

Fibre-Beet: Properties and Benefits

Physical Properties

- High quality conditioning fibre source to boost or replace forage sources
- Soaks rapidly compared to other alfalfa sources
- Fibre-Beet has been designed to be fed as a wet product ~ 75% moisture (3:1 soaking ratio)
- Wet feeding is the natural situation for the horse; grass has up to 80% moisture
- Smaller quantities can be fed dry as soaking is not essential.
- Suitable for all classes and ages of horses
- Ideal for Veterans, when soaked
- Veterans with poor dentition prefer Fibre-Beet to hay and other branded material - Independent research
- Suitable for livestock and show animals
- Unique lozenge shape aids prehension and selection, when fed dry

Nutritional Makeup

- Good level of quality protein. Overfeeding protein can lead to digestive disorders and production of endotoxins
- Good levels of branched chain amino acids. These have been shown to help muscle function and combat fatigue
- Good levels of the amino acid leucine. Leucine is involved in triggering muscle protein synthesis.
- High levels of digestible fibre. The effective degradability of fibre is twice that of grass fibre.
- Fibre profile has been formulated to enable hindgut fermentation produces slow release energy profile that is similar to grass, but in higher amounts.
- Slow release energy contribution from lactic acid is low, helping avoidance of hind gut dysfunction
- Less than 10% starch + sugar, making Fibre-Beet a low sugar product.
- Added biotin to support hoof and coat condition.

Gastro-Intestinal Health.

- Contains elements shown to have effects in supporting correct gastric function.
- Fibre constituents present a high acid binding capacity to “mop up” excess stomach acid
- Incorporates soluble fibre as pectin. Pectin can be released from matrix in acidic (pH~4.5) environment and be emulsified into protective mucus layer.
- Pectin also stimulates mucin production from intestinal cells, to help protect gut lining.
- Data shows alfalfa fed alongside hard feed can help maintain normal stomach acidity for up to 6 hours
- Initial data from Glasgow University Vet School supports ability to buffer stomach acid and maintain in a normal range.

Performance

- Overfeeding starch/sugar results in reduction in digestibility. Undigested material at worst leads to hindgut dysfunction, at best is a waste of money
- The majority of muscle fibres can use slow release energy to function. Some glucose (starch derivative) is needed to power fast twitch muscle fibres. These muscle fibres supply short term, high contraction power, in the absence of oxygen. Over use leads to build up of lactic acid and muscle fatigue.
- One of the slow release energy sources - propionic acid - can be metabolised to glucose and so can help spare dietary starch/sugar overload.
- Other slow release energy sources can be used directly by the other muscle fibre types.
- Fibre energy can provide significant amounts of energy to power muscle activity
- High effective degradability of Fibre-Beet supplies energy commensurate to cereals. Replacing cereals with Fibre-Beet will not compromise energy intake in the performance horse.

- It is believed that fibre load in the gut reduces performance. Research has disproved this and shows it can improve muscular activity and recovery rates

Additional Benefits

- Beet pulp fibre, in particular the soluble pectins, have been shown to have a prebiotic effect.
- When fed alongside forage the release of slow release energy is greater than the sum of the individual effects.
- Data shows that alfalfa utilisation can be increased by 25%.
- Fibre-Beet has components that will increase the efficiency of fibre utilisation of forage.
- The volatile fatty acids of Fibre-Beet contain significant amounts of propionic acid to support glucose metabolism, and also butyric acid
- Butyric acid is an essential nutrient for maintaining the gut cells in the hindgut. It also is implicated in the immune status of the animal.