



BEET PULP: WHAT DO I NEED TO KNOW?

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What is Beet pulp?

Beet pulp is a by-product of the sugar industry. Sugar is extracted from the beet leaving the pulp. The sugar finds its way into snacks designed to appeal to kids, while the pulp is used as an ingredient in animal feeds (>5% sugar). Beet pulp is rich in fiber and is unique in its form, as it is soluble fiber and highly digestible. Beet pulp is fermented in the large intestine of the horse similar to hay, pasture and chaff. However, since the fiber in beet pulp is soluble, it is more readily digestible than pasture, hay or chaff. In fact, beet pulp provides digestible energy ranging between that of good quality hay and grains, sourcing energy from soluble fiber as opposed to energy from starches and sugars. Consequently, it is ideal for all equines, especially for horses where weight gain is desired, as it increases the caloric content and energy density in the diet.

The safe option

When horses need additional calories in the diet, horse owners often feed grain. Grains, such as oats, maize and barley are digested in the small intestine of the horse. If too much grain is fed in a single meal, it can result in undigested grain passing into the large intestine. Once in the large intestine, bacteria ferment the undigested grain, potentially resulting in digestive and metabolic disorders such as colic and laminitis. Beet pulp avoids these potential digestive and metabolic issues as beet pulp is considered a super fiber – high calorie content and safe to feed. Beet pulp is ideal for horses that suffer from poor dentition due to its soft consistency once soaked and provides horses that can't chew hay with an adequate fiber source, while still maintaining body condition. Offering it to your horse as a mash offers the additional benefit of increasing their water intake. Generally, it is recommended when feeding beet pulp alone, that it should be soaked. This helps with improving the hydration status of the horse as well as slowing down intake. Care must be taken especially in warmer climates that the soaked beet pulp is not allowed to sit out for long periods (overnight) to become stale.

Provides energy, but low in non-structural Carbs

Beet pulp is widely used in the feeding of horses around the world and has been recommended as a substitute for hay in rations for horses with respiratory problems. It has also been recommended as a replacement for a portion of poor quality hay in performance horse diets to improve the quality of fiber and increase the energy density of the daily diet. It is used as a method to assist underweight or thin horses gain additional condition without the use of grains, while still lowering starch intake and retaining the digestible energy level as well. Accordingly, it is also ideal for endurance and excitable horses,



where calm conditioning is required, as it provides slow release energy and helps to restore and maintain fluid balance in the body when previously soaked. A study showed that horses had higher muscle glycogen content, and lower blood and muscle lactate content, after exercise when fed beet pulp in their diets as compared to oats. Muscle glycogen content is the main source of stored energy used for exercise in horses. Lactate (or lactic acid) accumulation can cause muscle fatigue which results in a decline in performance.

Beet pulp has a lower glycaemic index compared to any type of grain, meaning it has a small effect on blood glucose levels. A low glycaemic index feed may have a positive influence on behavior (less fizz), along with helping to control nutrition levels in horses susceptible to metabolic related disorders, such as laminitis, insulin resistance, Cushing's, grain intolerance, Equine Metabolic Syndrome, PSSM and tying-up.