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Food Variety: The Horse's Natural Choice

by Gwenyth Browning Jones Santagate

Across the board the topic of feeding horses is, at best, a controversial one. Fats, proteins, grains, no grains, sugars, no sugars, grass or legume hays ... one will hear different opinions from virtually every corner of the horse world.

In truth, the HORSE, himself, is the answer!

The Ideal Diet

Horses are naturally designed to eat FORAGES. Forages come in many shapes, sizes, colors, and all have specific nutrients fitting the particular family and species of plant. In the wild, horses eat what forage is available, which is dependent upon the area, terrain and climate. For instance, horses living in the high desert plains will have scrub, some grasses, weeds, cacti, and sagebrush for their pickings. Along the coast, such as the Outer Banks of the United States, seaweed, kelp, sea grasses, weeds, beach roses and such are available. Forest lands offer trees, shrubs, leaves and barks while meadows offer grasses, weeds, flowers and herbs. The 'ideal' diet for the horse is truly dependent upon the animal and his environment. Notice that there has been made no mention of 'grains' in the wild - there's only one reason for that and that's because grains are NOT readily available to the wild horse. The wild horses often eat down the vegetation before it can go to seed - the seed is the 'grain'. Yet, we continue to think that we must feed processed grain to our horses to keep them healthy.

Granted, wild horses are not asked to carry around humans on their backs performing in such sports as cutting, jumping, dressage, or other such activities. Therefore it is assumed that because our domestic horses are asked to perform in such manners that they NEED the specialized, processed, 'enhanced' grain in order to keep their bones, muscles and hooves healthy; that they 'need' the enhanced, lush grass and legume hays free from other weeds and herbs that naturally grow in fields and pastures. On the contrary, horses are just not designed to consume grains and enhanced one-type-only hay and pasture. Let's explore why...

Movement and Forage Variety

Every system in the horse is geared to function optimally with movement. The natural horse in an optimal environment will travel upwards of 20 - 30 miles a day, grazing, napping, galloping, playing ... always moving and rarely static. During their travels, horses will find hundreds of different grasses, weeds, barks and other forage upon which to graze and chew.

If a horse becomes ill for some reason, the 'natural' medicine is right out there in the wild in the form of weeds/ herbs of some sort. Most horses instinctively know what their bodies need; i.e. a horse who needs more vitamin C will eat roses and hips or other vitamin C rich plants; a horse with sore hooves may seek out poison ivy to relieve inflammation or other weed that helps to improve circulation; a horse with liver dysfunction of some sort will eat milk thistle, if it's available, to help cleanse and strengthen the liver.

The two major keys here are movement (to find suitable food) and various nutrients in the specific forages. Think on that for a moment and then think of the many domestic horses stalled most of the 24 hours in a day. Think of the horses receiving just two meals a day of grain and a bit of grass hay. Considering what the horse is naturally designed to eat and his natural amount of movement, we really are not giving our 'best' to our equine partners, are we?

Digestion

Something else to consider is how the horse's food is processed in the digestive system. For maximum enzymatic and microbial action to break down the horse's food properly the horse needs to have healthy teeth. This is where the digestive process begins ... in the horse's mouth. When chewing, salivary enzymes are produced help to break down starch into simple sugars. Chewing also breaks down long fibers into ¼ - ½" lengths that are the ideal length for optimal gut motility (any longer, get teeth checked by a qualified equine dentist). This is the first step of the entire digestive process.

From the mouth, the food is swallowed and moved down the esophagus into the stomach where it is mixed with acids and enzymes that help break it down further. The stomach then mixes, digests and pushes the feed into the small intestine. This entire process takes place in just minutes. An empty stomach can mean possible problems for the horse because the stomach is where hydrochloric acid is produced 24 hours a day. Only the bottom half of the stomach is protected against the acid by a thick mucous lining. The top of the stomach is unprotected. A horse exercising on a stomach with too little food and too much acid is at high risk for ulcers. If that acid in the stomach contacts the unprotected upper portion, which happens easily during strenuous exercise even with minimal amounts of food, the chances of the horse developing ulcers is increased. Feeding free choice forage is a good preventative of ulcer development.

From the stomach the food is then worked through the small intestine and then into the cecum in the hind gut. It is here that the

food that was not fully digested by the stomach and small intestine is fermented and then passed on into the large colon for further digestion and absorption. The rate of movement of the food through the cecum and hind gut is relatively slow and aids in creating body warmth. For this reason it's always a good idea to keep hay in front of the horse at all times especially in colder temperatures.

Lifestyle and Stress

The overall lifestyle of the natural horse also contributes to the overall utilization of nutrients from the diet. A stressed horse will not be able to optimally utilize the nutrients he is getting as his system will be more tuned in to fighting off the stressors. Stress comes in many forms: competition, solitary confinement (remember, horses are herd animals), training stressors, pain stressors, etc. These all will overload the immune system, the 'life force' of the body, and cause further weakening of the system overall. This weakening allows other dis-eases to then take hold - think arthritis, Cushing's, laminitis, insulin resistance, general unthriftiness, contagions and more.

Fresh Foods

The horse needs the natural nutrients, enzymes and glyconutrients found only in FRESH, vine-ripened veggies, herbs, fruits, nuts and seeds. Glyconutrients are monosaccharides that are essential for maintaining health. There are 8 glyconutrients essential for each cell in in the body to communicate correctly with the next cell and also to help prevent infections and disease. A variation of 'salads' given regularly will help to keep the gut naturally strong, healthy and vital!

The following are just some of the fresh ingredients that you can include in your horse's salad: Apples, carrots, leaf and head lettuces, greens of all sorts, broccoli, chard, all sorts of fruits - strawberries, cranberries, blueberries, mango, papaya, peaches, oranges, bananas, melons, squashes, avocados, nuts (Brazil, cashews, walnuts but NO black walnut!, peanuts), seeds (particularly shelled, raw pumpkin seeds), flax, black oil sunflower seeds complete with shell, green beans, fresh and dried peas, and sweet potatoes/ yams (no white potatoes, tomatoes or eggplant as they are members of the deadly nightshade family and can cause issues). Feed skin, seeds and all (except for large pits from peaches, avocados, etc.) Herbs can include echinacea leaves, rose hips, fenugreek, fennel - do some experimentation and see what your horse likes. He or she will let you know what is needed.

Something else that can be beneficial overall is allowing your horses access to woods to chew on trees (non-toxic) or throwing some fresh branches of non-toxic trees into the paddocks for them to munch on. The inner bark of the white willow tree acts as an anti-inflammatory and analgesic; the needles from the white pine help with wound healing and are an excellent source of vitamin C; even hemp is one of the earth's richest sources of protein and minerals as well as being an anthelmintic, calmative and digestive aid.

Providing your horses with a wide variety of foods and giving a couple of handfuls of fresh salads daily will add much to their diet and you may even find that your 'hard keepers' aren't really so hard to keep after all!

About the author:
Gwenyth Santagate has lived, played and worked with horses for almost 50 years. Her mission is to give them voices when they have none. Founder of PENZANCE Equine Integrated Solutions, www.thepenzancehorse.com, Santagate can be reached by email at caballus@charter.net or by phone in Massachusetts (508) 476-1317.