



As the grazing season winds down, it is tempting to relax pasture restrictions. Yet a paddock doesn't have to look lush to pose a problem. Autumn weather can leave grass with substantial sugar stores, raising particular concerns for horses and ponies prone to laminitis. ^{1,2,11}

Why fall pasture deserves attention.

Rain and mild weather can encourage a fresh flush of autumn growth. Grass makes sugar during sunny days and uses some of it to grow overnight. When nights turn cold, growth slows and more sugar can remain in the plant.

These sugars are part of the grass's nonstructural carbohydrates, or NSC, which also include starch and fructans. Levels can vary with weather, grass species and growing conditions. Neither a short paddock nor a mature, faded-looking field can tell you how much carbohydrate a horse will consume. ⁴

Which horses need the most protection?

Horses with equine metabolic syndrome, a history of laminitis, or PPID need extra caution, as they can develop an increased insulin response to carbohydrate-rich feed or forage.

Is your horse metabolic?

Excess weight and a pronounced fatty crest are good reasons to discuss metabolic testing with your veterinarian. A horse's appearance alone cannot establish whether grazing is safe. ⁵

Morning turnout is not always the answer.

When grass is actively growing and nights are warm, carbohydrate levels often decline overnight. Early morning may then offer a lower-sugar grazing period. After a cold night, however, the grass may retain much of the previous day's sugar. ¹

A frost is not an all-clear, either. Waiting until the frost melts, or until the pasture looks brown or dormant, does not establish that it is suitable for a laminitis-prone horse. Freezing can leave sugars in the plant, so turnout decisions need to reflect the horse's risk as well as pasture conditions. ²



Simple ways to reduce the risk:

- Limit grass when needed. Some horses need a grass-free paddock and suitable hay, particularly during cold, sunny weather. ⁵
- Use a grazing muzzle if appropriate. A muzzle can reduce how much grass a horse eats, but it does not make grazing safe for every horse. ⁵
- Have your hay tested. You cannot judge sugar content by appearance. Your vet or nutritionist can help you choose suitable hay. ⁵
- Keep the diet balanced. A suitable ration balancer can help supply nutrients missing from the hay without adding a large meal. ⁵

Protect digestive health during the transition.

Changes in pasture and sudden increases in grass intake can also upset digestion. You should introduce forage changes gradually, always keep fresh water available, and watch for any changes in appetite or manure. Colic or significant diarrhea could require veterinary attention. ^{2,3}

Hindgut health and insulin-related laminitis are different concerns. Hindgut microbes' ferment fructans, while sugars and starch can trigger an insulin response after digestion. Supplements such as EquiShure® are formulated to support hindgut pH; however, do not rely on a hindgut buffer to prevent insulin-related laminitis or use it in place of appropriate pasture and dietary management. ^{4,8}

Act quickly if your horse seems footsore.

Early signs of laminitis may include a shortened or hesitant stride, discomfort when turning, repeated weight shifting, unusually warm hooves or stronger digital pulses. Do not wait for the horse to adopt an obvious rocked-back stance. If you suspect laminitis, restrict pasture access, call your veterinarian immediately, and do not force the horse to walk. ^{9,14}

Review fall turnout plans as conditions change. Working with your veterinarian, farrier and equine nutritionist helps match grazing access, forage, hoof care and activity to the individual horse before a seasonal change becomes a health problem. ¹⁰

Sources and further reading:

1. Penn State Extension. *Sugars in Spring and Fall Pastures*.
2. University of Minnesota Extension. *Horse pasture frost and drought concerns*.
3. Horse Journal / EquiSearch. *Fall Pasture Warnings for You and Your Horse*.
4. Rutgers NJAES. *Non-structural Carbohydrates and Equine Warm-season Grass Pastures (FS1340)*.
5. Royal Veterinary College. *Summary of RVC Endocrinopathic equine laminitis research findings*.
6. Equine Endocrinology Group. *Recommendations for the Diagnosis and Management of Equine Metabolic Syndrome (EMS) and Insulin Dysregulation, 2024*.
7. University of Minnesota Extension. *Managing forage carbohydrate content*.
8. Kentucky Equine Research. *EquiShure® product information*.
9. American Association of Equine Practitioners. *Learn to Recognize the Signs of Laminitis*.
10. Madeline Boast, MSc / The Horse. *Understanding Autumn Laminitis in Horses*.
11. Kentucky Equine Research. *Autumn Grass Poses Risk for Laminitic Horses*.
12. Journal of Equine Veterinary Science. *Interaction of Grazing Muzzle Use and Grass Species on Forage Intake of Horses*.
13. University of Saskatchewan, Western College of Veterinary Medicine. *Equine Metabolic Syndrome (EMS)*.
14. University of Minnesota, Large Animal Surgery — Supplemental Notes. *Laminitis*.

BROOKS EQUINE NUTRITION

Proudly Canadian-owned and operated, Brooks Feeds has served equine nutrition since the early 1990s. Our range of feeds and ration balancers supports horses at different life stages and activity levels, from growing horses and broodmares to pleasure horses, competitive athletes, and seniors.

Our partnership with Kentucky Equine Research, established in 1993, brings nutritional research and technical expertise to our feed formulations and feeding recommendations. Each formula addresses specific nutritional needs, with careful attention to ingredient quality and the balance of energy, protein, vitamins and minerals.

Brooks feeds are produced in a drug-free manufacturing environment.



7707 Mill Road, Guelph, ON
N1H 6J1 Canada
T: 1-877-352-8236
E: info@brookseeds.com

