



U of M Horse Newsletter

Providing research-based information to Minnesota Horse Owners

Visit our Website at: www.extension.umn.edu/horse for more information and to subscribe to the newsletter.

Volume 1, Issue 4

July 2005



Nine Colic Preventing Strategies

By: Erin Malone, DVM

Colic, indicates a painful problem in a horse's abdomen. Horses are naturally prone to colic and many types of colic cannot be prevented. However, there are some relatively simple steps that can be taken to reduce the risk for colic in your horse.

- 1) Always have fresh, clean water available - horses on pasture for as little as 1-2 hours without water are at increased risk of colic. The risk is especially high for horses over 6 years of age. In winter, ensure automatic waterers and other water sources have free flowing water. When travelling, stop to let horses drink and have a veterinarian pretreat them with mineral oil before starting a long trip.
- 2) Allow pasture turnout - horses that have access to pastures have a lower colic risk than those without pasture access.
- 3) Avoid feeding on the ground

- in sandy areas - horses may ingest enough sand to irritate their intestines.
- 4) Feed grain and pelleted feeds only as required - colic risk increases 70% for each pound increase in whole grain or corn. Horses eating pelleted feeds and sweet feed are also at increased risk for colic.
- 5) Watch horses carefully for colic following changes in exercise, stabling, or diet - colic risk increases during the 2 weeks that follow changes; farms that make more than 4 changes in feed in one year have three times the incidence of colic than farms with less than 4 changes. Make gradual changes in diet, housing and exercise whenever possible.
- 6) Have your horse's teeth floated every 6 months - this ensures good mastication of hay and may help prevent impactions of coarse feed stuff.
- 7) Control parasites - horses on a daily wormer or regularly dewormed with

- ivermectin (or a similar product) are less likely to colic.
- 8) Closely monitor your horse and care for it as much as possible yourself - owners who take great interest in their horses care on a day-to-day basis have fewer horses with colic.
- 9) Watch broodmares closely in the two months following foaling for colic and monitor any animals that have been ill or have colicked before - all are at increased risk of colic and early treatment is essential. Above all, be a proactive owner. If your horse is being placed at unnecessary risk for colic, try to adjust the situation. If your horse does colic, appropriate and timely care make a great deal of difference in the outcome. Watch for more information on colic in upcoming newsletters.

Inside This Issue

Preventing Colic	1
Ask the Expert	1
Tips on Buying Horse Hay	2
The Importance of Water	2

Up Coming Events

Horse Info Booth
 July 9th from 10 to Noon
 Hennepin Coop
 Maple Plain, MN
 Contact Betsy at
 612-596-1175

U More Park Open House,
 August 18 from 4-8 pm.
www.umorepark.umn.edu

October 28, 2005.
 Equine reproduction.
 Call 800-380-8636.

Ask the Expert

By: Krishona Martinson

Q: Should I be concerned about the weed hoary alyssum?

A: Hoary alyssum is mostly a concern in hay, as horses will not choose to eat it in pastures if adequate forage exist. When ingested, horses experience depression and a "stocking up," or swelling of the lower legs, 12 to 24 hours following ingestion. A fever and occasionally short term diarrhea have also been observed. These clinical signs normally subside 2 to 4 days following removal of the hoary alyssum source. In more severe cases, an apparent founder with a stiffness of joints and reluctance of the animal to move has been observed, recovery of animals with these signs may take several additional days. In very rare cases, where hoary alyssum comprised 30 to 70% of the hay, circumstantial evidence exists associating the plant with the death of a few horses, however, death has not occurred in horses fed hay containing hoary alyssum under experimental conditions. In field cases, only half of the animals ingesting hay containing more than 30% hoary alyssum demonstrated any signs of toxicity. The cases of severe "stocking up," apparent founder, and death have only been observed in horses ingesting hay containing more than 30% hoary alyssum. Usually, only mild "stocking up" has been observed in horses on pasture or those ingesting hay with less than 30% hoary alyssum. Bottom line: hay containing 30% or more of hoary alyssum, or any weed for that matter, should not be fed to horses. If you think your horse is suffering from hoary alyssum toxicity, contact your vet, as these clinical signs can be produced by many other diseases, including strangles.



