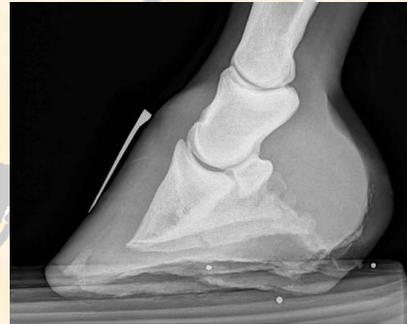


Preventing Laminitis

Founder, or laminitis, is inflammation of the connective tissues of the hoof, to put it simply, but it is far from a simple process! If you've ever bent a fingernail back you understand how uncomfortable inflammation and tearing of these connective tissues can be and we don't have to walk on only four fingernails like our equine counterparts. This delicate process has become a special interest of mine and this article barely brushes the surface as the research is endless.



Normal hoof with shoe



*Acute mild rotation, note black lines
at toe that show gas*

(Overweight Insulin Resistance case)

Acute Severe Rotation and Sinking, note large black gas pockets at toe

(Fever and Vasculitis induced case)

Chronic Severe Rotation with deformation of the coffin bone

(Cushing's disease case)

Strictly speaking, laminitis only means inflammation of the lamina (the connective tissues) but we also often talk about rotation or sinking on of the coffin bone when these tissues tear. Despite many new and exciting techniques, prevention of laminitis is still much easier than treatment. There are three main causes of laminitis: illnesses such as those with high fevers or diarrhea, mechanical trauma and obesity/endocrine disorders. Although all causes are important, YOU play the largest role in managing your horses' weight and some basic guidelines are listed below to get you started on the road to prevention.

Rule #1 – Determine your horse's healthy weight and set up a plan

Last newsletter we discussed appropriate body condition scores. Was your horse in the normal range? If not, give me a call to discuss our options as every horse is individual but below are some general ideas to get you started.

- Cut out or decrease feeding treats. Many horses are very happy to get part of an alfalfa cube or a handful of hay over a pile of sugary or starchy treats. In addition, we often don't feed the same amount of treats

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every day and diet CHANGES can also be dangerous. I have seen many cases of colic or founder after a cookout because everyone was feeding the pony!

- Decrease grain or switch to a feed that is designed to give only minerals. Horses that are dieted are the horses that are most likely to be vitamin and mineral deficient in most cases. Using a feed like Southern States Triple Crown Lite, Purina Enrich 12, Blue Seal Min-A-Vite Lite or Nutrena Empower Balance will give you very low starch and calories with a full ration of vitamins and minerals.

- If your horse is already on no grain or an appropriate feed and still overweight you may also need to limit or change their forage source. In general, hay diets are not only lower in sugars than pasture but are also easier to control. In general, horses should eat 1.5 – 2% of their body weight per day in forage, grass or hay, which equates to 15 to 20 lbs for your average 1000 lbs horse or 3.3 to 4.5 lbs for your average

mini. Set out your standard hay allotment for the day, weigh yourself on your bathroom scale, pick up the hay and weight you and the hay together and subtract! Just remember this is for healthy horses whose grain intake is already low. Never decrease forage before grain!

- RIDE! Yes its simple but the more you exercise your horse the more weight they lose or the more they can safely eat without gaining. 30 to 45 minutes mostly at a trot every other day goes a very long way in preventing founder.

Rule #2 – Stop repetitively fertilizing and seeding your pastures

I have a love/hate relationship with green pastures. There is nothing more beautiful but they are also the cause of the majority of the founders I treat. Lush green grasses are full of sugars and the content spikes when the pastures are stressed like first frost, rain and drought cycles, etc. Grass in their natural environment is scant and full of weeds and horses have to walk long distances grazing to get what they need to survive because the grasses are less nutritionally dense. Think about visiting a buffet for 12-24 hours every day versus eating a few bites of healthy foods every few minutes... huge difference right?

If you have an easy keeper on a lush pasture, a grazing muzzle is the best thing you can do for your horse. Yes, your horse will give you dirty looks the first few times you use it, but it will allow them to graze in a more constant fashion. Putting a treat in the bottom when you put it on will also have your horse reaching for the muzzle in no time. Anytime the grass is active enough to mow your yard, your easy keeper horse should have a muzzle on!

Rule #3 – Identify and treat metabolic diseases

Although all overweight horses can founder, the following metabolic diseases listed below can drastically increase the risk of founder even with a strict diet and they may need medication to be safe.

Cushing's Disease

Insulin Resistance

- Insulin resistance

This is a condition similar to diabetes where the body does not respond to insulin properly and therefore is not able to safely regulate sugars. These horses usually have abnormal fat distribution such as in the

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crest of the neck, around the tail head and sometimes patchy fat over the ribcage. We have found crest fat to be linked to laminitis the way belly fat in humans is linked to heart disease. A simple blood test can help up determine the severity of disease and help guide treatment which includes medication as well as exercise.

