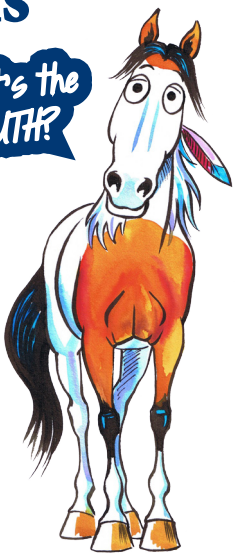
Seminole Wellness®

Feeding Myths & Misconceptions

Fact vs. Fiction



When it comes to feeding horses, there is no shortage of myths and old wives' tales circulating through feed rooms. Many of these feeding myths stem from traditions passed down through generations of horse owners. While some of these traditions are still useful, many are outdated or can even be detrimental to the overall health of the horse. Most myths that are still around today are the result of a lack of understanding of general equine nutrition and the specific anatomy of a horse's digestive tract.

The old saying "it's always been done that way" can make change difficult, but we now have scientific evidence that disproves some of the most common traditions surrounding feeding our horses.

Fact or Fiction: *Bran mashes are beneficial for horses.*

Weekly bran mashes have long been used because they were thought to have a laxative effect and could flush out a horse's digestive tract. However, current research has shown that wheat bran, the ingredient commonly used in bran mashes, does not have any laxative effect and does not cause softening of the horse's manure. Some owners claim that their horses have larger manure piles after a bran mash, so the bran mash must be working. However, this is due to the fact that the fiber in wheat bran is not very digestible, so the horse is forced to excrete all of that indigestible feed in his manure.

Weekly bran mashes may actually be detrimental to your horse. Horses are very sensitive to dietary changes, and any abrupt change in diet can disturb the normal population of microflora that live in the horse's hindgut. Suddenly changing the horse's diet by giving a bran mash, can kill off some of the horse's natural bacteria and cause digestive upset and diarrhea, which can lead to colic. Many owners will see this diarrhea and believe that it is caused by the bran's laxative effect, but it's really a result of a digestive upset.

In addition, wheat bran is much higher in phosphorus than calcium. High levels of phosphorus in the diet can interfere with the absorption of calcium, copper and zinc, and cause bone health problems. This is especially true in young, growing horses.

Take home message: Bran should be used only as an ingredient in a well-balanced, fortified commercial feed and should not be offered in a weekly bran mash. If you are concerned about adding water to a horse's diet to help him stay hydrated, it is a better idea to simply soak his regular feed or hay than to add a weekly mash.

Fact or Fiction: *Protein makes a horse "hot".*

If you surveyed equine nutritionists throughout the United States, this would be the myth that they would say is heard the most. There is absolutely no research that shows a connection between protein levels in the diet and horse temperament. We know today that it is sugar and starch, not protein, that has the most dramatic effect on horse behavior. It is extensively documented that diets high in non-structural carbohydrates (NSC), such as sugar and starch, are closely related to excitability and a lack of focus in horses. When horses eat diets high in NSC they experience a dramatic rise in blood glucose, and this essentially places them on a sugar high. These elevations in blood glucose can lead to hyperactivity or jumpiness in many horses.

Also, research has shown that overfeeding grain will also increase "hot" behavior in horses, because this creates a calorie excess. If the horse is consuming more energy than is needed to fuel normal metabolism and his current workload, that excess energy will have to be used somehow… many times in ways that the horse owner does not appreciate!

Take home message: If your horse is too hot on his current diet, lowering the protein content will not help. Look instead for a lower NSC concentrate, and make sure you are not feeding too much grain for your horse's needs.

Fact or Fiction: *Beet pulp must be soaked before feeding.*

There is a persistent idea that if beet pulp is not soaked before feeding, it will absorb saliva and swell to block the esophagus or rupture the horse's stomach. However, there is no way beet pulp could absorb enough saliva or gastric fluid quickly enough to expand to such a size that would cause problems. In addition, the chewing of beet pulp before swallowing decreases the ingredient's particle size. Once the beet pulp reaches the stomach, it is in much smaller pieces then when it was fed.

In fact, research has shown that large amounts of beet pulp can be fed without soaking without any danger. Studies have fed dry beet pulp at anywhere from 30-55% of the total diet with no incidence of choke or stomach rupture. Choke with beet pulp is associated with rapid eating and improper chewing, not whether the beet pulp was fed dry or soaked.

While beet pulp does not have to be soaked and can be fed dry with no problems, soaking does give some benefits. Soaking beet pulp makes it easier to chew, which is beneficial for older horses with poor teeth. Also, soaked beet pulp can be a great way to hide supplements and medications and is a good method to use to increase a horse's water intake.

Take home message: If you feed beet pulp, do not feel that you have to soak it. Soaking does provide several useful benefits that may work in your favor, but there is no safety risk to feeding dry beet pulp.

Fact or Fiction: *Pellets cause choke.*

Choke is a behavior problem, not a problem with the physical form of feed. Feed or hay do not cause choke; horses that eat too fast cause choke. If horses become overly hungry due to long periods with nothing to eat or feel threatened in a group feeding situation, they tend to become aggressive while eating and bolt their feed. Horses can choke on any food source, whether it is grass, hay, grain, or even treats. If a horse does not take the time to chew his feed properly, he will choke.

