



HAY, HAVE YOU THOUGHT ABOUT YOUR HORSE'S FORAGE!

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As horse owners, trainers and enthusiasts we all have spent many agonizing hours comparing feed tags on various bags of horse feed, trying to select the "best" one for our horse. We have also stared at supplements, in the aisles of feed stores and in glossy advertisements in horsey magazines, wondering if this supplement could be the "magic" bullet that makes my horse better, healthier, faster, shinier, quieter, etc. However, the single highest volume ingredient in most horse diets is forage (hay/pasture). So have we put adequate thought into our horse's forage and the many benefits that high quality forage can have in a horse's diet? The following article will highlight the power of high quality forage in a horse's diet.

A Unique Digestive System

The horse's digestive system is really the best of two worlds. In the front portion of the digestive system the horse has enzyme digestion that is very similar to humans and pigs. This is the area where the grain portion of the diet is intended to be digested. In the back portion of the digestive system the horse has a massive area (cecum/colon) filled with bacteria that are capable of fermentation. The bacteria within the horse's digestive system ferment forage into useful end-products the horse can then absorb and utilize. We have all witnessed the fermentation capacity of the horse's digestive system when we think of the horse or pony that is only occasionally ridden and that can easily maintain, or even gain weight, on a strictly hay/pasture diet. This individual is getting energy (calories), protein, vitamins and minerals from the forage. We also see this fermentation capacity in performance horses that are ridden or trained daily, yet only need a very small amount of grain to maintain proper body condition. Again, these horses are getting real nutrition from forage; it is not just dietary filler.

Horses have the ability to comfortably consume 2 to 2.5% of the body weight in high quality forage per day. For the proverbial 1000 lb horse, this equates to 20 to 25 lbs of forage per day. Conversely, an adult horse will typically eat less than half this amount of grain. So



it makes sense that if we feed the best quality forage available, and horses can efficiently digest it, we can satisfy most of the nutrient requirements with forage and potentially rely less on expensive grain and supplements. But what other benefits can good quality forage bring to the diet of a horse?

Behold the Power of High Quality Forage

High quality forage is an excellent source of nutrients. Forage contains energy or calories which allow horses to exercise and maintain body weight. The calories in forage are very safe since they are derived from fiber and digested and absorbed in the back portion of the digestive system. Conversely, the energy in grain is derived primarily from sugar or starch and can cause digestive upset (colic) if fed in large amounts. In addition, grain is absorbed as glucose and may cause certain horses to become nervous or excitable. So if we have an underweight performance horse, the first step is to increase both the volume and the quality of forage. Once the horse is consuming all the high quality forage it can, then we add additional calories in the form of grain or oils.

Premium forage is also a great source of protein. Horses require protein to build and repair muscle and bone. Since performance



horses naturally gain strength and mass in both muscle and bone, a quality source of protein is critical to soundness and longevity. Protein in forage is also important in maintaining quality hoof and hair since both of these tissues consist primarily of protein. Without adequate protein, horses will have a poor hair coat and often have cracked brittle hooves. Finally horse owners often struggle to maintain the top-line of their horses. The top-line consists of the muscles that surround the spine. Keeping these muscles strong and well-developed is a combination of exercise and protein intake.

Many of the supplements on the market highlight their inclusion of critical trace minerals, such as copper, zinc, manganese and selenium. Did you know that premium quality forage contains all of these trace elements? In addition, since we are feeding 20 to 25 lbs of forage per day, forage is the largest source of these minerals. Many critical bodily functions depend on these minerals such as the immune system along with joint and bone health. Horses that are showing, training and being hauled to athletic events depend on these trace minerals to fend off disease, make vaccines work better and maintain skeletal soundness. In addition since these minerals are naturally incorporated into growing plants, they are more available to horses compared to the inorganic mineral forms often added to grains concentrates or supplements.

High quality, green forage is also an excellent source of fat-soluble vitamins such as Vitamins A and E. These vitamins are important antioxidants and are involved in a variety of important functions including vision and muscle health. Another added bonus of feeding high quality forage is the fat content itself. Most forage has a fat content of approximately 3 percent. Interestingly, the fat contained in forage is mostly Omega 3 fatty acids which have many important anti-inflammatory functions within the body. The combination of fat-

soluble vitamins and Omega 3 fatty acids make a high forage diet a super-premium for performance horses.

Other Health Benefits of High Quality Forage

We know that forage is essential to maintain proper function of the horses' digestive system. In fact, the higher quality forage fed, and proportionally the less grain fed to horses', the lower the incidence of colic or digestive upset. Feeding a performance a large amount of high quality forage also stimulates water intake and makes the digestive system a reservoir of both water and electrolytes that can be used during exercise. This helps horses maintain hydration and exercise performance. High quality alfalfa forage has been shown to decrease the severity of gastric ulcers in performance horses. The high calcium content of alfalfa has a buffering influence on hydrochloric acid, the very acid that causes ulcers. Many performance horse owners are now feeding a small meal of alfalfa forage, alfalfa cubes or alfalfa pellets prior to exercise to buffer stomach acid. The alfalfa is provided 30 minutes prior to exercise since scientists concluded that acid splash during exercise is the likely cause of stomach ulcers. Finally, offering free-choice access to forage helps to fight boredom in performance horses. Boredom is often a trigger for horses developing stereotypic behaviors such as wood chewing, stall weaving or pacing. So in conclusion, high quality forage actually has potential medicinal properties as we try to keep our performance horses healthy and happy.

High quality forage is the best potential value in the feeding program. The higher the quality of forage, the fewer pounds of grain or supplements that must be fed to provide essential nutrients. Combine the nutrient benefits of forage along with the health benefits of forage, including less colic, less dehydration, fewer ulcers and fewer behavior issues means that forage is a real value for performance horses.

Selecting the Optimal Forage

So how do you select the type of forage that is "right" for your horse? There are some excellent tools on the web that not only help select the type of forage, but also help to put a value on premium quality forage. Visit Standlee Premium Western Forage® and use their "Standlee Forage Finder™" (www.standleeforage.com/nutrition/forage-finder) and their "Standlee Feed Calculator™" (www.standleeforage.com/nutrition/feed-calc) to determine the optimal diet for your horse today.