Information Sheet
Beet Pulp

Feeding recommendations for offering beet pulp to horses.

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Feeding recommendations:

- Beet pulp may be fed to replace a portion of either grain or hay in the horse's diet. This is particularly useful for aged horses that have difficultly chewing and getting utility out of stemmy hays and forages.
- Both **dried beet pulp shreds** and **pelleted beet pulp** can be fed dry, or soaked in water, so as to feed it wet. If fed dry, feed at low feeding rates, and observe your horse as he/she eats the dry beet pulp when first introducing it for signs of difficulty swallowing. Feed dried beet pulp at the rate of 1 to 5 lbs/horse/day. Introduce in small increments over 5 – 7 days, until target feeding rate is reached.
- **CAUTION** – rapid or excessive consumption of dry beet pulp may cause choking in some animals. Therefore, do not exceed 40% (or approximately 8 lbs; depending on BW) of the horse's ration in dried beet pulp.
- Beet pulp can also be soaked in water (for up to 2 hours) before feeding; doing so will allow the beet pulp shreds to swell. Feeding **Wet beet pulp shreds** increases water intake in horses that are prone to dehydration, or refuse water when being hauled. Weigh dry beet pulp before soaking in water, so as to feed at the rate of 1 to 5 lbs/horse/ day. Introduce in small increments over 5 – 7 days, until target feeding rate is reached. It is not recommended to exceed 8 lbs of beet pulp offered to a horse/day.
- **NOTICE:** Horses that have been diagnosed with a carbohydrate related disease should be fed beet pulp with strict feeding management as all beet pulp contains some level of sugar (see side bar). There has been a trial conducted that suggests submersing roughages for 60 minutes in cold water, followed by draining may leach some of the sugars from the product by 31% (Watts, 2003).
- Please read the side panel and review the table below for additional information regarding the difference between "plain" beet pulp and beet pulp "with molasses added."

	Form		
Typical Analysis*	Dry Beet Pulp Shreds, Plain	Dry Beet Pulp Shreds, with Molasses Added	Beet Pulp Pellets, Plain
Crude Protein, %	7.5	8.4	7.5
Crude Fiber, %	15.4	16.6	15.4
ADF, %	25.6	20.8	25.6
NDF, %	41.9	40.5	41.9
NFC, %	32.6	34.9	32.6
Total Sugars, %	8.2	8.8	8.2
Crude Fat, %	1.0	0.6	1.0
TDN, %	63.0	67.8	63.0

* Percent on an as-fed basis. Values reported are derived from analyses published by Mid-west Agri-Commodity and NRC (2007).

Supplemental Information:

Beet pulp is the vegetative residue that remains after the extraction of sucrose (sugar) from sugar beets. The residue can be marketed as either a dried or wet shredded product, and with or without molasses added. The dried product can also be pelleted to make dried beet pulp pellets. Be aware that regardless if the product is marketed as "plain" beet pulp or "with molasses added," that **all beet pulp products contain some level of sucrose (sugar)**. Often times, the "plain" beet pulp can have equaled to or greater amounts of sugar than even the beet pulp "with molasses added." This discrepancy is often due to differences between sugar extraction plants or geographic region where sugar beets are grown. Beet pulp can vary widely in the non-fibrous carbohydrate (NFC) content (38.1 – 50.6%; NRC, 2007).

Additionally, it is worth noting that color differences between bags of beet pulp is usually due to drying procedures of the product, and not of inclusion level of sugar or molasses. Please review the analysis table to the left for more information.

References:

1. Midwest Agri-Commodities
2. NRC. 2007. Nutrient Requirements of Horses. Nat'l Academies of Press. Washington, DC.
3. K. Watts. 2003. Soaking Hay to Remove Excess Soluble Carbohydrate and Potassium. http://www.safergrass.org. Accessed Feb, 2009.
4. Picture from: www.michigansugar.com