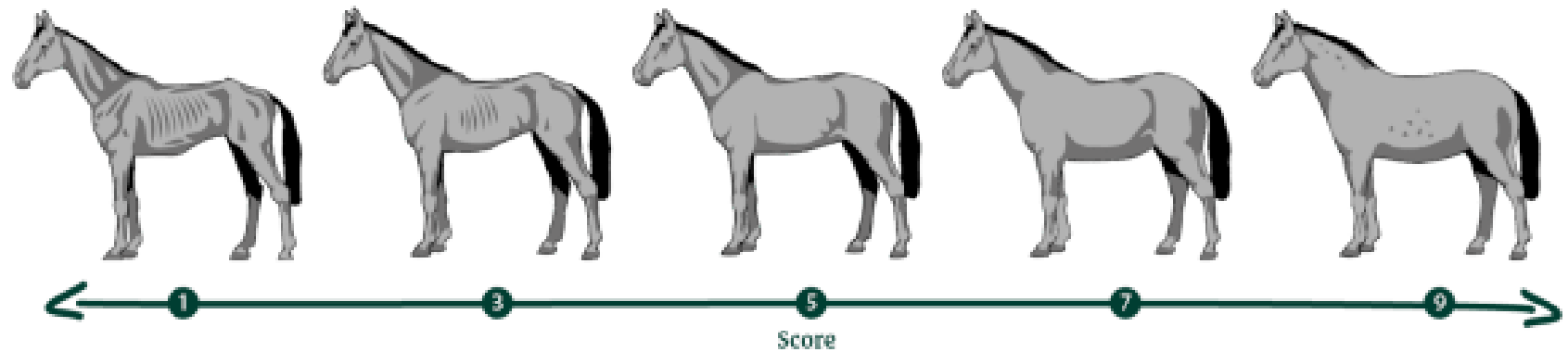
1.5 kg SPILLERS™
HAPPY HOOF™
4% sugar



60g of sugar



How Much Hay/ Haylage Should I Feed?



Ideally as much as your horse/ pony will eat (while being mindful of excess weight).

Minimum of 2% of bodyweight per day on a dry matter basis for maintenance.

How Much Hay/ Haylage do I put in a net



500kg horse no grazing



**Minimum 9kg if
fed dry**



**Minimum 11kg*
if soaking before feeding**
*unsoaked weight



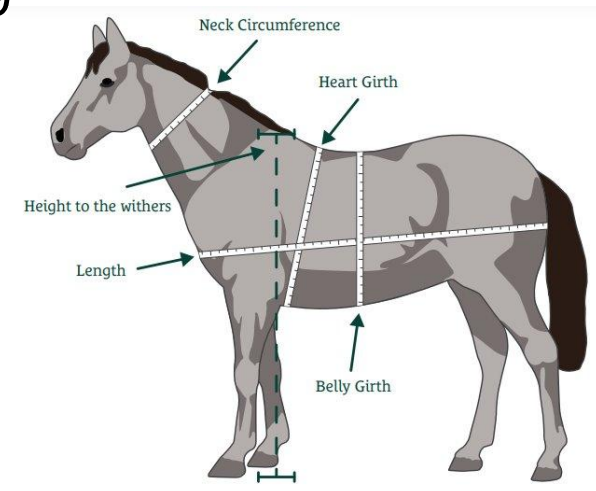
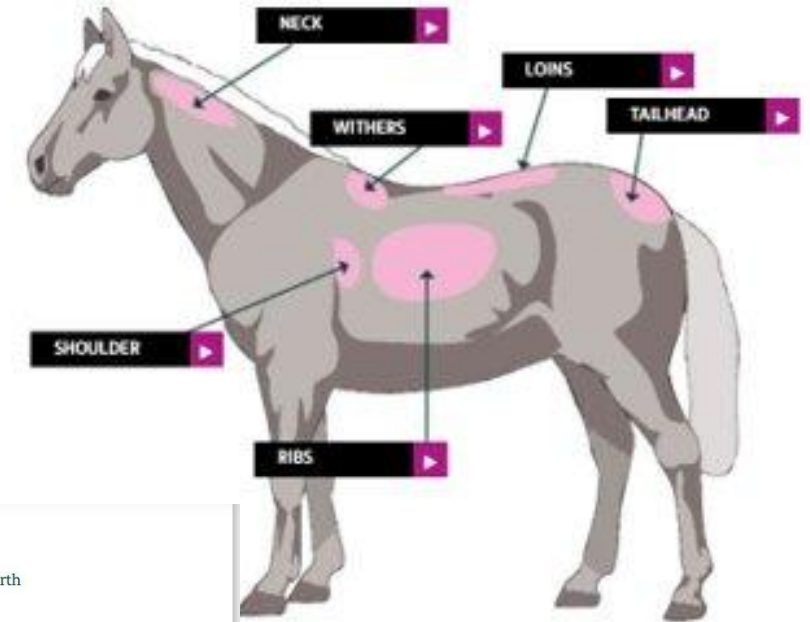
**Minimum 13.5kg if
haylage**



