

## Pasture for horses.

Some of you may have reoccurring laminitis without even knowing it. This is a statement that Pete Ramey makes. Some of these problems with the feet and hoof wall separation are caused by a sugar or carb overload. Here's a bit of information that I found on [www.safergrass.org](http://www.safergrass.org) which is the site of Kathryn Watts. This site was referred to me by a farrier that specializes in wild horse trimming.

Horses with carbohydrate intolerance may encounter excess nonstructural carbohydrates (NSC) in the form of dead grass, and weeds.

When cool season grasses are subjected to freezing temperatures, growth slows or ceases, but they do not go dormant immediately. If daytime temperatures are above freezing, and adequate sunshine occurs, sugars and fructan continue to form and accumulate. In autumn, grass may have its highest sugar and/or fructan concentration of the year. Growth utilizes sugars; cessation of growth allows them to accumulate. High sugar concentration triggers formation of fructans. When plant cells die and rupture from a hard freeze, fall rains or early winter snow may then leach out these accumulated water-soluble sugars and fructans. However, in areas with little rain or snow, these accumulated sugars may remain in the dead grass tissue.

Dead grass and weeds may contain levels of NSC high enough to trigger laminitis in susceptible animals. Caretakers of equines at risk of laminitis should never assume that dead grass or weeds are safe forage. All forage sources for animals with high risk for laminitis should be appropriately tested to assure carbohydrates are within tolerable levels.

Freezing preserves the sugars. (In order to have the sugars tested, you must send them in frozen. ) you need to wait for a rain or wet snow to wash away some of those sugars.

**Safest time to graze:** early morning; after a night when the minimum temperature was above 40°F (5°C); on grass that is in a vegetative stage of growth (leaves, not heads) and the grass is under no stress from lack of water or nutrients. Under overcast or shaded conditions, sugar buildup should be slower. A long stretch of cloudy weather will further decrease NSC levels.

**Most dangerous time to graze:** late afternoon or early evening on a sunny day; grass that is heading or flowering; anytime throughout the day if the night before had temperatures below 40°F (5°C); grass that is stressed for lack of water or nutrients; stubble left from mowing or overgrazing, especially in late fall (or winter in areas where grass stays green)

### **Grazing muzzles:**

This may be your best option, especially if your horse can handle at least 6 hours per day of un-muzzled grazing. This may limit their intake enough to allow them to be out a better part of the day. Be cautious. Some horses can still graze very efficiently even through the holes in the muzzle, or manage to tear the hole bigger. There are several models available in equine supply catalogs. Make sure you get one with a breakaway halter to limit risk of injury if they get it caught on something. If the horse cannot tolerate any green grass, it may be an option to tape the holes on the muzzle completely shut to allow the horse to exercise and socialize during limited turnout. Be very cautious about using a grazing muzzle if the horse cannot be observed all day. Some may figure out how to get them off.