

HÖNEYCHOP

Feeding and Management for Equine Gastric Ulcer Syndrome

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What and how we feed our horses impacts their gastric (stomach) health which in turn affects our horses' wellbeing and willingness to work. Equine Gastric Ulceration Syndrome (EGUS) is a set of diseases of the stomach where the surface of the stomach gets inflamed and can peel away, leaving exposed tissue that is tricky to heal without medications.

Feed ingredients

Traditionally, horse feeds contained high levels of starches and soluble sugars to increase the nutritional density of their feeds. However, many scientific studies have shown that levels of starch and sugar above a certain level are associated with an increased chance that a horse has gastric ulceration and colic (abdominal pain) (Galinelli et al., 2021). It can be tricky to work out how much starch and sugar is contained in your horse's feed; trying to convert from % to actual amounts in grams in a meal can be challenging. As an easy rule of thumb, we can aim for each and every feed we give to contain less than 10% starch and sugar. Using this method, even if we need to feed a few scoops a day, we won't feed a risky amount of starch and soluble sugar. Check out the ingredients or nutritional analysis section of your feeds (usually displayed within one or two clicks on the feed company's website) to be sure that the feeds you like to give to your horse are optimal for gastric health.



Endoscopic view of an equine stomach, showing gastric ulceration.

How to meet your horse's energy needs

For horses in low levels of work, their daily energy needs might be easily met with forage, and perhaps some light chopped feed and a diet balancer. It is only when we increase their workload, and try to build muscle and condition, that we look for additional feeds to provide those extra calories so that the horse can maintain bodyweight and strength.

TOP TIP:
To meet energy
needs, choose feeds
high in fibre and
oil, rather than high
in starch and
sugar.

The way that we meet our horse's energy needs (also known as calories) can be based on cereals and starch-based ingredients, or can be based upon high fibre and oil. There are many studies that have shown that horses do well and can compete and race to the highest of levels without needing starches and sugars in their feeds.

Be confident in making sensible choices by picking horse feeds with low starch and sugars that avoid cereals and starch-based ingredients. Be careful not to assume that if it says "suitable for horses prone to gastric ulcers" that the ingredients will meet these simple rules; check the nutritional analysis yourself. If you are not sure, you can consult your vet who will be happy to advise.

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If a horse needs a boost of energy in their feed, we can increase the calorie content safely by adding vegetable oil. Usually 100-200ml per day (for a 500kg horse) is sufficient. It might be handy to add some Vitamin E too when we increase oil intake, and this can be done in the form of a high-quality diet balancer.

TOP TIP: If you add oil to the diet, also include Vitamin E through a quality balancer or supplement.

Softness of fibre

About 20 years ago, a study of ex-racehorses in Denmark showed that wheat straw only diets might not suitable for horses with gastric ulceration compared to horses fed a more usual diet (Luthersson et al., 2009). Since this time though, evidence suggested that a mixed diet, that includes up to 50% high hygiene wheat straw, was not associated with any increase in risk of gastric ulceration (Jansson et al., 2021). Therefore, when consider which chopped forage you would like to feed your horse or pony, the evidence supports the safe use of straw in the diet. Feeds that contain low starch/sugar meadow hay may also be a good choice since this also keeps the fibre content high, whilst also being fairly non-abrasive.

Chewing

A key goal when feeding to prevent gastric ulceration is the use of feeds that increase chewing and lengthen feeding duration. Examples of these feeds include un-coated (not coated in molasses) 'chaffs' and 'short-chopped' fibre also known 'chop'. These types of feeds have a higher chewing requirement, increasing saliva production and mixing of saliva with the feed. This harnesses the natural buffering (anti-acid) activities of saliva against the gastric fluids (acid) of the stomach, especially in comparison with pelleted or muesli-type mix feeds.

Feeding before work

Feeding a scoop or two of chaff prior to exercise may reduce the risk of gastric ulceration by adding to the fibre mat in the stomach. This could reduce the chance of 'splashing' of gastric juices to the top half of the stomach once vigorous exercise commences. Rest assured, the traditional advice not to feed before exercise is considered outdated and it is safe to offer a simple feed of this sort prior to work(Sykes et al., 2015).

How important is it to optimise the diet in cases of gastric ulceration? Recent work from Europe in naturally-occurring gastric ulcer cases showed that following these type of recommendations in diet and management

supports the healing of low grade gastric ulceration, even in the absence of anti-ulceration medication (Böhm et al.,



It is recommended to feed a scoop of chaff prior to exercise to reduce the risk of gastric ulceration.

2018). We can be confident that we are choosing feeds that are in our horses' best interests by following these simple steps to optimise their diets.

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Victoria graduated from Cambridge University in 2006, and worked as an ambulatory equine vet for several years before becoming a resident in Equine Internal Medicine, in March 2009. She became a European and RCVS recognised specialist in decade. More recently, she runs a mobile specialist medicine and ophthalmology service, providing flexible access to specialist skills, knowledge and equipment. In Mar 2025, she graduated from University of Oxford with an MSc in Evidence



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