Weight management

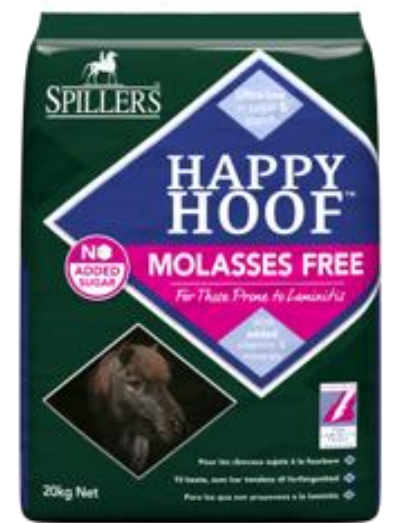
How to monitor weight/condition

- Body Condition Score (BCS)
- Body Condition Index (BCI)
- Weigh tape
- Weigh bridge <https://www.spillers-feeds.com/how-to-body-condition-score-your-horse>
- Aim for a body condition score (BCS) of 4.5-5.5 out of 9



Reducing the calorie density of forage!

- CONSIDER GRAZING – how much grass
- Ideally recommend feed hay low in WSC!
- Feeding soaked hay
- Hay replacers
- Feeding straw as a partial replacement up to 30-50% of the total forage ration





Feeding Straw

- May be a useful way of diluting the calorie content of the forage ration for good doers without dental issues
- Must be of good hygienic quality & introduced gradually
- Oat, wheat & barley straw are suitable
- As a guide, replace up to 30-50% of the hay ration with straw



Managing grass intake

- Calculating intake is very tricky!
- Free access 1.5-5% BW DM!!
 - A 250g pony could consume 12.5kgDM which is enough energy (calories) to fuel a racehorse.
- Reduce turn out time?
 - But be wary of binge eating ponies can consume 1% BW DM in 3 hours
- WSC levels vary day by day and even throughout day!



Strip grazing



Track systems



Grazing muzzle



Co-grazers



Zero grazing
options

Hay soaking

- Helps to reduce WSC but results are highly variable – soaking alone doesn't guarantee suitability for laminitics
- Ideally recommend forage analysis - forage for laminitics should contain <10-12% NSC (WSC + starch)
- UK forage contains very little starch – testing for WSC (by wet chemistry) is generally sufficient

As a guide we recommend soaking for:

➤ 6-12 hours in cold weather

➤ 1-3 hours in warm weather (ambient temperature 16°C and above)



**SOAKING HAY MAY
REDUCE WSC BY
UP TO**



40%

but results are variable

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Hay soaking Vs Steaming

Soaking vs steaming hay

Research shows steaming is by far the superior option for improving hygienic quality, reducing the number of respirable particles (those small enough to inhale) and microbial contamination

BUT

NOT very effective at reducing WSC. Although less practical, soaking followed by steaming achieves the best of both worlds - reduces the 'sugar' content and improves hygienic quality.



**Home made
steamers**

Balancers

NOT 'conditioning'

- Provide a negligible level of calories (except stud balancers)
- Feed the recommended amount of an appropriate compound feed to provide additional calories and vitamins and minerals for a balanced diet (some fibre feeds and mashes contain added vitamins and minerals too)
- Add a balancer if feeding less than the recommended of compound feed or feeds without added vitamins and minerals



Balanced diets

- Feeding a balanced diet is essential for all horses and ponies.
- Grass, forage and particularly soaked hay will not provide a balanced diet, vitamins, minerals and quality protein (lysine) will need to be supplemented.
- Balancers are ideal for good doers by cutting calories not nutrients!
- Low feeding rate = very limited amount of calories, starch & sugar per daily serving



Weight loss – Identify the cause



Are you supplying
enough calories???



Are they eating enough
forage???



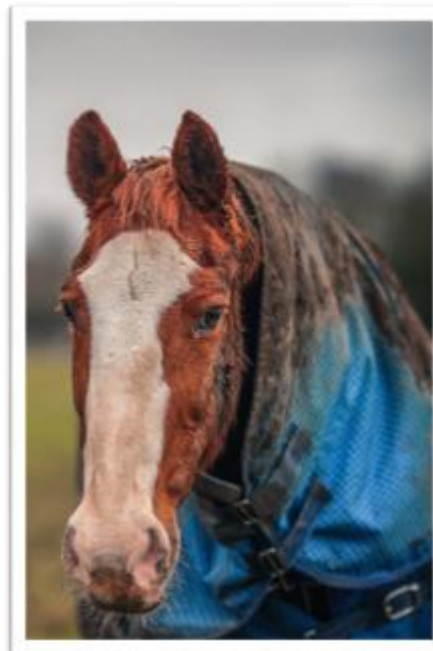
Are they warm
enough???