Listed below you will find some of the characteristics of hay that should be used to evaluate and select hay for horses.

1. **CONTENT:** percent of grass and legumes in the hay. In general, legumes (like alfalfa and clover) have higher protein content than grasses. Fiber from grasses is more digestible than that of alfalfa and other legumes at the same stage of maturity. In many cases, pure alfalfa hay has more protein than the horse needs. Although this will not affect the horse's health, it will increase water requirements and cause more urination that is high in ammonia. Young horses that are developing have higher protein requirements, and alfalfa hay is an excellent supplement for them.

2. **NUTRITION:** plants have more fiber and less protein as they mature.

Tips on Buying Horse Hay

Indicators of maturity are flowers for legumes, and seed heads for grasses. Thick stems in both cases are indicators of maturity, remember, leaves have more protein and digestible energy and less fiber than stems. Usually, more leaves also means softer hay. Grasses harvested at early boot stage (when the seed head is just starting to form), have excellent fiber digestibility and energy availability.

3. **TOUCH:** horses' mouth, lips and tongue, are very soft; hence, softer hay will be consumed more readily, and there will be less waste. If the hay feels rough to you, it will feel rough to your horse.

4. **SMELL:** sweet smell is attractive to people and horses, and it is also a good indication of having

readily available energy (sugar). Much like soft touch, a sweet smell is an incentive for the horse to eat the hay and get its full nutritional value.

5. **COLOR:** Green is very appealing and a good insurance of quality, but don't get too hung up on color. Bleached color indicates exposure to sunlight or rain and very likely oxidation of vitamin A, but other very essential nutrients are still there! If in doubt, send a sample for a nutritional analysis. Be sure to require an equine analysis.

6. **CROP:** plants that grow under cooler temperatures build more digestible fiber. Therefore, 1st crop hay may have more fiber, and the fiber will be easier for the horse to digest and use. Just knowing whether it is 1st, 2nd or 3rd

By: Krishona Martinson

crop does not predict nutrient content. The stage of maturity at which the hay was cut is the foundation of its nutritional value.

7. **MOLD:** mold is detrimental if the horse inhales it, plus it has the potential to be toxic and/or upset the digestive system as well. Before buying a truckload of hay, be sure to inspect the inside of at least one bale. If the hay has been stored inside and is not moldy, then the risk of it getting mold is very low. Do not buy hay that is moldy, as it will only get worse. The use of propionic acid is safe for horses and can be used to prevent molding of hay at time of baling. For more information, please visit www.extension.umn.edu/horse.

Horses require a clean, fresh supply of water at all times. Adequate quantities of water are necessary for the horse's normal metabolism and propulsion of feedstuffs through the gastrointestinal tract. If the horse does not consume sufficient quantities of water, the results can range from impaction of feedstuffs in the intestine to dehydration. A 1,000 pound horse, at rest in a cool climate, eating a normal diet of good

The Importance of Water

By: Marcia Hathaway, PhD

quality dried roughage will normally drink from 8 - 10 gallons of water a day. If the horse is turned out on pasture the water content of the fresh forage will meet some of the horse's requirements, but not all. Young horses, pregnant or nursing mares need additional quantities of water. With increased temperature, humidity and/or exercise, voluntary water consumption can increase 2 - 4 fold. A horse that is working hard

in a hot environment can lose up to 2 - 4 gallons of sweat/hour with a total loss of as much as 10 gallons of sweat. Because of the composition of horse's sweat, even though there has been a loss of a lot of water, the horse may not necessarily be thirsty i.e., the basis for the phrase: "You can lead a horse to water but you can't make him drink". You should however encourage water consumption by a horse that is sweating extensively.

Voluntary water consumption is enhanced when the water offered is clean and between 45 - 64° F. A horse that is working should be allowed sufficient opportunity to drink every couple of hours. Although it is a commonly held belief that a hot horse should have water withheld until it is cool, there is no scientific basis to support that belief.