

Stretching Your Hay Budget

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Most livestock owners, including horse owners, have noticed the price of feed (both hay and grain) has increased. There are several key factors contributing to these increases, including extreme weather patterns, high oil prices, currency fluctuations, and a surge in global food demand. Horses have evolved on diets composed entirely of forage. Therefore, forage should be the primary component of a horse's diet (at least $\frac{2}{3}$). Thus, horse owners, unlike other livestock owners, have few options other than forages to meet their horse's nutritional requirements. However, there are management practices and a few forage alternatives that can help horse owners ride out high feed prices.

Management Practices

Take a critical look at equine body condition and maintain a body condition score of 5 (on a scale of 1-9). Horses that maintain their weight on forage-only diets do not usually require any concentrate (grain). A well-formulated ration balancer (concentrated vitamin/mineral mix) will ensure vitamin and mineral needs are being met when dried hay is the sole dietary component. Even the best quality hay will be lacking essential vitamins and minerals.

While all forage offered to horses should be free of dust, mold, weeds, and foreign debris, the quality of the forage offered can vary depending on the type of horses being fed. Forage selection should be based on needs, as there is no one forage best suited for all classes of horses. For example, providing a nutrient-dense forage, like vegetative alfalfa hay, to 'easy keepers' can create obesity issues; however, that same hay would be a good option for a performance horse with elevated nutrient requirements. Test hay for quality to determine how much and what type is best to feed to individual horses. Keep in mind higher quality hay usually demands a premium and such hay is not needed by all groups of horses. Finally, older hay, if stored properly, is usually a great option for horses.

Plan ahead and know how much hay is needed. Horses eat roughly 2-2.5% of their body weight each day. For example, an average 1,000 lb horse will eat around 20-25 lbs of feed (hay and grain) daily, plus water. Weighing the amount of feed offered will help to avoid over-feeding. When calculating hay needs, make sure to account for wasted hay. For example, in a recent study conducted by the University of Minnesota, feeding round-bales to horses without a round-bale feeder resulted in 57% waste, while using different feeders ranged from 5-33% hay waste.

The price of all feed ingredients have increased. Lower-quality, inexpensive grain substitutes can lower the nutritional content and palatability of feed. In other words, "you get what you pay for." When feeding grain is necessary, purchase a high quality feed.

Finally, have a good relationship with a supplier to ensure a consistent and reliable hay source. Consider adding hay storage space to reduce the effects of price and seasonal fluctuations. For example, hay is often more expensive in winter vs. summer. Buy early (do not wait for late cuttings) and budget for price increases by re-evaluating how many horses can be fed economically.

Forage Alternatives

Below is a list of common forage alternatives, including benefits and disadvantages of each:

- Hay cubes (processed forage products) used as feed usually result in little waste, are easily handled and transported, and are a good baled hay extender or replacement. They can be expensive.
- Beet pulp is a good source of energy and protein. Most horses can consume 5-10 lbs/day. However, a mineral supplement will be necessary in order to achieve recommended calcium to phosphorus ratio of 2:1.
- Complete feeds offer a balanced diet and are good hay extenders. Some are meant to be fed with forage, while others can be substituted for forage. However, some may not have enough total fiber, can be eaten quickly, will need to be divided up into several small meals, and can be expensive.

Unlike other livestock, horses should not be fed straw, corn stalks, or haylage. Corn stalks and straw provide very little nutritional value, and corn stalks and haylage can have mold and botulism issues, posing severe concerns for sensitive horses.

Before feeding an "alternative" feed to horses, consult a local veterinarian or an equine nutritionist. Any change in forage, or forage alternative, should be done slowly to allow horses time to acclimate to the new diet. Constantly changing diets can lead to horse health problems, specifically colic.