



Developed to enhance client satisfaction and increase your profitability

Brought to you by:



Danger looms in springtime pastures

Spring is coming with its warm, sunny days and long, cool nights. Grass pastures green up and horses begin to graze with gusto! But spring can be a dangerous time for the horses in your practice that are susceptible to laminitis. The individuals most at risk are cresty-necked easy keepers suffering from metabolic syndrome or those that have previously foundered due to other health issues.

Fructan and the role it plays

In plants, a process known as photosynthesis produces sugar as an energy source to support growth. Fructan is a type of sugar commonly produced by cool-season grasses found in horse pastures. Healthy horses have little problem adjusting to seasonal changes in fructan levels, but horses with metabolic disease can be challenged by high intakes of sugars. Fructans that "pass through" the foregut and escape into the hindgut undigested cause pH fluctuations. Changes in gut pH play havoc with the microbial balance of the digestive tract. The resulting GI tract degradation can cause a systemic release of toxins. Horses with metabolic disorders can also have abnormal hormonal fluctuations when exposed to high blood

sugar levels. Systemwide disturbances of these types leave at-risk horses highly susceptible to developing laminitis.

Spring is risky, but too much grass can cause problems all summer long

The photosynthesis that produces fructan only occurs during daylight hours. The sunnier the day, the more fructan is produced in a plant. At night fructan is made available to the plant for growth.

Temperature dictates how plants utilize fructan during the nighttime hours. If the temperatures stay warm (40° F or higher), plants use fructan to fuel growth in leaves and stems. Unused fructan is then stored in the lower two inches of the stem just above the soil line. If the nighttime temperature drops below 40° F, the plant does not grow and fructan will remain in high concentrations in the leaves where it is quickly consumed by grazing horses. This is a common scenario in the spring (and fall) of the year.

As summer progresses and evening temps remain warm, the lifecycle stage of a cool-season grass is more likely to affect its fructan levels. In new-growth grass, the first 3 to 6 inches of growth is low in fructan and indigestible fiber. This makes late spring, early summer grass extra tasty and horses can easily consume high levels of fructan by simply



eating too much grass. On the other hand, mature grasses, 8 to 10 inches in height and going to seed, are high in both fructan and indigestible fiber. The indigestible fiber makes the grass less appealing so horses tend to eat less of it, but the fructan levels are higher so it takes less grass to cause fructan overload.

Grazing management is the key to avoiding problems. It is best to limit grazing time or stop it completely when daytime temperatures are warm and nights are below 40° F. When days are sunny and nights are warm, it is safest to allow grazing in the early morning when fructan levels are still low. Grazing in the late afternoon or evening on a sunny day is risky.

Nutritional support for laminitic horses

Many of your clients have been lead to believe that foundering horses need to be starved, but that is a myth. Laminitic horses need to be fed enough energy to maintain a healthy body weight and an array of nutrients that will support healing. A supportive diet will often consist of free-choice grass hay and some amount of low starch/sugar concentrate to provide necessary vitamins, minerals and energy. Some horses do very well on just hay alone. Easy keepers can be fed a more mature grass hay that will provide fiber, but fewer calories. When energy levels can be maintained by hay alone, or when less-than-recommended levels of concentrate are fed (under 4 lbs per day) adequate vitamins and minerals need to be supplied by feeding a vitamin and mineral supplement. **NutrientWise™** is a well-balanced vitamin and mineral supplement that is low in starch and sugar,

Pasture management can reduce risk

Pasture management is important and can minimize fructan levels. Clip pasture between 4-8 inches in height. Don't allow pastures to become overgrazed, since stress can increase fructan levels in grasses. If possible, rest each pasture every two months.

If the climate allows, consider seeding with warm-season grasses that are lower in fructan, such as Bermuda grass, bluestem, or switchgrass. Contact the local cooperative extension office for help in determining which types of grasses are suitable for your area and how to incorporate them into pastures.



and will not add unwanted calories to the ration. It is readily consumed by horses, even when fed alone. To support high-quality hoof growth in the compromised foot, **FootWise™** can be recommended. It is important that the building blocks of the hoof wall—high-quality amino acids, omega fatty acids, biotin, and trace minerals—be supplied daily. Long-term supplementation is recommended as it takes up to a full year for the hoof to regenerate completely.

For horses that are suffering from hindgut imbalances, **ProbioticWise™** will provide the prebiotics and probiotics needed to rebalance digestive tract pH levels, heal damaged gut tissues, and support a healthy microbial population. A healthy digestive tract will reduce the risk of recurrence, and will promote a strong immune system and efficient nutrient absorption.



VETERINARY FORMULA
Wiser Concepts®
KPPvet.com

For more information, please email
WiserConcepts@KPPusa.com or
call 800-772-1988.

Developed by:

Kentucky
Performance
Products, LLC
15-134