Choosing The Right Feed For Your Horse

A Guide To Understanding the Nutritional Needs of Your Horse

By Dr. Tania Cubitt

With so many options on the market, choosing the right feed for your horse can be daunting. By answering these questions, you can help simplify your feed choice.

What is the age of your horse?

If the horse is 2 years or younger, its nutritional needs are driven by growth. Most commercial growth and development feeds have a protein content between 14% and 16%. This is because protein is a major component of most tissues in the body and added dietary protein, as well as added vitamins and minerals, is necessary to ensure healthy and sound growth in the young foal. When considering protein in the young horse's diet it is not only the amount but the quality of protein that is important. Lysine is an amino acid that has been shown to be critical in the sound development of growing horses.

"Senior" status is not determined by age alone, but can be classified as when bodily functions begin to decline, and/or when dental health is such that proper chewing is not possible. Horses that are missing teeth or have poor dentition must rely on alternative sources of pasture and hay, such as hay cubes, pelleted forage, and chopped forage, as their ability to chew is limited. Complete feeds that use high fiber ingredients such as beet pulp can be used as a quality forage source, and are often fed wet or in a "mash" form to minimize issues of choke associated with inability to properly chew. Commercial feeds specifically designed for the senior horse are typically pelleted or extruded and are easy to chew and highly digestible, with readily available vitamins and minerals required in higher concentrations than younger horses.

What is the physiological stage or use of the horse?

It is important to consider the level of exercise your horse is getting. Over or under feeding can have consequences for the performance your horse, as well as compromising its health and soundness.

A maintenance horse is one that is more than two years old and exercised one hour or less per day, excluding pregnant or lactating mares and breeding stallions. These animals have minimal energy requirements to maintain an optimal body condition. You MUST feed the minimum recommended amount of feed the tag directs for your horse's weight to guarantee him the nutrients that the feed is designed to provide. If your horse is gaining unnecessary weight on the recommended amount, you should select a "ration balancer" with fewer calories per pound, designed to be fed at a lower rate while ensuring adequate vitamins and minerals in the diet.

Light exercise is considered to be recreational riding, beginning training, and horses that show occasionally. Moderate exercise includes low level polo, horses that show frequently, and ranch horses. Heavy exercise includes frequent showjumping, low-medium level eventing, high level polo, and the middle stages of race training. Very heavy exercise includes racing and elite three-day eventers.

Stallions during the breeding season have increased nutritional requirements compared to maintenance mares and geldings. Their energy requirements are related to the intensity of their breeding program. Breeding stallions in heavy use have similar energy needs to that of the late gestational mare.

It is critical that pregnant mares receive balanced minerals and vitamins all through their pregnancy. Ration balancer products are an excellent option if your mare is in good body condition and just needs adequate vitamins and minerals during early pregnancy (conception to 5 months) and mid gestation (6-8 months). During late gestation (9-11 months) when the fetus is rapidly developing tissue mass the energy demands on the mare are higher and therefore a growth and development feed should be considered. These feeds are higher in protein and calories, as well as calcium and phosphorus, and will ensure the mare goes into lactation with adequate nutrition to support the added stress.

Does your horse suffer from any relevant medical issues?

Relevant medical conditions can include anything from gastric ulcers to metabolic diseases such as tying-up, obesity, insulin resistance, laminitis, and Cushing's. Low carbohydrate diets are often sought for horses with these conditions, as they can be worsened by diets with excess non-structural carbohydrates (NSCs). Carbohydrates can roughly be divided into two types, structural and non-structural. Structural carbohydrates make up the cell wall, include cellulose, hemicelluloses and lignin, and are what make up fiber and roughage in the diet. Non-structural carbohydrates make up the cell contents and include simple sugars, starch and fructan. These non-structural carbohydrates are predominantly found in cereal grains and lush green pasture. When considering decreasing carbohydrates in your horse's diet it is the NSCs that should be limited, not the structural carbohydrates.

What is your horse's body weight and body condition?

Regular body weight and condition scoring of your horse will help in deciding if your horse needs to gain, lose or just maintain weight, and which feed will be most appropriate. If you do not have a weight tape, you can also use a simple measuring tape to determine your horse's approximate weight. Measure the heart girth, then measure the length of the horse from the point of the shoulder to the point of the buttock. Then use the following equation to estimate body weight:

Heart girth (inches) x Heart girth (inches) x Length (inches) / 836.65 = Weight (lbs)

Body condition scoring involves the palpation and visual assessment of the degree of fatness of various areas of the horse, such as: over the ribs, tail head area, neck and withers, and behind the shoulders The scoring system uses a numeric scale of 1 to 9 where 1 is emaciated and 9 is obese, and 5-6 is ideal.

What type of forage are you feeding?

Forage, which includes hay and pasture, should be the base for all equine feeding programs. The feed you select should complement the forage that you have available for your horse. If you have ready access to pasture and good quality hay you will generally have to feed less concentrate to reach the horse's nutritional requirements. Low intake ration balancer products are often a good choice under these conditions. If hay is lower in nutritional value then you will need to add more concentrate to your horse's diet to meet its requirements. Hay analysis is the best way to determine its nutritional value.

High performance horses have increased nutritional requirements.