Boehringer Ingelheim

NUTRITIONAL ADVICE FOR THE EQUINE CUSHING'S PATIENT

Cushing's support for horse owners at https://www.careaboutcushings.co.uk

CARE ABOUT CUSHINGS

Here for you. Here for your horse.

Equine Cushing's disease affects older horses and this means that if your horse is diagnosed with this condition they will need extra support to cope with the consequences of the disease as well as their advancing age.

It is also important to be aware that Equine Cushing's disease can alter your horse's appearance by causing unusual fat distribution and/or muscle wastage. This can make it more challenging for you to assess their nutritional needs.

While it is important to remember that your horse's diet will not have caused their Equine Cushing's disease, accurately assessing their nutritional needs and providing the correct nutritional support can help your horse cope better with the consequences of this progressive hormonal condition.

Using Body Fat Score (BFS) to assess your horse's nutritional needs

Regularly monitoring your horse's fat levels is a helpful way of tracking their response to treatment and deciding on appropriate nutritional changes. This is especially important because horses with this condition are at an increased risk of laminitis and Body Fat Scoring can be used to help identify when management changes are needed to reduce their laminitis risk.

Care About Cushing's has partnered with equine nutritionist Teresa Hollands to create a Body Fat Score (BFS) guide specifically for horses with Equine Cushing's disease.

Visit the website **www.careaboutcushings.co.uk** to download a BFS guide and watch helpful videos on how to Body Fat Score your horse.

What do I do if my horse has too much fat and is overweight?

If your horse's BFS is high in any area, or their weight is higher than expected for their breed, you should discuss their specific nutritional management options with your vet. Obesity or weight gain can also be symptoms of an underlying hormonal condition such as Equine Metabolic Syndrome (insulin dysregulation) or Equine Cushing's disease, your vet can test for these if appropriate.

In general, in overweight, obese and/or laminitis-prone horses it is important to keep calories, sugar and starch in the diet low in order to reduce the risk of laminitis and weight gain. This means that the diet should be low calorie and high fibre, consisting mostly of forage. The most suitable forage to elicit weight loss is hay, ideally soaked (to reduce the calorie content) with limited or controlled access to grazed down, poor quality pasture. Haylage is not suitable due to the high calorie content, and you should also avoid concentrates and treats where possible.

Weight loss tips

Helping your horse to lose weight can be a long and difficult process so here are some handy tips to get you started:

- Always weigh out the total daily amount of hay at one time – about 1.5-2% of your horses weight in dry hay; it's easy to underestimate feeding amounts or be tempted to add more later in the day!
- Use a low-calorie balancer to provide key nutrients
- Avoid high calorie treats such as mints or fruit. A safe, crunchy low calorie alternative to apples and carrots is celery.
- Have hay analysed; knowing the sugar content of hay can help you and your vet formulate the right diet for your horse
- Soak hay; soaking in water for 7-16 hours can reduce the sugar content by 24-43%
- Use a grazing muzzle when your horse is turned out; this can reduce pasture intake by up to 80% in a 3 hour period
- Double or triple net hay, or use slow feeder nets so that you can reduce the amount of forage but extend your horse's eating time
- Hang nets from the ceiling (ensuring they are hung safely) or split one large net into smaller nets and hang around the stable/paddock to encourage movement

What do I do if my horse has too little fat and is underweight?

If your horse's BFS is low in any area, or their weight is lower than expected for their breed, you should discuss their specific nutritional management options with your vet. A veterinary examination is vital for horses with Equine Cushing's disease that are suffering from unexpected weight loss, to ensure that other medical conditions and/or dental disease are ruled out.

In many cases prescription medication and nutrition can play a key role in improving the condition of your horse with Equine Cushing's disease. Prescription medication can reverse the hormonal imbalances that may cause unusual fat distribution, muscle loss, and apathy and should result in an improvement in these symptoms. If your horse has lost weight (fat, muscle or a combination of both) then an increase in daily calories alongside regular exercise should be initiated in addition to prescription medication to support their return to fitness.

