

Guide to feeding a horse with Cushing's disease



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What changes when you find out your horse has Cushing's disease?

Cushing's disease in horses is a serious condition that affects the endocrine system. It needs to be diagnosed by a vet. Although it is problematic and will mean changes to lifestyle management and diet, there are positive steps you can take to help your horse lead a comfortable life.

The vet will give you medical guidance, but this guide is intended to explain the issues around Cushing's disease in plain language. In particular, it will look at what you can do for your horse nutritionally to ensure they are on an appropriate diet for what they need.

This guide will explore what Cushing's disease is, what the tell-tale signs of the disease are, what you should do if you suspect your horse has Cushing's disease, and the nutritional considerations.

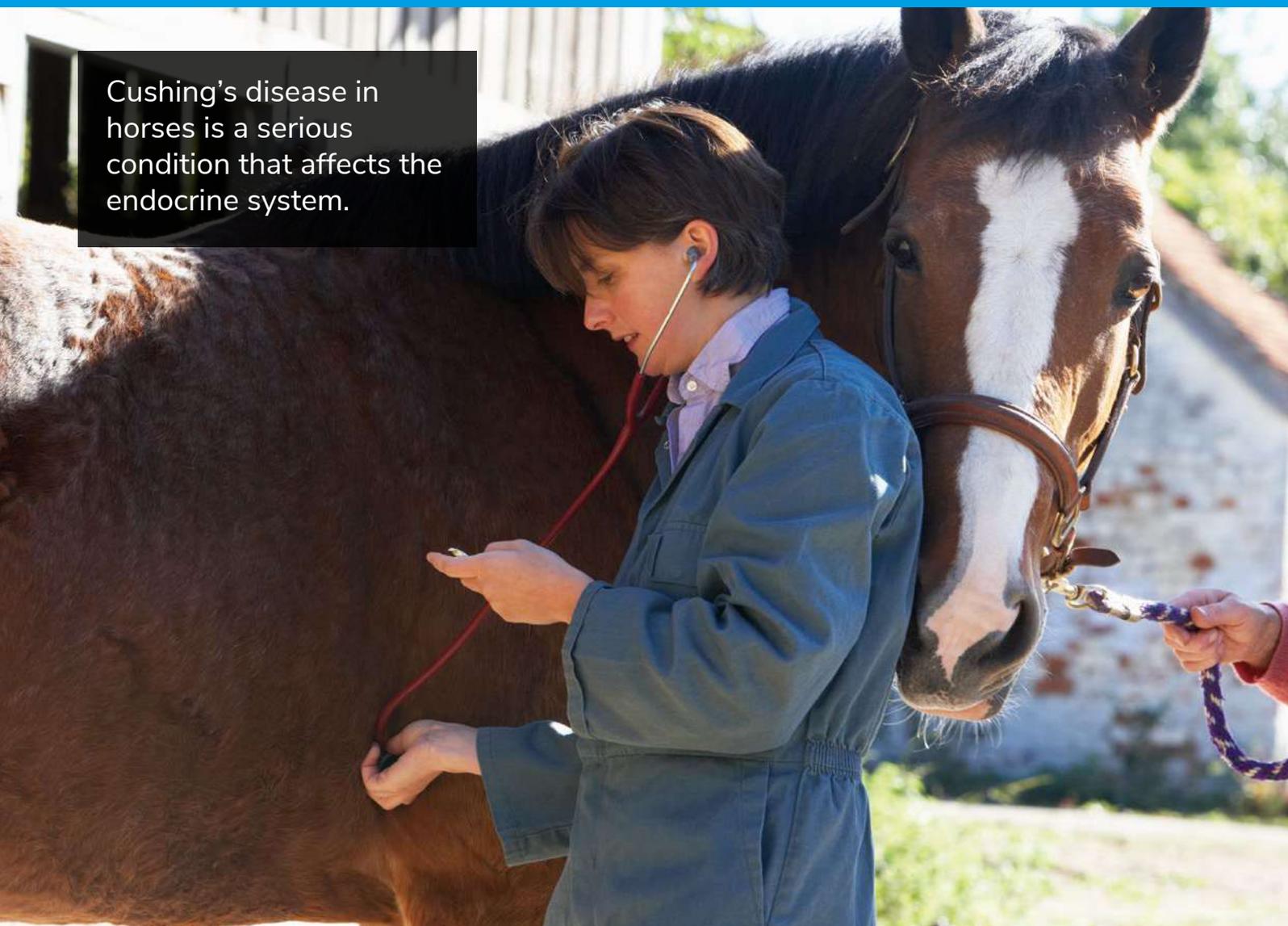
It also provides practical suggestions from the Pure range of feeds that will help you ensure your horse gets the right nutrition to keep them healthy and happy. You can buy them online at www.purefeed.com or by calling us on the number below. Pure Feeds and supplements are also available to buy in many retailers across the country.

I hope you find this information useful. If it raises any further questions for you, please do not hesitate to call our nutritional team on 01458 333 333. They can give you advice or prepare a bespoke diet plan for your horse.

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Cushing's disease in horses is a serious condition that affects the endocrine system.



