

So Where is the Problem?

There is a reflex in all mammals that whenever something is placed in the mouth, for example, food, saliva is produced to initiate the first sequence of digestion, which also stimulates the release of acids in the stomach. Now consider this; something as simple as placing the bit into the horse's mouth can elicit the same effect. The increased acidic environment is not being utilized in the digestive process and is therefore being contained, yet the acids are moving around within the stomach. If your horse has bleeding ulcers or inflamed areas in the stomach, the acids will further irritate the ulcers and cause pain. A horse experiencing these types of pains will be uncomfortable, can be very uncooperative and may even act out. Thus, when a horse is not behaving properly, the rider often reaches for their favourite calming product and many times they are surprised when they get no positive results. This is because they are treating the wrong symptom.

What Can Be Done?

The goal here is to reduce the discomfort experienced by the horse as the result of stomach acid being released before bridling. Horse owners will often turn to supplements for support to address this issue before it even starts.

When choosing supplements for a horse with gastrointestinal issues be sure to choose products that have been proven safe and efficacious for horses to prevent unwanted side effects. Look for ingredients such as *Marshmallow Root*, *Slippery Elm*, *Ginger Root*, *Licorice Root* and *L-Glutamine*, all commonly used to support gastrointestinal health. These nutrients help soothe the gut and provide natural anti-inflammatory relief if stomach ulcers are suspected. They also help calm the stomach and in turn can help improve comfort and focus for the equine athlete. These herbs work most effectively when administered an hour before bridling.

Conclusion

Changes in the horse's gastrointestinal tract can possibly be related to general stress, and the stress of inconsistent diet and feeding schedules as experienced by many equine athletes. The need for horses to forage on a constant basis is of paramount importance when trying to reduce pain and improve behaviour associated with gastrointestinal distress. To reduce and prevent undesirable behaviours, try to adapt to the type of nutrition, housing, and care of the horse which best mimics free-range conditions. In general, these factors can help horses avoid health problems⁴ by reducing the risk of horses developing digestive issues, such as gastric ulcers and by maintaining a healthy stomach pH. The benefit of exercise assists with gut motility by increasing metabolism⁷

and in turn reducing the risk of colic symptoms like impaction and gas build-up. Barn managers and horse owners who can identify initial signs of behavioural changes in horses and who are willing to individualize the care of these horses can offer a more proactive approach to the horses general health.

The overall health and well-being of a horse is linked to its digestive abilities, so consider supporting your horse's gastrointestinal tract with Omega Alpha's Biotic 8, Gastra-FX, Gastra-FX Ultra or RegenerEQ.

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ESSENTIAL Living



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Gastrointestinal Distress and Behavioural Problems

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It is undeniable that the overall health and well-being of a horse is linked to its digestive abilities. The primary objective of digestive health is to provide feeding strategies that optimize the evolutionary function of the horse's intestine; however, it is also known that horses have a highly developed, complicated and sensitive Gastrointestinal (GI) tract. As a result, the digestive functions are easily disrupted by modern feeding techniques, feeding intervals, seasonal changes and activity levels. In fact, many behavioural problems observed in the equine athlete may be related to gastrointestinal pain.¹

Gut Function & Anatomy

As strict herbivores, horses have evolved a complex intestinal design that focuses most of their digestion in the enormous hindgut. It is there in the large intestine that the bulk of nutrients and fluids are absorbed, and because horses thrive on eating plant fibre materials, the entire intestinal tract has developed mechanisms to process cellulose. Beginning in the mouth where huge and numerous grinding teeth crush plant fibres, then to the small intestine where limited digestion occurs, and then to the large intestine where resident bacteria (microflora) digest fibre (cellulose) and release nutrients⁶.

When considering how horses naturally evolved and how they are physiologically wired to nibble their way through the day, it makes sense that they would spend 70% of their time grazing⁴ which accounts for 16 hours a day⁵. This



Selena O'Hanlon, Canadian Eventing Team Silver Medalist

means they have a continual intake of small amounts of forage¹⁰ which in turn stimulates saliva and promotes gastric health⁶. That's why it is important for dental procedures to be performed on the horse's teeth to stay in good shape and enable effective and pain-free chewing and grinding⁶ of fibrous materials.

The GI tract is designed for continuous grazing and to efficiently extract soluble nutrients found in the forages they consume by enzymatic digestion in the small intestine. Anything that escapes the small intestinal digestive process is fermented in the complex ecosystem of the hindgut which produces volatile fatty acids that are absorbed and used as energy sources⁶. Fibre, found in plant matter, keeps gut motility active and is important in providing specific nutrients like antioxidants, bioflavonoids and isoflavonoids⁹ and can contain up to 20% soluble carbohydrates⁴. Accessibility to clean, fresh water is the most essential nutrient for not only keeping the horse hydrated but to help with proper digestive function².

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