The key to preventing and managing choke is to change how you manage the horse. This can be done by offering free choice grass and/or hay, giving smaller portions of feed at one time, soaking the feed to make it softer, and removing the horse from a group feeding scenario. Feeding the aggressive horse in a shallow tub with large rocks can also prevent the horse from bolting his feed.

Take home message: If you have a horse prone to choke, the most important management change you can make is to provide free choice forage so that the horse does not become overly hungry from long periods with nothing to eat. You can also follow the management guidelines listed above, making sure to wet down the feed at each meal.

Fact or Fiction: *Letting a hot horse drink is dangerous.*

It has widely been thought that horses should not be offered water during or directly after exercise. People believed that letting a hot horse drink would cause founder or colic. However, we now know that this is not only false, but a real detriment to our performance horses. During exercise, a horse can lose 5-10% of his bodyweight in sweat, and this amount must be replaced by water. Exercising horses have water needs that may increase to up to 300% of their normal water intake. Research performed all over the country has shown that not only does offering horses water frequently during strenuous exercise not create founder or colic, it is actually the best way to help them rehydrate.

A working horse that has lost too much water can quickly develop heat exertion, which can be fatal if not addressed. Heat exertion can be prevented by offering water before, during, and directly after exercise. Offering water after exercise is key, as a horse's greatest thirst occurs directly after he is done working. If we wait until the horse is cooled out before offering water, he may not feel thirsty even though his body is dehydrated.

Take home message: Allow horses free access to water at all times, even during and right after exercise. Do not limit the amount they drink, as this is the best way to prevent dehydration and heat exhaustion.

Fact or Fiction: *Horses that practice coprophagy are missing something in the diet.*

This is one of those myths that is untrue in 90% of cases. Cophrophagy, or eating feces, is common in young foals as a way for the foal to populate his digestive tract with the bacteria necessary for a fully functional digestive system. It is not normal, however, for adult horses to eat feces. Horses in starvation situations or those that do not have adequate forage have been known to eat their own feces as a coping mechanism, but it is extremely rare for a horse on a properly balanced diet to consume his own feces for nutritional purposes.

If your horse has access to an adequate amount of good quality forage and is fed a well-balanced, fortified concentrate but is still eating feces, the cause is probably boredom. In this case, increasing turnout, providing a companion, or increasing exercise may alleviate the problem.

Take home message: If your horse is eating feces, the first thing to do is to make sure you are feeding enough forage and the recommended feeding rate of a good quality concentrate. If you are, the feces consumption is probably due to boredom and is not nutritionally related.

Fact or Fiction: *Coastal hay causes colic.*

Coastal hay is by far one of, if not the most, popular hay in the southeastern United States. The greatest proportion of horses in the southeast are fed coastal, most of which never have any problems with colic. However, coastal has gained a bad reputation in causing impactions. This reputation has partly

come from a handful of studies performed in Georgia and Louisiana. These studies examined the horses admitted into a university for colic treatment and looked at what hay the horses were fed. They found that most of these horses suffering from colic were fed coastal hay. However, there is a strong population bias in these studies because of the popularity of coastal hay in these areas. Since the horse population of these states was already skewed toward the feeding of coastal hay anyway, it is impossible to make a clear connection between feeding coastal hay and incidence of colic.

With coastal, as with any other hays, it is important to make sure the hay you feed is good quality and the correct maturity stage. Immature coastal hay can be very fine in nature, and this can create a problem if the horse does not chew it properly or does not drink enough water. However, this idea holds true for very mature stages of other hays as well. There is no evidence to say that an immature coastal is more dangerous than an overly mature grass hay of another species.

Any hay can lead to impaction. This is especially true if you combine the factors of poor water intake, weather changes, rapid change of hay type, or a horse with poor gut motility. Even moving a horse from pasture into a stall (perhaps as a result of cold weather or injury) and feeding the same type of hay can increase impaction risk, as the stall confinement will change the horse's eating behavior and gut motility. Also, eating out of round bales can cause trouble, since horses will stand and gorge longer without drinking.

Take home message: There is no concrete scientific evidence to support the idea that coastal causes impaction colic. However, care must be taken to ensure that the coastal hay you feed is not immature and fine in texture. Also, as with any hay, it is important to make sure your horse is drinking an adequate amount of water and staying hydrated.

Fact or Fiction: *High protein diets cause developmental problems in growing horse.*

If there is one nutrient that has been shown to not cause growth problems in horses, it is protein. There are many studies that definitively tell us that high protein diets do not cause any growth problems. There are many causes of developmental orthopedic disease (DOD) in horses. Nutritionally, imbalances in minerals, energy, sugar and starch have been linked to bone growth problems in horses, not protein. Feeding high levels of protein does not increase the growth rate or compromise bone growth.

Overfeeding energy, on the other hand, can result in developmental problems, especially if the other dietary nutrients are not increased in proportion to the energy. Additionally, high dietary sugar and starch have been shown to increase the incidence of DOD. High sugar and starch feeds cause a disruption in the hormones that control bone formation, and can therefore result in bone abnormalities.

Take home message: Growing horses need a good amount of protein in their diets to lay down correct muscle and bone, so it is very important to provide protein in the diet. The most important dietary consideration to make with growing horses is to ensure that energy, protein, and minerals are balanced. Feeding a low starch and sugar feed can also reduce the risk of DOD as your horse grows.

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