

EQUINE FEEDS

FEEDING HORSES

Horses are herbivores, consuming grass to meet their nutritional needs. Like cows with a rumen, horses rely on bacteria within their hindgut, large intestine and cecum, to ferment forage fibers and release volatile fatty acids that the horse can use for energy. This fermentation occurs at the end of the gut rather than in the beginning as in ruminants, and horses do not benefit from bacterial protein. These differences mean that horses are more dependent upon the quality of protein they receive than are cattle. Additionally since horses get less nutrition from the grass they consume than cattle do, they resolve this problem by consuming feed constantly. This is one of the reasons that it is important that horses have access to forage at all times. As man has asked horses to perform work, they often cannot get all of the energy they require out of forages alone, hence our need to feed a “grain” supplement.

Mature horses have a relatively low protein requirement and rarely need more than 12 or 13% crude protein. Horses in the upper Midwest can be exposed to a variety of forage sources either grasses or legumes such as alfalfa or clover. Grasses and clover have widely different calcium concentrations and therefore Ca:Phos ratios. Most nutritionists try to keep Ca:Phos ratios between 1:1 and 2:1, however horses can tolerate much larger variations in calcium concentration and there is no need to have a separate supplement for those on different types of forages.



PRODUCT OFFERINGS

Prince offers both texturized and pelleted feeds. Different horse owners have strong differing views and preferences regarding these two feed forms. Pelleted feeds have several advantages verses texturized feeds. The process of pelleting generally improves the digestibility of ingredients for use in the horse.

Some horse owners just prefer texturized feeds. Horses consuming texturized feeds do not stop eating to get an additional drink of water, which is more likely to happen with pelleted feeds. Some owners are concerned that horses could choke by trying to eat pelleted feed too quickly.

LOW STARCH DIETS

Equine Diets formulated with low or no grain contents have come into vogue in recent years. In reality, most horses do not require specifically lowered starch feeds and in some situations, such as late gestation and lactating mares, along with performance horses, it may actually be contraindicated. However in situations where horses with health conditions that cause them to poorly regulate insulin and or regulate starch (glycogen) storage, it is imperative that their diet not include high concentrations of starch or simple sugars.

Owners with horses that have Cushing's, glycogen storage disease (genetic tying-up), and obese horses that have or may become insulin resistant should not use feeds which are corn or oat based. Horses that have had and are predisposed to laminitis should also consider using a low starch diet. Low starch horse feeds will not have any negative effects when fed to "normal" horses and owners with special needs horses may find it more convenient to have the entire herd on **Prince Lo-Carb Maintenance** diet rather than inventory several different feeds. Owners of horses that have severe conditions should also restrict horses to hay diets and should consider soaking the hay remove as many soluble sugars as possible.

Prince Regency Lo-Carb contains no grains and is designed to have fiber content similar to that found in early vegetative alfalfa or grass. The starch content is also similar to that found in forages. Prince Regency Lo-Carb is balanced using three digestible fiber sources: alfalfa meal, also a source of protein and minerals; soy hulls, highly digestible fiber; and wheat midds, digestible fiber also needed for the manufacturing of pelleted feeds. Because of the highly digestible fiber content Prince Regency Lo-Carb Maintenance feed does provide a significant amount of energy and should be fed at similar rates as other maintenance products. Owners should feed at levels to reach desired body condition scores. [Owners needing to severely restricting calories, not just starch, should consider specifically designed supplement. Please contact us directly for recommendations in these particular cases.]

Prince Regency Lo-Carb feeds should not be fed as a sole source of feed. Although the fiber level is similar to forages, it lacks the fiber length and "gut fill" necessary to keep horses satisfied. Additionally, longer fiber parts of the diet are essential in the prevention of colic.

SENIOR HORSE NUTRITION

Horses have the capacity to live long lives. As horses have become companion animals as well as work animals we have seen horses kept until much older ages and it is not unusual to find horses in their late 20's and even early 30's in years of age. In general terms the strict nutrient needs of older horses do not differ that greatly from their younger relatives. However as horses age they become less able to metabolically handle large changes in their nutrients and may develop special needs.



Dental Needs

One of the first things to consider in feeding the older horse is the condition of the teeth. All horses should have their teeth checked to see that “spurs” and edges do not develop that not only limit the ability of the horse to chew grains and forages, but also may inflict real pain. Any horse that appears to “dribble” their meal and shows body weight loss should have its’ teeth examined. Older horses may actually have lost teeth or worn them down to the point that it limits their ability to masticate properly.

Protein Requirements

Older horses may have more limited absorptive capabilities. It is important that they receive the proper balance of amino acids, not only to maintain skeletal muscle, but also to maintain a strong immune system. We do not want a high crude protein diet as it puts more pressure on the kidneys to excrete urea.

