



Beet Pulp as a Fiber Source for Horses

Debra J. Hagstrom, M.S., Equine Extension Specialist, University of Illinois
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With the current price of hay, horse owners may be interested in options for stretching their hay supply this winter. Beet pulp may be just the thing to help with that as it can function as a soft, easily digestible supplement to your horse's roughage intake.

Beet pulp is a by-product of extracting table sugar from sugar beets. It is dried down to 5% moisture for storage because beet pulp is rather soft and prone to molding in its original form. Beet pulp is an excellent source of digestible fiber while being relatively low in crude protein (approximately 8-10%). These numbers are comparable to good-quality grass hay. Its digestible energy has been found to be greater than hay but less than grain. In fact, some research studies have suggested that the energy value of beet pulp is higher than alfalfa pellets and possibly as high as oats. Beet pulp is also relatively high in calcium while being very low in phosphorus. It is unquestionably low in vitamin B and selenium and has virtually no vitamin D or the precursor of vitamin A. This means that in a diet where a significant amount of beet pulp is fed, balancing for vitamins and minerals can be a challenge.

Dehydrated beet pulp is available in either shredded or pelleted form. The shredded form provides some additional fiber length ("scratch factor") which might be lacking in a complete feed or senior feed dominant diet. So, in situations where very little long stemmed roughage is fed shredded beet pulp may be preferred over pelleted. Additionally, most commercially available beet pulp has a small amount of dried molasses added to increase its palatability and energy content.

It is recommended to soak dehydrated beet pulp prior to feeding to reduce the chance of choke in your horse as well as to make it more palatable. Feeding soaked beet pulp is also a good way to increase water intake during the winter which can be a cold weather concern for some horse owners. (Water intake can actually increase in the winter if your horse goes from a water-rich pasture grass summer diet to a dried forage winter diet.)



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Soaking beet pulp is simple. Place the shreds or pellets in a bucket and add twice as much water as beet pulp. Either cool or warm water can be used although it may absorb warm water more quickly. (Use warm water to feed it instead of bran mash in the winter months. Nutritionally it is a better choice than wheat bran as it is a more balanced feed stuff). Never use hot water though as that will actually cook the beet pulp and destroy most of the nutrients in it. When ready, the beet pulp will have soaked up all of the water, increased in volume to fill the bucket, and be light and fluffy in consistency. This could take as little as 30 minutes or up to a couple of hours to accomplish. It is best to make up beet pulp in single feeding batches as soaked beet pulp tends to ferment. Generally, soaked beet pulp will keep for up to 24 hours.

Not only can beet pulp help to stretch your hay supply, but it can encourage weight gain on your “hard keeper”. Furthermore, it may help horses with dental problems that make chewing hay difficult or older horses that have a hard time digesting other types of roughage (hay). Beet pulp may be of particular interest to horse owners that are trying to lower non-structural carbohydrates (sugars and starches) in their horse’s diet as it has an average non-structural carbohydrate content of approximately 12%. This fact, coupled with its calorie content and easy digestibility, make beet pulp an excellent ingredient for formulating high fiber, low carbohydrate diets.

For those specifically trying to decrease their horse’s non-structural carbohydrate intake, add slightly more water when soaking the beet pulp. The excess water not absorbed by the beet pulp will contain most of the sugar from the dried molasses. Simply pouring off that excess sugar-rich water will significantly reduce the sugar content of the beet pulp fed.

Due to beet pulp’s relatively high calcium and low phosphorus content, feeding too much could result in an imbalance of the ratio of those two minerals in the total diet of the horse. This is important to bear in mind as it could interfere with normal bone development in youngsters. In addition, excessive dietary calcium can increase the risk of kidney stones in older horses or



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intestinal stones (enteroliths) in horses of any age. Therefore, it is advised to have no more than 25% of your horse's total diet fed as beet pulp. That percent may need to be reduced for young, growing horses in which proper bone development is critical.

Most horses will eat straight beet pulp, but its appeal will be improved if you mix it into your horse's regular grain ration. As with any change to your horse's diet, start by feeding only a small amount and gradually increase the amount fed over a period of a week or so. Consulting with your veterinarian or equine nutritionist to ensure your horse's total diet remains balanced for all nutrients is also recommended.

Beet pulp is a relatively inexpensive feed that is readily available throughout most of the Midwest. It can provide a consistent, cost effective forage alternative giving you options when it comes to extending your hay supply. As you consider incorporating beet pulp into your horse's feeding program keep in mind that it is not balanced in vitamins and minerals and those short falls must be provided by other ingredients in your horse's total diet.