

Grasses, Pasture and Horse Health: Tips for Safer Grazing



The horse industry is struggling to develop a better understanding of the issues surrounding sugars, non-structural carbohydrates and grasses for horses. Over the years, pasture grasses and related grazing principles have been developed for horses through the cattle and sheep industries. This means we have grass species with extremely high levels of sugars and carbohydrates -- good for fattening up animals bound for milk or meat production and early age slaughter but NOT GOOD for horses which are athletes, intended to live 25+ years.

In horses, "fat" is not healthy and the related high sugar and non-structural carbohydrate issues in hay and grass may explain why we are now seeing so many overweight individuals with metabolic disorders and insulin resistance problems. ***The way we've been grazing horses and the types of pastures we've developed may be contributing to very serious horse health issues.***

If your horse is overweight or already has suffered a metabolic disorder (such as Cushings, laminitis, Equine Metabolic Syndrome, insulin resistance, Polysaccharide Storage Myopathy, etc.) you need to research options for reducing sugars and carbohydrates in their diet. Watch your horse's waistline, and do your best to keep him/her in good health before diet related problems become an issue. Here are some simple Do's & Don'ts that can help to reduce the sugar and carb load in your horse's diet.

Remember: Seek help from a veterinarian and/or other professionals experienced in this area especially if you have an at-risk individual. Also, keep in mind that for any changes you institute you need to give the situation time in order to evaluate its effectiveness. And, any changes in diet need to be done gradually, over a period of time, in order to give the horse's gut time to adjust.

Do's:

- Learn what a healthy weight for your horse is. Talk with your vet or consult a weight chart such as this one: <http://drgwald.com/Documents/Body%20Conditon%20Score%20Chart.pdf> . Determine where your horse's weight is and should be, as well as how to manage their diet.
- Night grazing may be very useful. The best time to graze while gaining maximum benefit of forage without adding extra fat on your horse is between 3AM until 10AM. At this time pasture plants have used up most of the accumulated sugar that built up during the day. Since there's not many of us that want to set our alarm clocks to 2:45 am, what works for some horse owners is to turn horses out as late as possible in the evening (say, 10 pm), bringing them in the next morning before heading off to work.
- Another useful alternative to night grazing is turning horses out on pasture in the early morning (say 6 am) and bringing them in by about 10am when plant production of sugar becomes high once again.
- Don't be fooled by the late summer brown grass -- ***brown grasses can be very high in sugars!*** Pastures are healthiest for horses (i.e. lowest in sugars) during the active growing season when plants are green and not stressed (i.e. brown). Therefore, graze

horse during the active growing seasons (spring & early summer) and limit grazing of dried out and brown pastures.

- Implement a rotational grazing program to help avoid overgrazing. ***The greatest amount of sugar in a grass plant is in the bottom 3 inches.*** For more help designing a rotational grazing system for your property contact your local conservation district, extension office or Horses for Clean Water.
- Shady pastures and cloudy days will cause lower carb and sugar levels in grasses. Rotating horses to shady pastures may be an option for high-risk individuals.
- Easy-keepers on pasture may need a grazing muzzle, a device that fastens on a horse's head and only allows the horse to eat through a 2-inch hole in the muzzle. An internet Google search will give you several options, plus tips on safety and how to use them.
- When feeding hay, always weigh it and don't cheat; a 1 lb difference in a feeding is a big difference.
- Exercising a horse as little as 30 minutes/day, three times/week can make a big health change by improving their metabolism. Most horses with metabolic issues are not getting enough exercise. Horses (like their humans!) need regular exercise as part of their standard care regime.
- Treat each horse as an individual. Just like with people, the dietary needs for one horse may not be the same for another horse.

Don'ts:

- Cut out grain and carbs in your horse's diet and review your feeding program with your vet. Except for specifically developed low-carbohydrate products, all grain, complete feeds and concentrates add **huge** amounts of sugars and non-structural carbohydrates to a horse's diet. **Horses only require these in their diets when lacking in energy or weight.**
- **Don't overgraze pastures.** The greatest amount of sugar in a grass plant is concentrated in the bottom 3 inches. Allowing horses to overgraze pastures adds high amounts of sugars to their diets.
- Don't graze during cool weather (under 40 degrees) and *especially* if it has frosted. Pasture plants store carbohydrates at very high levels during these times, making it a particularly dangerous time to graze (i.e., plants are extremely high in sugars and carbs). ***This is a key issue and will play the most havoc with an at-risk horse's metabolic condition.***
- Don't graze pastures that are under stress or drought conditions (yellow, brown and dried out grass) as these are likely to be high in sugars.
- During long periods of sunny weather eliminate or substantially reduce grazing time for at-risk individuals. Consider grazing late at night instead (see above).
- Confining horses in a stall along with reducing physical demands sets the stage for serious metabolic problems.

In summery, especially if you have an at-risk individual, you may need to research this area further and seek professional help. Talk with your veterinarian about specific feeding and grazing recommendations for your horse. This is a complex and evolving area; each horse is an individual and each situation may require a slightly different way of handling things.

RESOURCES:

One of the best resources on this topic is Katy Watts, Rocky Mountain Research and Consulting, Inc., www.safergrass.org. Katy has DVDs and other educational materials available for purchase for a reasonable price.

Northwest feed companies that have low NSC (non-structural carbohydrates) feeds and list the NSC content so you know exactly what your horse is getting in grain or pelleted rations:

LMF Feeds at <http://www.lmffeeds.com/>

Sterett Bros. Hay at <http://www.sterettbroshayandfeed.com/>

Nutrena at <http://www.nutrenaworld.com/screens/BrandListing.aspx?BrandID=63>

International Veterinary Information Service, www.ivis.org

Equi-analytical laboratories for testing forage, <http://www.equi-analytical.com/>

Grazing muzzles. Sites with information on gazing muzzles:

<http://www.shopping.com/xPC->

[Bc Equine Grazing Muzzle for Horses And Ponies Black Muzzle for Horses](#) ,

<http://www.horse-sense.org/archives/20050911124342.php>