

# Feeds and Feeding to Prevent Gastric Ulcers in Horses

## What is Equine Metabolic Syndrome in horses

As responsible horse owners, we know our horses have sensitive digestive systems. We follow the basic rules of feeding – little and often, plenty of fresh water, the right balance of fibre and energy. We learn about common types of gastric distress our horses may experience, and there aren't many horse owners that don't know the signs, preventions, and consequences of conditions like colic or laminitis.

However, horses have complex and delicate digestive systems, and even horse owners who are careful with feeding can find themselves with a horse that won't eat, loses weight, gets recurrent colic, or shows other signs that something is wrong. If this sounds like your horse, you might want to ask your vet about Equine Gastric Ulcer Syndrome, or EGUS.

Gastric ulcers – in horses as well as humans – are areas of erosion and irritation in the digestive tract. They aren't necessarily in the stomach itself, but occur most often near the entrance and exit to the stomach, in the lower oesophagus, and in the intestine (commonly called 'leaky gut syndrome'). They are basically the result of acids escaping the stomach and damaging the sensitive surrounding membranes. [1]

A horse with gastric ulcers is most likely in pain, and may be reluctant to eat and show symptoms of colic (rolling, sweating, agitation, and looking at or snapping at its flanks). Other symptoms include chronic diarrhoea, poor appetite, weight loss or an inability to gain weight, and general discomfort. Anytime a horse shows chronic colic-like symptoms, it's worth investigating the possibility of gastric ulcers.

## How do I know my horse has Equine Metabolic Syndrome

The only way to definitively diagnose gastric ulcers is to examine the stomach directly with an endoscope at a veterinary clinic or do a sucrose-absorption test. However, most horses are "diagnosed" by symptoms only.

Signs most suggestive of gastric ulcer include:

- Grinding of the teeth.
- Belching noises.
- Slow eating, often walking away without finishing meals all at once.
- Picky appetite that includes the horse refusing foods or supplements that were consumed readily before.

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These symptoms aren't diagnostic of ulcers, but they do suggest discomfort associated with the upper GI tract/stomach. Less-specific signs frequently attributed to ulcers are:

- Sour, sulky attitude.
- Poor coat.
- Weight loss.
- Poor performance.
- Irritability.
- Sensitivity to touch around the horse's lower belly/sternum area.

Since the signs and symptoms are nonspecific-and overlap quite a bit with other causes of low-grade intestinal-tract discomfort and with pain from any cause-ulcers may be blamed when another problem is actually the cause. It's important to involve your veterinarian in the diagnosis and treatment.

Ref: <http://www.equisearch.com/uncategorized/recognizing-and-detecting-ulcers-your-horse/>

## What causes Equine Metabolic Syndrome in horses

Equine gastric ulcers are more common than you might think. One quarter to half of foals develop gastric ulcers, and it is estimated that over half of mature horses have gastric ulcers at some time, and to some degree. The cause – especially in foals, may be genetic or developmental (such as delayed development of the muscles at the entrance or exit to the stomach), but for adult horses diet is almost always a factor.

Any circumstances that increase the volatility or quantity of stomach acids can lead to leakage, and ultimately ulcers. Stress is a primary culprit – especially in horses stabled for long periods - as is high intensity exercise.[ii] Some steroid medications can lead to ulcers, because they upset the natural balance of digestive bacteria. Feed deprivation – even ‘starvation diets’, used with the best of intentions to prevent laminitis, are dangerous and can cause ulcers, and horses that are malnourished or suffered neglect often develop ulcers.

A common cause, which is often hard to identify, is simply feeding the wrong types of feed to your horse.[iii] Feeding concentrates and diets high in sugar and starch (NSCs) not only increase the horse's metabolism in bursts (called ‘glucose spikes’), but also have more inherent risks. NSCs can be fermented by the natural bacteria of the stomach producing volatile fatty acids (VFAs), which dramatically increase the acidity in the stomach.[iv] If these acids escape, they can cause immediate damage to the delicate membranes near the entrance and exit to the stomach.

Another known cause is a specific bacteria – *Helicobacter Equorum* (H.Equorum).[v] This bacteria causes ulcers by creating actual physical damage as it burrows into the lining of the gastro-intestinal tract. While the damage caused by H. Equorum is well known in humans, as *Helicobacter Pylori* – it is a known cause of stomach cancer – its existence in horses is only recently discovered, and how it is transmitted to horses is unclear.[vi]

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## How diet helps Equine Metabolic Syndrome or Dysbiosis in horses

If your horse has ulcers caused by faulty muscles at the entrance or exit to the stomach, there is little you can do to prevent ulcers. Foals often grow out of the condition, but adult horses may need surgery to relieve the condition completely. In any case, you will need to take steps to manage the volume and acidity of the acids in your horse's stomach.

The best way to prevent a healthy horse developing gastric ulcers is to choose a feeding regime designed to reduce stomach acidity. Feed little and often, and offer plenty of low energy hays and forage to prevent your horse getting an empty stomach. Allow your horse plenty of turn out time, and if you can't, then offer your horse lots of toys or other distractions to minimize stress. Horses that compete or travel a lot may benefit from frequent short 'vacations' or breaks in their schedule to relax and unwind.

Most of all, choose feeds low in NSCs to reduce the fermentation of starches and sugars in your horse's digestive tract. Feeds such as CoolStance have a low NSC content (<12%), and high fibre content to keep your horse feeling full for longer. CoolStance also contains Lauric Acid, which is a natural antibacterial effective against H. Equorum, as well as Glutamine, which is known to have probiotic effects for a healthy digestive system.

## Recommended Stance Horse Feed for Leaky Gut or Dysbiosis in horses

If your vet diagnoses a gastric ulcer in your horse, you need to know the cause. Immediate treatments depend on whether it is the result of faulty muscle function in the stomach, an infection, stress, or diet. Your vet can conduct most basic evaluations to determine a cause, but in some severe cases you may need the expertise of a specialist equine medical facility.

Your vet may prescribe probiotics, antibiotics, or other supplements to help get the symptoms under control and make your horse more comfortable. Whatever the cause, you will need to manage your horse's diet very carefully to ensure that you do not aggravate the condition, and give your horse every chance to heal.

Again, make sure your horse isn't allowed to get hungry, by offering it plenty of low-energy forage or pasture.

Opt for low NSC feeds like CoolStance, and consider adding MCT supplements such as PowerStance.

Most of all be positive, because the prognosis is good. Most cases of EGUS can be effectively managed with the right feeds, good management, and the advice of your vet and nutritionist, and before long you should see signs of improvement and a more comfortable horse!

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