How to feed a horse with Cushing's disease

What is Cushing's disease?

Cushing's disease (or PPID as it is alternatively known) is becoming more commonly diagnosed. It is estimated that it now affects over 20% of horses and ponies over the age of 15.

PPID is a hormonal disease, caused by a tumour on the pituitary gland which is located at the base of the brain. In scientific terms, this refers to hypertrophy of the melanotroph cells in the pars intermedia section.

The pituitary gland is responsible for producing a variety of hormones which maintain and control different bodily functions and is regulated by dopamine. Horses with PPID don't produce enough dopamine which means that their hormone levels are unregulated and the horse can produce too much of certain hormones, in particular ACTH.

What are the clinical signs associated with Cushing's disease?

Clinical signs associated with PPID include:

- Increased thirst,
- Increased urine production,
- Weakened immune response which makes the horse more susceptible to recurrent infections such as foot abscesses,
- Increased healing time,
- Hypertrichosis - changes in coat colour and coat shedding through to excessive hair growth and a long curly coat,
- Lethargy or poor performance,
- Excessive or patchy sweating,
- Laminitis and recurrent laminitis,
- Fat pads around the eyes - called peri-orbital fat,
- Abnormal fat distribution – for instance muscle wastage and loss of topline, and a pot-bellied appearance.

What to do if you suspect your horse has Cushing's disease?

As with any medical condition you should always consult your vet. They will carry out a blood test to confirm PPID and advise you on the best course of action for your horse. If your horse is overweight it is advisable to reduce them to a healthy body weight safely. This will help to reduce the risk of laminitis or insulin resistance.

What are the nutritional considerations for a horse with Cushing's disease?

A horse that has been diagnosed with Cushing's disease will require a specialised diet. As with any horse, the main proportion of their diet should be made up of forage. NSC (non-structural carbohydrate) intake should be reduced, and feeds containing wholegrain cereals and molasses should be removed from the diet. The sugar and starch levels should be 10% or less.

Hay may need to be analysed to check the sugar and starch content. If it is too high the horse should be changed to a forage with lower levels, or the hay could be soaked.

Grazing may also need to be monitored. A horse with Cushing's should not have access to lush pasture or stressed grass, as both of these are likely to contain higher levels of fructan in the grass.

Vitamins and minerals as part of a balanced diet

The diet should contain an easily digestible source of quality protein to help counter muscle wastage and loss of topline. Whilst every horse diet should be balanced and supply an adequate supply of trace and major minerals as well as vitamins, this is particularly important in horses with PPID. This is to support their musculoskeletal system and immune response.

In particular they need a good source of anti-oxidants: vitamins A, C and E, and copper, Zinc and selenium as part of a balanced diet.

Also, meals should be split into several smaller ones to reduce insulin peaks.

Countering inflammation

Cushing's horses also appear to be more susceptible to inflammation. This could lead to problems including arthritis. So a good supply of omega 3 fatty acids for their anti-inflammatory properties could be beneficial. Linseed is high in omega 3 fatty acids.

Maintaining a healthy bodyweight

The goal with supplying feed alongside the horse's forage ration should be to maintain a good bodyweight. Horses with Cushing's should not be overweight. For horses with Cushing's that are in work and require extra energy, it can be provided through high energy fibres such as unmolassed beet or soya hulls. These are highly digestible, broken down slowly (which will help reduce insulin peaks) and naturally low in sugar and starch.



Case study

Finally! A suitable feed that my horse with Cushing's loves

Pure Feed customer Jackie Keene shares her experiences as she searched for a new feeding solution once her older horse was diagnosed with Cushing's disease.

A routine vet check revealed my horse had Cushing's disease

"I have owned Katie since 2008 and she has been the most fantastic horse: very bold and capable. We have had so much fun together doing things I never thought I was brave enough to do.

I used to feed her on basic coarse mix, chaff and sugar beet. When she got older, I progressed her to a veteran mix as she struggled to maintain weight and condition during the winter. It was a routine vet check that diagnosed PPID (Cushing's Disease) and a complete change of diet was required. No molasses and low in starch - basically the polar opposite of what I had been feeding her!"

Cushing's Disease and other conditions that older horses are prone to

Cushing's is a disease of the endocrine system where the pituitary gland stops working effectively. You may see weight loss and even a pot belly as the stomach muscles breakdown. Fatty deposits often appear behind the eyes, on the ridge of the neck and above the tail. Sadly, your horse may not respond to pain and the healing of wounds slows down. Even mouth ulcers can turn really nasty. You'll need to see a vet, but horses that suffer from Cushing's will benefit from a diet that is low in sugar and starch.

Laminitis is another disease that veteran horses can be particularly prone to. The inflammation to the soft tissue that connects the pedal bone to the hoof is painful to the horse. It can lead to lameness. In very serious cases your horse may need to be put down. As with Cushing's, a diet that is low in sugar and starch can be beneficial.

What was the answer for Katie?

Jackie said: "There seemed to be an abundance of feeds catering for laminitis prone horses that are good doers but Katie isn't. She needs more calories especially through the winter. So I put her on a laminitis-friendly feed and added oil. But during this time she went onto Prascend medication to manage the Cushing's which can affect their appetite. She completely turned her nose up at this unappealing offering. I was literally throwing buckets of uneaten feed away on a daily basis.

