



Equine Gastric Ulcers

Gastric ulcers affect an estimated 50 to 90% of all performance and racehorses. This man-made condition is a product of stress, reduced forage intake, meal feeding, and/or high starch diets. But, through dietary modifications, horse owners can greatly decrease the risk of ulcers in their horses.

The equine stomach constantly secretes hydrochloric acid which helps in the digestion of nutrients. The lining of the lower stomach is glandular, offering a thick layer of mucus to protect itself from the low pH of gastric secretions. Unfortunately, the upper stomach is non-glandular, and its only protection comes in the form of saliva and the buffering capacity of the feed. When the upper stomach is exposed to gastric acid for a prolonged period, erosion of its lining can occur. Many horses with ulcers are asymptomatic. But, owners should be on the lookout for signs such as decreased appetite, colic, behavioral changes, weight loss, and reduced performance.

Now that we know the physiology, we can discuss dietary modifications to reduce your horse's risk of gastric ulcers. The primary goal of any dietary intervention is to help buffer (increase the pH) the stomach. As stated previously, the stomach is constantly secreting gastric acid, regardless of feed intake. Therefore, a stomach which is empty for longer periods of time is more at risk for ulcers. Horses are grazing animals. As such, horses with continual access to pasture have significantly decreased risk of ulcers when compared to their stalled, meal-fed counterparts. If confinement is required, always ensure your horse has ample long-stem forage available. When compared to a concentrate (i.e. grain or commercial feed), forages stimulate twice the production of saliva which helps protect the upper stomach. The type of forage is also an important consideration. Legumes, such as alfalfa, have a greater buffering capacity when compared to grasses. This is due to a legume's greater concentration of protein and calcium, both natural buffers.

If possible, the starch content of the diet should be decreased as starch can further decrease gastric pH. If extra calories are needed, try substituting fat for starch. Fat sources such as soybean oil and stabilized rice bran can give the extra calories your horse needs while helping maintain a healthier gastric pH.

Stress is also a large contributor to gastric ulcers. Unfortunately, the life of the modern performance horse encounters stressful conditions almost every day. Combined with the fact that these horses are typically stalled and meal fed, it is easy to see why so many performance horses suffer from gastric ulcers. But, a few dietary modifications can greatly decrease the risk of this condition. In short, allow constant access to a long-stem forage, substitute alfalfa for grass hay, and replace starch with fat. If you have any further questions regarding equine gastric ulcers or how ADM equine feed can help minimize the risk of gastric ulcers, please give us a call or send us a message.