

Preventing Laminitis or Founder During Changing Seasons.

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As we approach the colder part of the year, one of two things is probably happening with most feeding programs with horses in Arkansas. Either you are looking for hay to purchase (many have already purchased their hay for the year) or you planted some winter grasses that are good for grazing during winter months – these are typically rye, ryegrass, and oats. While winter grazing on these grasses is highly recommended and a proven viable option, a major factor to take into consideration is the prevalence of the carbohydrates in these grasses. For those horse owners who are forgoing winter grazing and feeding hay, it is equally important to consider the added carbohydrates in unfamiliar “horse quality” hay as well. With the over abundance of carbohydrates, comes the possibility of laminitis or as it is also known: founder.

We hear a lot about laminitis or founder, but rarely do we understand what’s going on when it happens. As with any health issue or unexpected turn in normalcy with our horses, the most important thing you can do is contact your veterinarian. Your veterinarian knows your horses almost as well as you do.

What is Laminitis?

According to the Animal and Plant Health Inspection Service (APHIS), laminitis is a specific condition of the foot that can produce lameness. Laminitis is characterized by inflammation and destruction of the cellular bond between the sensitive and insensitive laminae of the hoof. These structures normally attach the hoof wall to the coffin bone. In horses with laminitis, the attachment of the hoof wall to the coffin bone is compromised and rotation or sinking of the coffin bone within the hoof capsule can occur. In simpler terms, founder itself is where the coffin bone can no longer remain attached or held secure in its proper position.

How does what we feed a horse have an effect on horses feet?

Tom Inczewski, a well recognized farrier who specializes in hoof care and laminitis, states that laminitis is often associated with carbohydrate overload in the form of high-sugar feeds, too much feed, and/or access to pasture high in soluble carbohydrates. These carbohydrates are readily broken down by the bacteria in the horse's large intestine. One of the consequences of rapid breakdown of these carbohydrates is production of a substance that, when absorbed into the bloodstream, can damage an important structure in the hoof: the basement membrane. It should also be noted that not all horses will develop laminitis when they’re exposed to potential triggers such as too much starch/sugar. Those that do are most likely metabolically susceptible to the disease.

What does it look like?

Affected horses are usually reluctant to move and resist attempts to lift their feet. The condition is usually worse in the front feet resulting in a peculiar stance. Horses lean back to transfer weight off the front feet and onto the hind feet. The feet are typically warm and have bounding digital pulses. A horse with laminitis might also develop visible rings in the hoof wall and might also experience a change of hoof angle in the coffin bone rotates or sinks. Laminitis can strike one foot or all four.



What can we do to prevent it?

- Limit grazing on pasture that have been planted with winter grazing type grasses until grass is mature
- Have hay tested for soluble sugar levels
- Soak hay in water if heavy in soluble sugars
- Turn horses out early in the morning and only for a brief time. If limited grazing is not an option, purchase a grazing mask to limit amount of intake
- Keep your horse's weight in check (overweight horses are more susceptible to metabolic problems)

What treatment is available?

Minimizing mechanical trauma within the foot via trimming/shoeing is the cornerstone of treatment and ongoing management. Pain management is also an integral part of the healing process. Your veterinarian and/or farrier will help create the best treatment plan for your horse.

The majority of laminitis cases can be prevented with a sound grazing management plan. Planting winter grasses in preparation for winter grazing is a viable option when deciding on a plan for your horse's nutrition. High quality "horse hay" is also an important part of nutrition management. Keep in mind, horses that have foundered before are more susceptible to experiencing it again. Understanding the causes and the health history of the horse will go a long way in prevention.

University of Arkansas, United States Department of Agriculture and County Governments Cooperating.

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