Poor dentition???



Seek veterinary advice if
weight loss is sudden,
severe or unexpected



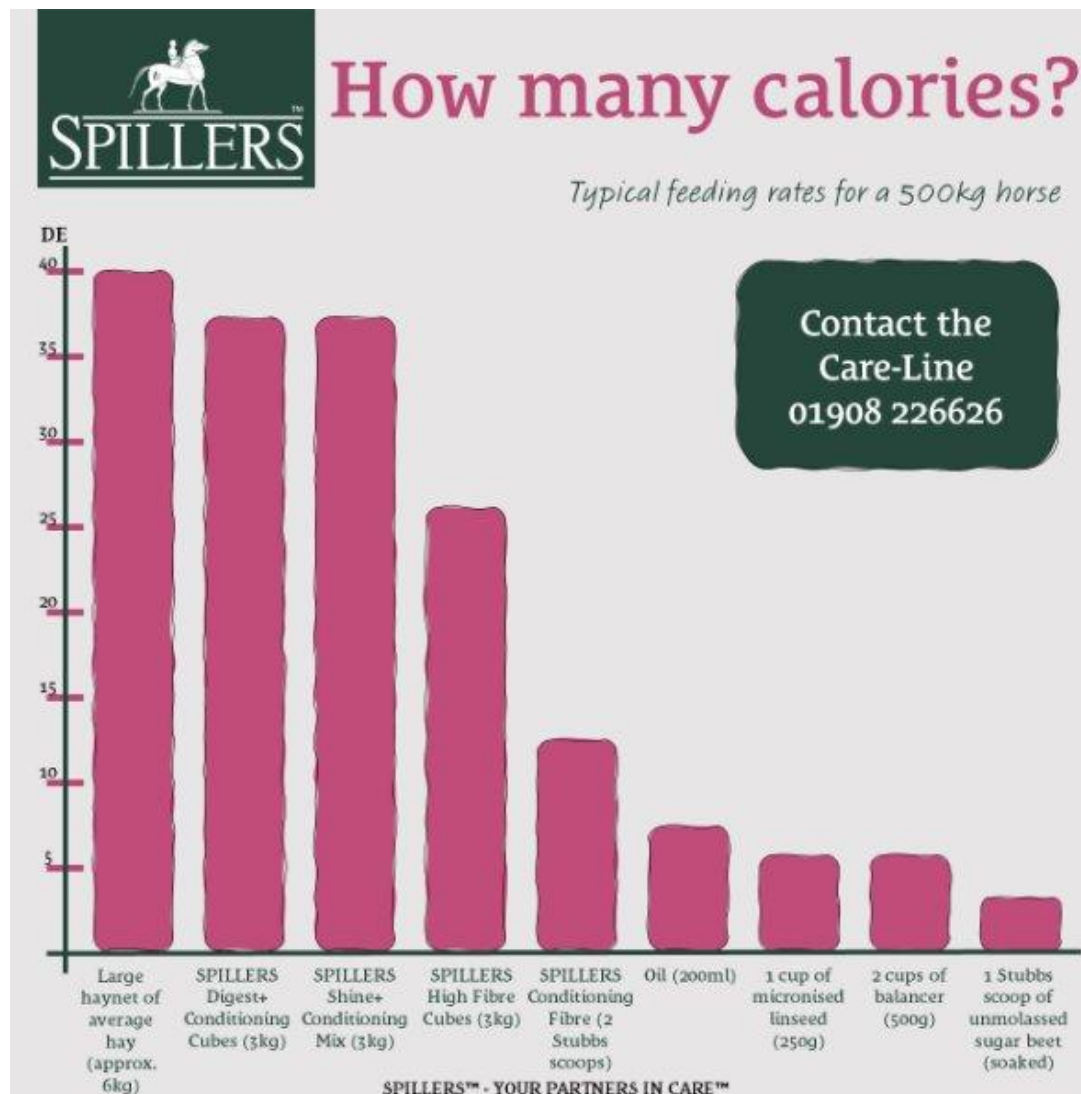
Calories Vs Energy

- Calories = Measurement of energy (kilocalories in human food)
- In the UK, energy in equine feeds is described in 'megajoules of digestible energy' (MJ DE)
- Excitable horses CAN have high energy/calorie feeds
- Horses prone to conditions such as laminitis, gastric ulcers and tying up CAN have higher energy/calorie feeds if required





