

The truth about Colic

By The Nude Horse
(Equine Epidemiologist)

The cooler months coupled with drought conditions (increased hand feeding) can increase the risk of colic episodes

Colic is the most prevalent cause of death in horses, followed by old age, accidents and laminitis. (Adeyefa , 1990).

Horses are unique in their digestive processes to other species and understanding their needs may help owners adjust feeding practices to help prevent colic. Horses continuously produce stomach acid; the design purpose is to be able to graze constantly. The saliva produced when chewing neutralizes the



stomach acid. Horses fed one to three feeds a day, without access to quality ad lib quality hay, are at a higher risk of colic and stomach ulcers. Early signs of poor gut health may be mucous matter present in faecal matter.

Common factors that may increase the risk of colic

Fermentation of grain based hard feeds can easily result in a decrease in caecum and colonic pH when lactic acid is produced. This decrease in gut pH causes a shift in the microflora of the hindgut, which may result in the release of toxins and subsequent clinical colic. Additionally, the causation effect may also

be an increase in gas production in the hindgut leading to colic.

One study Munsterman* discussed showed that consuming large portions of low-quality forage (hays) increased the risk of impaction colic, and another revealed that horses consuming round bale hay had a 2.5 times greater risk of colicking. Abrupt hay changes have been implicated in colic cases.

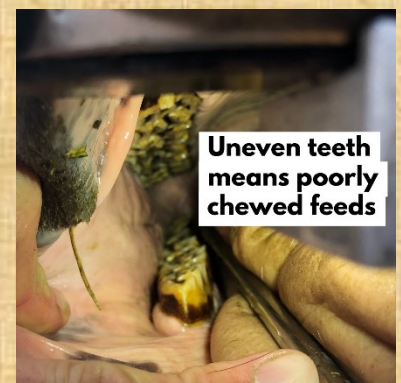
Research study results have found several associations between concentrate (grain, processed grain based feeds and



premixed/pelleted feeds) and colic risk. One study found that feeding more than 2.7 kilograms of oats per day increased colic risk, while another identified whole corn as a major risk factor. Researchers have shown that changes in the concentrate a horse consumes elevates colic risk. Another study discovered the risk of colic increased 6-fold for horses at the highest concentrate intake levels over the horses on pasture who received no concentrate.

Caution should be noted regarding feeding large round bales of hay. Although many times this is done successfully, there is an increased risk of gastric upset. Horses generally will not ingest mouldy feedstuffs if given a choice, but mouldy hay or spoiled silage can be deadly if the horse is forced to eat either because no high-quality alternative is available. Mould contains mycotoxins that can cause colic in horses. Hint: Mouldy hay is also dustier than normal hay.

A trial of 140 horses demonstrated that sharp enamel points and dental caries significantly predisposed horses to colic. Regular dental care can assist healthy chewing of forage into saliva rich processed digestible matter.



Parasites such as *strongylus vulgaris* have been reported to cause a large proportion of colic cases (Becht 1984). Other studies have implicated small strongyles (Uhlinger 1990), tapeworms (Proudman 1993) and ascarids (DiPietro et al. 1983).

Feeding to prevent colic

Feed a good quality forage with long fibres (Beet-pulp, lupins & copra) to increase the bulk of ingesta in the colon. Always pre-soak in 5x water to dry feed & stand for approx' 1 hour prior to feeding. Monthly additions of physillium husks may also be beneficial.



Ideally lucerne hay should be provided ad lib or in small amounts at least four to six times daily. Feeding through a slow feed grazing bag slows down consumption rate, allowing more saliva to be produced and neutralize the stomach acid.



Green grass or alfalfa-based diets could provide a laxative effect and may help prevent recurrence in recovered horses.

Promoting water intake with rock salt available 24/7 in the paddock or electrolyte supplementation to prevent impactions. An easy solution may be to daily feed a balanced quality mineral and vitamin supplement that also contains sufficient electrolytes namely Calcium, Potassium, Magnesium & Sodium/Chloride.



Horses may benefit from a course of *high ratios of broad spectrum probiotics* coupled with *prebiotics* to sustain recolonization of crucial gut flora. Beneficial prebiotics include fermentation metabolites such as *beta-glucans*, as well as yeasts (*Saccharomyces Cerevisiae*)

and *MOS* (Mannonoligosaccharides). Beta Glucan & MOS have demonstrated the ability to bind with strains of *E. coli* and *Salmonella*, aiding in flush these out of the horse's system. Supplying a feed supplement that is also rich in toxin binders may support flushing other dangerous toxins found in hay and pelleted feeds. One such feed supplement that supplies these is *Gut Centric by Wattlelane Stables*.



Regularly wormed horses are shown to be less likely to colic. Keeping up seasonal worming programs that rotate to prevent resistance is sound management practice.



To avoid sand colic:

- Avoid feeding the horse on the ground
- Use large tubs and/or rubber mats to prevent feed from spilling on the ground
- Avoid using overgrazed pastures
- Provide horses with a psyllium supplement for one week, monthly, as a preventive measure

"The most effective method of clearing sand from the gastrointestinal system is to provide 2.5% of body weight per day of hay," said Munsterman. "The bulk alone is capable of removing almost 95% of ingested sand and was better in a controlled trial than psyllium, mineral oil, or wheat bran."

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