

But I Thought...

Things you always thought you knew about feeding your horses.
Debunking the Myths: Horse Nutrition and Feeding Misconceptions

By Edgar A. Ott, PhD, PAS

University of Florida Department of Animal Sciences Institute of Food and Agricultural Sciences

The horse industry is riddled with untruths about feeding and the effects of feed on horses, and it's getting downright mind boggling. Too much protein? Not enough protein? Coastal hay? No coastal hay? We needed an expert to clear up confusion on feeding – so we called on Dr. Ed Ott, a man who has made equine nutrition his life's work and is a past chairman of the National Research Council. His No. 1 study is equine nutrition, and he's known as the pro when it comes to formulating feeds and breaking out new analyses regarding their effect on equine performance, growth and behavior.

Dr. Ott's comments might surprise you. But remember: his research is based on decades of study, scientific research and reliable data that you can take to the bank.

charging from water

My horse is stalled except when I ride him or when he gets his one-hour turnout. I feed him a good concentrate and two flakes of hay. I don't want him to get a hay belly.

The horse's digestive system works better on forage than concentrate. Although some horses will do well on fairly low forage diets, most have fewer problems if they get at least 1 lb forage/100 lb bodyweight daily. For a 1200-lb horse, this would be 12 lb. A flake of hay varies greatly. A flake from some bales will weigh only 2.5 lb. From other bales, a flake might weigh 5 or 6 lb. Weigh your hay and know what you are feeding. If your horse is only getting 5 lb of hay per day, you might be asking for some big vet bills.

I give my horse a bran mash every Friday. I haven't had a colic in the past two years so it must be working.

The theory behind bran mashes is that the warm, moist bran increases the moisture content of the digesta as it moves through the animal. Research does not confirm this relationship. In fact, Cornell University research found that bran mashes had no effect on the moisture content of the feces.

Making your horse a bran mash might make you feel like you are providing a special treat for your animal, and he might enjoy the change in his diet. It is unlikely that the mash has any influence on the incidence of colic. Count your blessings.

My horse gets good quality hay and 8 quarts of oats daily. He is fat and looks good so he must be getting all of the nutrition he needs.

Oats and alfalfa hay can provide a pretty good nutrient package for yearlings and older horses. However, even these animals will be short in salt and might be marginal in phosphorus, trace minerals and some vitamins. Younger horses might also be short on required amino acids and find that the calcium:phosphorus balance is inadequate for good skeletal development. A properly balanced mixed feed will provide a better nutrient package for horses with high nutrient demands. Just because your horse looks good doesn't mean that he is adequately nourished to meet all of his needs.

I feed my hunter/jumper a good quality concentrate designed for performance horses and good quality hay. I shouldn't need to give him any supplements.

Almost true – if you select a concentrate designed for your performance horse, it and the hay should provide almost all of the nutrients the animal needs. However, even the best concentrates often have less salt than needed by horses that are perspiring heavily. Free choice salt should always be available to your horse or you might need to supplement the animal with an electrolyte mixture.

My horses have access to lots of well-managed bahiagrass pasture, but I don't think the nutrient value of the pasture is adequate, so I give them two flakes of alfalfa daily.

Supplementing a good quality pasture with alfalfa hay is probably wasting money. Of course, in the spring and fall, the use of hay to supplement the grass when the quantities or the quality is marginal is recommended. Idle horses, mares in early gestation and many pleasure horses can meet most of their requirements on grass. Provide a good quality free-choice mineral supplement to provide the calcium, phosphorus, salt and trace minerals that might be lacking.

My horse is obese but I am afraid to not feed him some concentrate even though the pasture is growing well and is well managed.

You're killing him with kindness. If the pasture is adequate, minerals and water are all of the supplementation he needs.

I put my 5-year-old gelding in three-day-event training. To meet his increased energy demand I switched from a 12% protein to a 15% protein

concentrate.

The protein content of the concentrate has nothing to do with its energy content. To increase the animal's energy intake, increase the amount of concentrate you are feeding, or switch to a high-energy concentrate. Most of these are fat-added products. Standard concentrates have about 3.5% fat (ether extract). Adding 5% fat to the concentrate will increase the fat content to 8.5% and the energy value by about 10%.

Excitable horses are that way because they are fed too much.

This statement is only partially true. You can feed a horse a lot of forage and not make him excitable. When you feed a lot of concentrate, some horses react to the high glucose levels. The excitability of these animals is best controlled by providing a low-starch concentrate fortified with fat.

I don't want any beet pulp in my horse's feed. I hear that it can absorb water, swell up in his stomach and cause a rupture.

It is true that beet pulp will absorb large quantities of water. Therefore, when including this ingredient in a horse feeding program, it should be moisturized before it is fed. In commercial feeds this is usually done by adding molasses to the concentrate. If beet pulp is added to the feed at the farm it should be soaked with water or saturated with molasses before feeding. Beet pulp is an excellent source of non-starch energy.

I can't feed Coastal bermudagrass hay to my horse because it causes colic.

There are thousands of horses that consume Coastal bermudagrass hay. The incidence of colic is not any higher on this hay than it is on other programs. It is important to avoid short, early cut forage. Apparently, this hay is so palatable that the horse will consume it without adequate mastication, increasing the likelihood that impaction will occur. Be sure that the length of the stem and leaf is at least 16". Good quality Coastal bermudagrass hay is an excellent hay for horses.

I have mares, foals, performance horses and pleasure horses. I feed everything the same feed and get along well.

If you do, you are overfeeding most of the horses. Foals require higher nutrient densities than older horses. If you select a concentrate that will meet the foals' needs, you will be overfeeding the other horses most of the year. Most farms with this diversity of animals will need two or might be three concentrates to meet the needs of all of the horses at the least cost.

I would never feed my horse any hay except alfalfa because it is the best.

True, alfalfa is the best hay you can buy. It is also the most expensive hay available in many areas. Most mature horses do not need the high protein content provided by alfalfa. Alfalfa might be useful in feeding programs for growing horses and lactating mares. Other horses will do well on grass hays or mixtures of grass and alfalfa. You can use a combination of grass and alfalfa to increase the nutrient value of the forage program. Feeding straight alfalfa to mature horses usually means wasting a lot of protein. If your horse's stall smells strongly of ammonia, he is getting too much protein.

I can't feed corn to my horse – it is too hot.

The response to this statement depends upon the meaning of "hot." If hot means that the horse is excitable, corn might be an enemy because it is a rich source of starch. If hot means that the horse perspires heavily, corn is not the problem. The heat load on the horse is a function of the activity, condition of the animal, temperature and humidity. Nutritionally you can control the condition of the animal by feeding only what the animal needs to support the maintenance needs and the activity. The daily heat load can be reduced by reducing the forage intake. Forage produces heat because it is fermented in the hind gut. If we rank feed ingredients by their heat production: forage>by-products>grains>fats. When it is hot, feed high fat diets, but only feed enough to meet the animal's energy needs. Excess energy intake will make the horse fat and decrease the animal's ability to dissipate heat.