Prince Regency Senior contains Zeo-Carb® a product that can hold excess ammonia ions. When ammonia ions (containing nitrogen) are produced by bacteria in the lower gut. Ammonia ions can be absorbed with the result of increased urea production. By holding those ions in the gut, and potentially absorbing ions from the body into the gut, we can reduce the effect of excess protein by increased fecal nitrogen content rather than urinary nitrogen.

Calcium and Phosphorous

It is recommended that older horses be restricted in their excess to legumes (alfalfa and clover hays) in order to reduce the Calcium excretion by the kidneys.

FEEDING GUIDELINES

The most important nutrient - WATER

A good source of clean water is necessary. Poor water intake leads to reduced performance and reduced feed intake.

Horses should have free access to salt

Ionic balance for the horse can change with the weather and activity level and a good source of available salt helps protect against any sudden changes. Some free choice minerals rely upon salt intake to control mineral consumption, horses in these management systems should not have access to free salt. Many producers prefer to use trace mineral salt block, however in reality these products are a poor supplier of needed trace minerals.

Horses will consume approximately 2.5 % of their body weight in Dry Matter Daily

If a horse is consuming pasture that is only 30% dry matter, a 1200 pound horse can be expected to consume 100 pounds of pasture a day

The minimum forage intake should be 1.5% of body weight in Dry Matter Intake

Horses are a grazer by nature, less than 1.5% forage intake may leave horses more prone to colic, more likely to exhibit vices such as fence chewing and may be too reliant on the grain in the diet.

Horses are creatures of habit

Horses anticipate feeding time. Abrupt changes in schedule can lead to digestive upset as well as aggressive behavior.

Horses are greedy

Much like people horses will over consume feed and can make themselves sick from colic or laminitis.

It may be appropriate to restrict access to new pasture growth that may be particularly lush. In group feeding situations the feed should be spaced out to prevent one dominant animal from scaring the rest away. Even with feed spread the handler must be sure that some animals are not quickly consuming their meals and their neighbors as well.

FEEDING FOR MOTION

Without doubt, a healthy horse has intrinsic beauty. However most of us keep horses for active tasks, be it some form of riding or pulling. We feed horses for “motion” whether it is racing, gaming, endurance riding draft pulling, or simply “hacking” on the weekends. For this “motion” we need to not only develop and maintain good muscle tissue but also all of the supporting materials such as bones, tendons. We also need a strong immune system and other organs such as the liver, pancreas and kidneys.

QUALITY 13% HORSE ADULT MAINTENANCE – (#001112)

A pelleted feed designed as maintenance diets for horses with lower activity levels.

13% SWEET HORSE - (#001288)

16% SWEET MULTI FEED - (#201359)

12% SWEET MULTI FEED - (#201339)

Texturized or “sweet” feeds that contain pellets, grains and molasses.

FEEDING DIRECTIONS: Prince horse feeds can be fed from 1/2 to 1 1/2 lbs. per 100 lbs. of body weight, according to needs of the horse, more for active horses. Horses should never be feed more than 3/4 lb. per 100 lbs. of body weight at any one feeding and preferably never more than 1/2 lb. per 100 lbs. of body weight at any one feeding.

Prince horse feeds contain selenium. Horse owners should not feed a combination of Prince Feeds and other supplements that could result in a diet which contains a total of more than 0.3 ppm of Selenium.

If your horse feeds do not contain salt. Horses should be provided salt free choices in the form of either salt blocks or free granules.

PRINCE REGENCY SENIOR - (#210003)

- Chelated Mineral-superior biological availability
- Proteins balanced for amino acids.
- Contains Natural Vitamin E- Greater biological availability with increased plasma concentrations compared to synthetic forms.
- Contains Zeo-Carb® to reduce the effects of excess Nitrogen
- Contains mannan oligosaccharides to help support immune protection
- Contains d-glucosamine.

PRINCE REGENCY LO-CARB MAINTENANCE - (#210017)

- Contains highly digestible fiber sources
- Contains added fats (high in Omega-3 fatty acids)
- Chelated Mineral-superior biological availability
- Proteins balanced for amino acids.
- Contains Natural Vitamin E- Greater biological availability with increased plasma concentrations compared to synthetic forms.

BLENDING ONES OWN HORSE FEED

• SWEET HORSE CONCENTRATE - (#001286)

Prince manufactures a pellet with concentrated nutrients for use in manufacturing a 12%, 14%, or 16% protein sweet feeds or feeding as a top dress supplement. As a top dress product, Sweet Horse Concentrate should be fed at the following rates:

TYPE OF HORSE	FEEDING RATE
Growing Horses	1 lb. of Sweet Horse Concentrate to 1 lb. of grain
Mature Horses	1 lb. of Sweet Horse Concentrate to 1 lb. of grain
Performance Horses	1 lb. of Sweet Horse Concentrate to 1 lb. of grain