In general, the majority of your horse's diet should still be fibre based (using forage such as hay or haylage), however concentrates such as veteran mixes can be given to underweight horses with Equine Cushing's disease following the manufacturer's feeding recommendations to help increase the energy content of their diet.

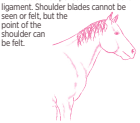
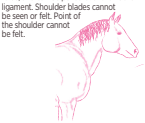
Weight gain tips

Helping your horse to gain weight may not be as straight-forward as you first think, so here are some helpful tips:

- Unlike overweight horses, underweight horses can have haylage due to their need for increased calorie content
- Increasing the oil content of the diet such as switching to a concentrate or chaff with a higher oil content. It is advised to start with a small amount and slowly increase.
- Split concentrate feeds into several smaller meals given throughout the day so as not to over-face your horse
- Use large hole nets or feed hay loose from the floor so that your horse does not have to struggle to pull hay from the net
- Supplements such as Equitop Myoplast can ensure that your horse has all the building blocks to create muscle when they are exercised
- Increase grazing as grass is easy to chew and digest
- In-hand walking and grazing is an excellent way to incorporate exercise and grass if your horse does not have regular turnout

Ongoing Monitoring

It is important to reassess your horse's BFS and weight every two weeks, so that you can make any appropriate changes to their nutritional and management plan in order to keep them in optimum condition.

	SCORE 0	SCORE 1	SCORE 2	SCORE 3	SCORE 4	SCORE 5
NECK	Neck bends upwards, and appears narrow and thin. The nuchal ligament is obviously visible and has no fat on top. There is no crest. The boney outline of the entire shoulder blade is visible with no fat coverage. 	Neck bends upwards, and appears narrow and thin. The nuchal ligament is visible, can be felt all the way down the neck, and has no fat on top. There is no crest. Only the top of the shoulder blade is visible with no fat coverage, but the shoulder blade can still be felt. 	No obvious bend to neck. The nuchal ligament is not visible, but can be felt all the way down the neck, and has no fat on top. Neck appears narrow and muscle can be felt. There is no crest. Shoulder blade is not visible but can easily be felt. 	Neck bends downwards. The nuchal ligament is not visible, but can be felt all the way down the neck and there is fat over the ligament. The neck is firm with visible muscle. No crest is present (except in stallions). The shoulder blade can be felt with a small amount of pressure. 	Neck bends downwards. The nuchal ligament is not visible and cannot be palpated all the way down the neck. Your horse may be sensitive to you feeling for this ligament. The neck feels softer to touch. A wide, spongy crest is present. The crest can be pulled over the nuchal ligament. Shoulder blades cannot be seen or felt, but the point of the shoulder can be felt. 	Neck bends downwards. The nuchal ligament is not visible and cannot be palpated. Your horse may be sensitive to you feeling for this ligament. The neck feels soft to touch. A marked crest is present which is wide and firm with fatty folds, and can be pulled over the nuchal ligament. Shoulder blades cannot be seen or felt. Point of the shoulder cannot be felt. 
MIDDLE	Backbone is very visible and prominent. Skin is sunken on each side of the backbone. When you lift your hand, it is a V-shape. Bones on the backbone can be felt easily. Skin is pulled tight over the ribs which are all clearly visible and can be easily felt. 	Backbone is visible and defined. Skin is sunken on each side of the backbone. When you lift your hand it is a V-shape. Bones on the backbone can be felt. Skin is tight over visible ribs which are visible and can easily be felt. 	Backbone is well-covered. When you lift your hand, it is a V-shape. Bones on the backbone can be felt. Ribs are only just visible, but can be felt. 	Backbone is not visible. No 'gutter' is visible along the back. When you lift your hand, it is curved. Bones on the backbone can just be felt. Ribs are covered but can be felt with light pressure. 	Backbone is not visible and the topline is smooth. Gutter is visible along the back. When you lift your hand, the fingers are slightly curled upwards. Ribs are not visible but can be felt with pressure and are covered by fat. Fat behind the shoulder can be felt. 	Backbone is not visible, topline is smooth. The back is flat with a deep gutter. When you lift your hand, it is C-shaped upwards. Ribs are well covered by fat and cannot be seen or felt. Fat behind the shoulder can be felt. 
RUMP	Croup is sunken and angular. Pelvis is visible, angular and easily felt, and skin is tight over this area. Angular hips with no fat coverage can be easily felt. Narrow bottom. Deep cavity under tail and each side of croup. 	Croup is sunken and angular. Pelvis is visible, angular and easily felt, and skin is tight over this area. Angular hips with little fat coverage can be easily felt. Narrow bottom. Cavity under tail. 	Croup is angular. Pelvis is visible, angular and can be felt, skin is not as tightly stretched over this area. Angular hips can be easily felt. Narrow bottom. Cavity under tail. 	Croup is well-defined but covered by muscle. Pelvis appears rounded, not obviously visible, but can be felt. Skin is not tight over this area. Hips appear rounded; not obviously visible, but can be felt. Rounded bottom. No cavity under tail. 	Croup is rounded. Pelvis is covered by soft fat, not visible, and felt only with pressure. Skin is not tight over this area. Hips appear rounded; not visible, but can be felt with pressure. Apple-shaped bottom. Gutter in centre of tail. No fat pad on tail head. 	Croup is rounded. Pelvis is buried under fat and cannot be seen or felt. Skin is not tight over this area. Hips cannot be seen or felt. Apple- shaped bottom. Deep gutter to tail with fat pad present on tail head. 