Know your calories



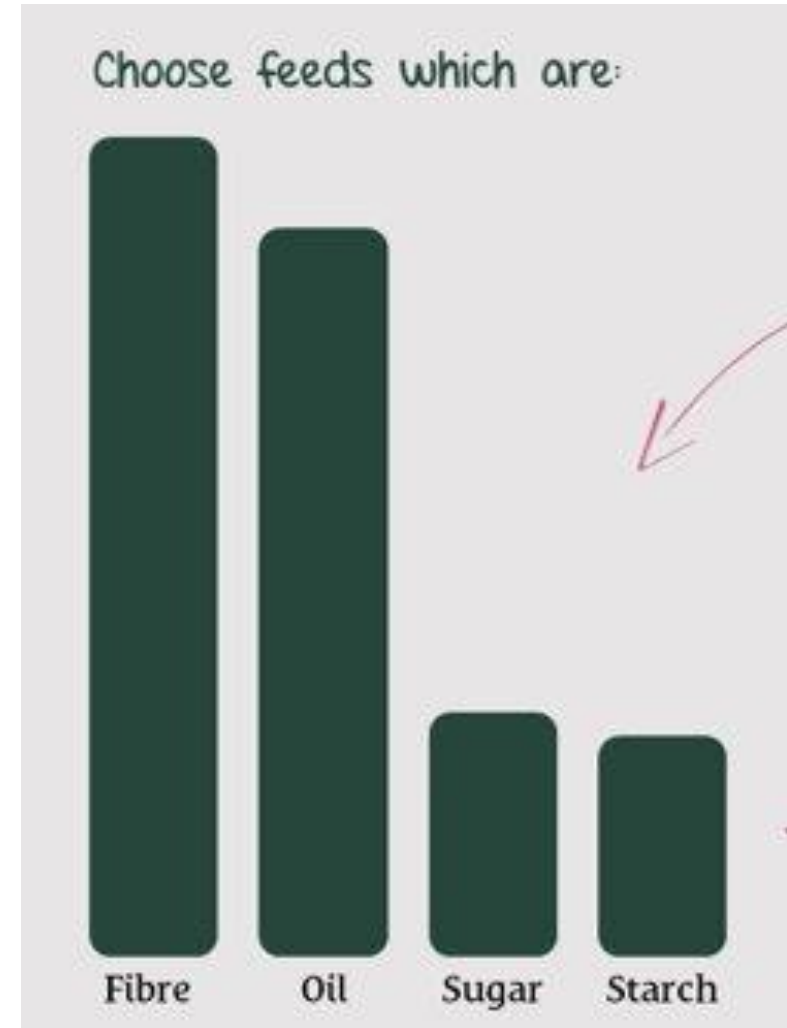
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Oil as a calorie source

- Approx. 2.5 times higher in energy vs cereal grains
- 300ml of oil provides the same amount of energy = 1kg of “oats”(approx.)



Weight gain without excitability





How much is in your scoop?!

	Calories per kilo (MJ DE)	Calories per Stubbs scoop (MJ DE)
SPILLERS High Fibre Cubes	8.4	16.8
SPILLERS HAPPY HOOF	8.8	4.4
SPILLERS Digest+ Conditioning Cubes	12	24
SPILLERS Shine+ Conditioning Mix	12	18
SPILLERS Alfalfa-Pro Fibre	12.5	7.5

As a guide 1 Stubbs
scoop holds
approximately

- 2kg of cubes
- 1.5kg mix
- 500-600g of SPILLERS
Alfalfa-Pro Fibre or
Conditioning Fibre



Other common challenges!

- Gastric Ulcers
- Laminitis
- Colic
- PPID
- EMS
- Sterotypical behaviour





Enrichment and promoting positive behaviour!

Where possible feed an unlimited supply of forage being mindful of waste.

Reduce calorie density of forage before amount.

All horses are individuals – turn out time as appropriate.

Find ways to extend eating time – be imaginative.



Herd dynamics

- Look out for changes in herd dynamics & signs of bullying
- Older horses may lose out when it comes to feed/ forage, water and shelter
- Ideally provide a large water trough or more than one water supply in the field
- Consider feeding senior or poor doers separately if needed



Take Home tips!!

- Don't forget the importance of water
- Forage is the foundation of the diet
- Enrichment and extend eating time when turn out is limited
- Not all forage is equal
- Most of a horse's calorie intake will come from forage
- The amount of starch and sugar provided by **ANY** feed will depend on how much of it is eaten!
- Monitor bodyweight and condition in a consistent way
- Reduce calorie density of forage before restricting amounts
- Calories VS energy know what's in your feed
- Identify the cause of weight loss before finding the solution
- Use fibre and oil for weight gain without excitability
- Horses and individuals just like people what works for one may not work for another.
- Consider enrichment and extending eating time be imaginative
- A Happy Horse is a Healthy Horse remember the 5 Freedoms



Any questions?



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