Cue a Google search for a low sugar/starch diet, and that is how I discovered Pure Feeds.

After requesting a diet plan I was advised to put Katie onto Pure Working as I was still doing a fair bit on her at this stage and this was pre Pure Veteran days!

Well, she LOVED it! No more wasted feed, she takes her time to eat it which is much better for her. And what you don't realise until you actually open a bag is how good it smells - really fresh and it looks like something a horse should be eating. Not all sticky and powdery like many of the grain-based feeds. Also, my shelf of additives has disappeared, it's all in one bag which is fabulous.

I'm so pleased there is now a Pure Veteran, as when my vet gave me a list of all the things Katie needed to maintain condition at her age (now 24) they are literally all in that one bag!"



Jackie concludes:

"I don't bother with Google searches for the best feed anymore. My younger horse is on Pure Condition and she looks utterly fabulous. I'm gradually converting all my horsey friends as well. Everyone who has tried it loves it - I can't thank Pure enough!"

How the Pure Feed range can help you feed a horse with Cushing's disease

For good doers and other horses that do not need any extra calories in their diet
Pure Balance

Our balancer is free from molasses and wholegrain cereals and low in sugar, starch and calories. Therefore it will ensure that your horse is getting all the important daily nutrients that they need -including the full spectrum of vitamins and minerals, as well as amino acids, biotin and pre and probiotic - without encouraging weight gain. Pure Balance comes in pelleted form and only needs to be fed in small quantities. It is perfect for good doers that don't need a lot extra in their diet.



For good doers that need more than just a balancer
Pure Fibre Balance

Our Pure Fibre Balance is perfect for good doers that need little extra feed to maintain condition and that have suffered with laminitis and/or have Cushing's. It is low in calories, free from molasses and wholegrain cereals and contains our balancer in a more concentrated form. This means that you only need to feed half the quantity in comparison to our other feeds.



For good doers with Cushing's disease in light to medium work
Pure Easy

Our Pure Easy feed is the perfect complete feed for horses or ponies diagnosed with PPID that are good doers in light to medium work. Free from molasses and wholegrain cereals, but containing quality ingredients and our premium balancer, it will ensure you horse is getting all they need to meet their daily nutritional requirements in a safe way.



For horses with Cushing's disease that are in regular work, or who need help with condition
Pure Working

For horses with PPID that are still active and in regular work, or those that need a little extra help maintaining condition try our Pure Working. The higher oil content will provide extra calories in your horse's diet. The grass chaff and unmolassed sugar beet will provide additional energy which is highly digestible and broken down slowly. Whilst the low sugar and starch content makes it safe to feed to horses with PPID. It is a complete feed so there is no need to add anything extra.



For horses requiring a Cushing's disease compatible feed designed for older horses Pure Veteran range

Our Pure Veteran range consists of both Pure Veteran Mix and Pure Veteran Pellets. They are designed specifically to meet the needs of the older horse.

Our balancer that is included provides a higher level of vitamins and minerals to ensure that your horse is getting all the important nutrients they need. This will help to keep them healthy and support their immune system. We also include pre and probiotics to help nourish the good bacteria in the hind gut and aid digestion. High quality amino acids and easily digestible protein are provided to help prevent muscle wastage and maintain condition, as well as oil to provide extra calories. Both the Veteran Mix and Veteran Pellets are fibre based and free from molasses and wholegrain cereals. This gives them a combined sugar and starch content of less than 10%, making them suitable to feed to horses that have been diagnosed with Cushing's.

Our Pure Veteran Mix contains a soft chop making it easier to chew. We suggest that you dampen it well with water prior to feeding.

Our Pure Veteran Pellets provide a solution for the older horses with poor dentition. They must be soaked with water prior to feeding to form a soft mash making them much easier to chew.



For horses requiring a calorie top-up to their standard feed Pure Linseed

Pure Linseed is high in oil and protein so great for increasing the calorie content of the diet and helping to maintain condition. It is also low in starch.

The high oil content supports coat condition and helps to develop a good shine and is beneficial for older horses that may have dry or flaky skin. Linseed is also high in omega 3 fatty acids.



How to buy Pure feeds and supplements

We are dedicated to making high-quality, natural horse feeds. All our feeds contain everything your horse needs nutritionally in one bag, which means it's very convenient from till to trough. And, because it's all in one bag, Pure Feed can save you money compared to buying multiple products.

- Buy directly from Pure Feed.
- Visit www.purefeed.com or call 01458 333 333.
- Buy in store at your local retailer. We have national coverage and are expanding all the time. You can find your nearest stockist on our website www.purefeed.com.

As well as making great products we offer great customer support. We have an expert nutritional team available to answer your queries Monday to Friday 9:00am to 5:00pm. So switching to Pure really is the natural choice.

How to contact The Pure Feed Company

Helpline: 01458 333 333 (9:00 – 17.00 Monday to Friday)

General and nutritional enquiries: info@purefeed.com