EQUITOP MYOPLAST®

One of the most noticeable symptoms of Equine Cushing's disease is muscle wastage. Many forages (most notably soaked hay) do not provide horses with sufficient protein (amino acids). This is especially important for those animals that are on restricted diets for weight loss.

Equitop Myoplast® is a tasty, readily digestible supplement that contains 18 amino acids (the building blocks of protein) and is designed to support lean muscle development. Supplementing your horse's feed ration with Equitop Myoplast® whether they are over or underweight provides your horse with the high quality amino acids they need to support the maintenance of muscle mass. For more information visit **www.equitop-myoplast.co.uk**

Exercise

We are all aware that exercise is essential for weight loss and maintenance of general health. This can be especially important for older or retired horses. Regular controlled exercise will increase the calories burned by overweight animals, therefore helping to reduce their fat levels and in turn will aid the building of muscle. Exercise helps to support heart and lung function as well as keeping joints supple. A gradual increase in exercise can play an important role in maintaining and improving quality of life for older animals or those that are on restricted diets. Discuss exercise recommendations with your vet to ensure that your horse receives a bespoke exercise plan to maximise health and fitness.

Summary

Horses with Equine Cushing's disease often need extra attention when it comes to nutrition and exercise. Your veterinary surgeon will be able to provide further support and can advise on a diet and exercise plan specific to your horse.

With the help of daily treatment that can be prescribed by your vet, most horses with Equine Cushing's disease can live a life similar to before their diagnosis. For more information, expert advice and tools that will help you manage Equine Cushing's disease in your horse visit the Care About Cushing's website **www.careaboutcushings.co.uk**

References

- Longland *et al* (2016)Effects of Grazing Muzzles on Intakes of Dry Matter and Water-Soluble Carbohydrates by Ponies Grazing Spring, Summer, and Autumn Swards, as well as Autumn Swards of Different Heights. Journal of Equine Veterinary Science. Volume 40, May 2016, Pages 26-33
- Frank (2007) How to feed horses with endocrine disorders. AAEP Proceedings. Vol 53. 2007

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