

Feeding Horses on a Budget

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Whether you own horses for pleasure or raise them for profit, reducing costs without sacrificing quality is of paramount importance. In tough economic times, making small adjustments to your feeding program can mean the difference between making it or breaking it in the horse business. The key to saving money on feed bills is not always to buy cheaper; in fact, always choosing the cheapest option, cutting corners on management and feeding like you've always fed can end up costing you a whole lot more in the long run. By feeding smarter instead of cheaper you can maximize the nutrition available to your horse while minimizing the damage to your wallet. Begin the journey to smarter feeding by asking yourself these questions:

- 1) *Am I feeding my horse what he needs?*
- 2) *Is he able to use what I give him?*
- 3) *Am I wasting resources?*

Am I feeding him what he needs?

Domesticated horses are often fed contrary to the way nature intended. The horse's digestive anatomy is designed to consume small quantities of roughages throughout the day (primarily in the form of grazing) as opposed to the one or two large high calorie grain meals which are standard fare on most horse farms. From both economic and health standpoints, diets should be roughage (grass and hay) based. In fact, most horses, unless they are in late gestation, lactation or heavy work, require little if any grain provided there is adequate forage availability and mineral supplementation. Start thinking about your feeding program as being roughage based with a grain supplement rather than the other way around.

Speaking of roughages, hay should be high quality, free of weeds, mold or dust, and palatable to your horse. That being said, the most expensive hay is not always the best. Over half of the cost of hay is in shipping. Look for hay which is grown locally (for example Coastal Bermuda grass hay or Perennial Peanut legume hay). These hays are nutritionally similar to imported grass and legume hay (for example timothy, orchard and alfalfa) but come at a much more budget friendly price. Forming a relationship with a local hay producer and buying hay out of the field can secure an even lower price.

Table 1: Comparison of retail price and nutrient value of four commonly fed horse hays

Hay	Price/Ton*	Digestible Energy (Mcal/lb)	%TDN	% Crude Protein	Ca	P
Alfalfa ¹	\$430	0.8-1.1	48-55	15-20	0.9-1.5	0.2-0.35
Timothy ¹	\$420	0.7-1.0	42-50	7-11	0.3-0.5	0.2-0.35
Perennial Peanut ²	\$280	0.9-1.3	54-68	11-20	1.1-1.7	0.2-0.3
Coastal Bermuda ¹	\$200	0.7-1.1	42-50	6-11	0.25-0.4	0.15-0.3

*price current as of

3/15/11

Certain classes of horse will not be able to maintain adequate body condition on roughage alone. When selecting a grain pay close attention to feed tags and use them to comparison shop. Feed companies dedicate a significant portion of their budget to advertising, hoping to appeal to the heartstrings (and purse strings) of horse owners. By reading labels, the educated owner is able to shop with their heads as opposed to their hearts. Of course, cheaper is not always better as cheaper feed is often less nutritious and may have to be fed in a greater volume to achieve the desired result. Look for a feed which is nutrient and calorie dense and complements your forage program.

Table 2: Comparison of lbs/d of a 14% complete horse feed vs. whole oats needed to meet the nutritional requirements of an 1100lb horse in light work consuming 18lbs of grass hay/d

Nutrient	14% CP pelleted complete feed (lbs/d)*	Oats (lbs/d)
Energy	5.25	6
Protein	5.25	6.2
Lysine	5.25	10
Potassium	5.25	16.4*
Copper	5.25	>50*
Zinc	5.25	>50*
Calcium	5.25	78*

*feeding more than 5lbs oats/meal is not recommended

Table 3: Cost comparison of three feeds which meet the nutritional requirements of an 1100lb horse in light work consuming 18lbs of grass hay/d

Feed	Cost/bag*	Cost/d*
Complete feed	\$14.50	\$1.52
Whole oats**	\$9.00	\$14.04
Whole oats + ration balancer	\$9.00 + \$20.25	\$1.62

*price current as of 3/15/11

**feeding more than 5lbs oats/meal is not recommended

Is my horse able to use what I give him?

In order to efficiently use the grain and roughages that are being offered to him, your horse needs to be able to ingest, digest and absorb all available nutrients. Start by watching him at the grain bucket. Is he dribbling a lot or producing excess saliva? If so, it may be time to have the dentist out for a float. Grain that is dribbled on the ground is doing nothing for him nutritionally and can actually contribute to sand colic as he tries to clean his mess later. Next, take time to evaluate your deworming program. Parasites in the GI tract can rob the horse of valuable nutrients and contribute to colic. The best deworming plans start with a fecal egg count to determine parasite load and involve targeting dewormer to the specific parasite populations present.

Am I wasting resources?

Spoiled feed and hay is money down the drain. Store your grain in air-tight vermin-proof containers (trash cans with locking lids make excellent feed bins) and be sure to empty one bin before adding fresh grain to prevent the bottom layer from spoiling. Feed grain off the ground when possible or in tubs which are difficult to tip.

A hay bag in the stall minimizes waste and a hay ring or above ground bale feeder in the pasture will prevent horses from walking in and soiling hay. Hay should be stored in a dry, covered area off the ground (preferably under roof and on pallets). Improper hay storage results in reduced feed intake as well as dry matter losses.

Table 4: Forage quality changes when storage method differs

Storage Method	Digestibility	Economic Loss (\$/T)
Barn	58.8	-
Outside	42.5	\$9.72

Poor pasture management practices can also result in a higher feed bill. Overstocked, under-managed horse pastures can quickly morph from fields of green to weed filled sand lots. If the amount of grass in the pasture is not adequate to meet the horses roughage requirements more hay will have to be supplemented at a significant cost to the owner. Regular soil testing, appropriate fertilizer and herbicide use, maintaining low stocking rates and practicing rotational grazing will extend the grazing season and dramatically lower hay bills.

Finally, be wary of over feeding horses. Obese horses (those of a body condition score of 7 .5 or higher) are at risk for major health complications. Feeding horses to the point of obesity not only raises your feed bill, it can raise your vet bill as well.

For more tips on horse keeping on a budget contact your local county extension agent.

Works Cited

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