EQUINE COLIC

ETIOLOGY

- There are many causes of colic (abdominal pain); many are related to feeding mismanagement (abrupt changes, feeding frequency, quantity or quality of feed).
- A leading cause of colic is related to exceeding the starch and sugar digestion and absorption capacity of the small intestine, allowing the undigested portion to pass into the hindgut where it is rapidly fermented.
  - Rapid fermentation of nonstructural carbohydrates leads to rapid and undesirable changes in the microbiota populations and environment in the hindgut (excessive gas production, drop in pH), and may result in colic and other systemic consequences.
- Immediately following a bout of dietary related colic or other lower gastrointestinal upset/disorder, horses may be limited in their ability to digest fibre due to undesirable shifts in the microbial populations in the cecum and colon.
- Ingestion of poorly digestible fibre can lead to an intestinal impaction, particularly if exercise and water consumption are inadequate.

MANAGEMENT RECOMMENDATIONS

- Horses should be turned out and/or exercised daily.
- Horses should be completely cooled out following exercise before being fed concentrates.
- Horses that bolt their feed should be fed small amounts more frequently and feeding devices may be needed to slow consumption.
- Horses should be fed individually or in small groups with consideration for social hierarchy to prevent dominant individuals from consuming other horses' rations.
- Test for hydration

DIETARY RECOMMENDATIONS

- Horses should have access to good quality hay or pasture at all times.
- Horses should have clean, fresh water available at all times, particularly in very hot or cold temperatures.
- Never feed concentrate (grain) meals of more than 0.5% of a horse's body weight in one feeding. Do not exceed 0.5% of body weight per meal of concentrates (serve 3 to 6 meals par day).
- Avoid sudden changes in pasture, hay, supplements and grain concentrates.
  - Dietary changes should be made gradually over a minimum of 7 to 14 days to allow time for the microbial populations in the gut to adapt.
- Do not feed spoiled or mouldy feeds.
- Close attention must be paid to both rapidly growing "lush" pasture grass or grass growing under stress conditions (frost/drought) as consumption of pasture with high levels of fructan under these growing conditions can lead to colic.
- Horses should always be fed A MINIMUM OF 1–1.5% of their body weight per day as forage. Utilize controlled starch and sugar, added fat and highly digestible fibre feeds to minimize risk of sugar and starch overload in the hind gut.
- Utilize feeds with pre- and probiotics, and organic trace minerals to enhance fibre digestion and the bioavailability of nutrients, particularly in cases where there's a history of colic.
- Free choice access to fresh water and salt should be available at all times.
- Add 1 to 3 ounces of salt daily

SUGGESTED PURINA PRODUCTS

FEED NOTES

- Control starch and sugar intake and provide added calories from fat and digestible fibre.
- Further minimize the risk of starch overload by feeding highly digestible starch from processed grains (pelleted or extruded), or utilize products with controlled, highly digestible starch, added fat, highly digestible fibre, organic trace minerals, prebiotics and probiotics to minimize risk of starch overload and support fibre digestion in the hind gut.

GENERAL HORSES

Recommended:

EVOLUTION ELITE
EVOLUTION SENIOR
EVOLUTION MATERNITY
EVOLUTION JUVENILE
SUPERFIBRA INTEGRI-T
EQUILIBRIUM TRIMAX
EQUILIBRIUM XCEL HD

Alternatives:

SUPERFIBRA ULTRA
SUPERFIBRA PLUS

Supplements:

PUR-ATHLETE

Consider a high caloric supplement to reduce the total amount of feed consumed by the horse. If the horse needs extra calories in its ration, consider a highly digestible high fat, high protein and low sugar supplement.

HORSE-SHIELD

To improve nutrient absorption, add a live yeast supplement to the ration.

NOTES: Various considerations should be kept in mind when deciding on a feed. Choose a feed in a form that is easy to digest and assimilate for the animal such as multiparticle, extruded or pelleted feeds. When choosing a feed, priority should be given to those containing low to moderate levels of sugars and starch. It should also focus on feeds containing pre- and probiotics, including complete yeast cell membranes, yeast culture and a mixture of live bacteria. Look for feeds with a **minimum content of 15% fibre and, preferably, lower than 8% fat**.

For colic caused by impaction: reintroduce a **soaked high fibre feed**.

For gas colic: control the intake of sugars and starch as well as hyperacidity in the colon. The analysis of hay and pasture is recommended to determine the percentage of sugar and fructan levels.

Post-surgery: Choose **INTEGRI-T** for its caloric value and digestibility.