

# FEEDING THE SENIOR HORSE

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## Performance Horse Nutrition

It is not uncommon to hear of individual horses that may be in their upper 20's or early 30's. Why are horses living so long? Several potential reasons exist including improved internal parasite control, better nutrition, advances in veterinary care, and less strenuous work. As horses become old their bodies naturally begin to fail. This leaves their owners with the responsibility of providing proper care for their senior horses.

A common question many owners have is "When does a horse become a senior?" In general, horses between 18 and 20 years of age are thought to be approaching their senior years. However, a better description of senior

is when a horse becomes a "Nutritional Senior." A nutritionally senior horse is one that can no longer eat its normal diet and maintain proper body condition. Nutritionally senior horses typically have one or more of the following conditions: decreased nutrient absorption, dental problems, increased sensitivity to stress. A geriatric horse is a condition related to diseases and disorders caused by aging, not by a specific number of years spent on this earth.

Understanding these conditions will allow care givers to modify feeding programs to ensure proper nutrition.

## Physical Signs

Some common physical signs of aging

that require nutrition management are loss of weight, decrease in body condition, loss of muscle tone and mass over the top line, sway backed appearance, chronic diarrhea and dehydration, reduced mobility and agility, greying of muzzle and coat, decrease in coat and hoof quality, reduced fat deposits above the eyes, and dental problems.

## Digestive and Metabolic Changes in the Senior Horse: Decreased Nutrient Absorption

Exposure of horses to intestinal parasites causes scarring of the digestive tract. These scars result in damage to the lining of the intestine which decreases nutrient absorption.



Improvements in de-worming products have delayed and minimized damage from internal parasites, but over a lifetime this damage still occurs. To further compound digestion problems, the horse's digestive tract begins to lose efficiency with advancing age. Research studies have shown that "Nutritionally Senior" horses require additional protein, phosphorus, and certain vitamins. Proper protein intake is particularly important in senior horses. Senior horses with inadequate protein intake will break down muscle tissue to provide essential protein for other body functions. Muscle wasting is common in aged horses that are not getting the proper amounts of protein in the diet. In creating feeds for senior horses, the protein content of the diet is similar to that which would be fed to a yearling rather than that of a mature horse.

### Dental Problems

As horses age their teeth wear down from chewing and grinding their feed. As a tooth wears, an additional tooth erupts from the jawbone in a constant cycle. The process continues until the roots holding the teeth in place become short and the tooth is lost.

Old horses often lose teeth and have difficulty properly chewing their feed. Horses begin the digestive process in the mouth by reducing the physical size of feed to a suitable size for proper digestion. Without proper chewing of feed, the horse will not effectively digest its feed. Old horses will often drop or spill grain from their mouths, or they wad up hay or grass into partially chewed balls and drop them on the ground.

Inefficient chewing of feed can lead to digestive upset, weight loss and nutrient deficiency. While the loss of teeth cannot be prevented, proper care of the teeth can delay problems. These horses must rely on alternate sources of pasture and hay as their ability to chew is limited.

Forage products such as hay cubes, pellets and chopped forage can be used

as substitute long stem forage sources. These forage sources are often fed wet or in a "mash" or "gruel" form to minimize issues of choke associated with inability to properly chew.

### Stress

Old horses are very sensitive to stress. This stress can come in the form of changes in temperature, changes in housing, dealing with the pecking order imposed by other horses, or pain. Old horses are particularly sensitive to changes in temperature, predominantly cold temperatures. Sensitivity to cold may result from decreased fat cover that acts as insulation to the cold. Sensitivity to cold could also be a result of the senior horse's inability to chew and take in adequate amounts of fiber. It is the fermentation of fiber in the horse's hindgut that produces heat to help warm the horse. Senior horses are also sensitive to changes in their surroundings. Changing paddocks, stalls or routine tend to cause weight loss in senior horses. Adding horses to, or taking horses out of, a pasture containing an old horse changes the herd dynamics and sends the old horse to the bottom of the pecking order. This can also lead to weight loss since the old horse is not given adequate access to feed.

### Overweight

Not all older horses are hard keepers. Some will hold their weight easily and may actually become too heavy since they are not exercised as often or as intensely as their younger counterparts. These horses may begin to accumulate fat at a rate that may be detrimental to their health. Horses that become too heavy may stress their bones and joints and may aggravate any existing lameness conditions such as arthritis and navicular syndrome. Therefore, it is important to ensure that the horse is meeting all of its nutritional requirements without gaining an excessive amount of weight. Allowing

ample turnout time for horses that are not in a routine riding program will provide them with some exercise and allow them to maintain muscle tone and a healthy body condition. Choose forage sources such as Timothy instead of Alfalfa to reduce the calorie content of the diet

### The Diet

**Energy requirements:** Generally senior horses that are in good body condition are less active than their younger counterparts and only have maintenance energy requirements. However, if the horse has difficulty maintaining body weight then a higher caloric diet is needed. Energy dense forage sources such as Alfalfa pellets, cubes of chopped forage are ideal to increase the calorie content of the diet.

**Protein requirements:** Older horses in good body condition have protein requirements that are similar to those of horses at maintenance. Horses that are underweight or have lost muscle mass require higher quality proteins and often increased quantity. Once again forage sources such as Alfalfa pellets, cubes or chopped forage are ideal to increase the quantity and quality of protein in the diet.

### Summary

The main point to remember when developing feeding programs for senior horses is that these animals should be treated as individual cases and optimized for the specific needs of each horse. Improved internal parasite control, better nutrition, advances in veterinary care, and less strenuous work are leading our horses to live longer and longer. Through good care and optimal nutrition, we can improve the quality of life of our senior horses and also extend their lives even further.

Standlee Premium Western Forage® provides a wide variety of products to meet your horse's particular needs. Standlee recommends consulting with a veterinarian or equine nutritionist when changing your horse's diet.

