

# **Fibre-Beet Facts**

## **What is Fibre-Beet and how does it work?**

Increasingly the nutrition of the horse is becoming more widely understood and accepted, and the benefits of maximizing fibre intake have been well received. More high fibre mixes are being produced to help optimize the utilization of forage and there is now a comprehensive range of possibilities to maintain the nutrition, behavior (chewing, trickle feeding) and welfare of the horse. What is different in wet feeding and why do we need to look at a new concept? Your horse has access to water so why do you need to add another layer of complication?

Well, answer me this. How much does your horse drink? The answer may surprise you.

## **Vital Water**

A horse at rest may drink up to 7 litres per 100kg of body weight per day. A 400kg horse will drink over three bucketful's. During exercise up to 15 litres of water per hour can be lost as sweat another two buckets. And it has been shown that as water intake is restricted so intake of food reduces.

Water is essential, not only to maintain every aspect of the physiology and biochemistry of the body but also to ensure the correct condition in the gut.

The gut content (chyme) in a horse is mainly water in which is suspended food particles and digestive enzymes.

Muscular contractions squeeze (and mix) the contents along the length of the gut as enzymes break down nutrients for absorption and microbes mix with, and attach to, the fibre to release energy. It's only as the chyme passes through the large intestine that most of the water is absorbed and utilized in the biochemistry of the animal. But he's got a bucket!

So, no problem; you've a bucket of water in the stable and you fill it whenever its level is low; or maybe an automatic bowl. However trial work has shown that water intake from bowls is less than buckets, and if intake from buckets is restricted feed intake and welfare can be compromised.

And water intake is essential. A big drink after a meal is good, isn't it? Yes, but water and feed intake together is better.

Every article of feeding horses relates feeding behavior to the evolutionary past of the horse. They are trickle feeders, far ranging, eating a variety of forages and exercising intermittently (when hunted, or mating). And this article is no different.

## **Moisture Matters**

Forage varies in its moisture content. However even mature grass contains up to 90% moisture and so a grazing horse can fulfil most of its water needs from grass. Chewing a moist product has less impact on the teeth and localized oral dehydration and prepares it for its subsequent journey through the gut where it will mix easier with additional water than a dry chewed product. It's like the difference between eating porridge and the dry oat flakes!

And that's the problem. Most feeds where water soaks in well are starchy and current thinking encourages a reduction in these feeds unless the horse's level of activity justifies

their use. Fibrous feeds (hay, alfalfa) do not soak well, and soaking will result in a slightly damp product and a bucket of water! Wet feeding of the horse is better as it avoids physiological stress in chewing, swallowing and gut transit. However, for many people access to grazing may not be practical.

### **Absorbent alfalfa**

Fibre-Beet addresses this situation. Exploiting the technology of Speedi-Beet rapid soaking technology, Fibre-Beet absorbs at least 3 times its own weight of water, holding the moisture through chewing and swallowing and entering the stomach in an ideal form. Fibre-Beet complements the water holding and nutritional benefits of Speedi-Beet with those of a moist alfalfa, a combination that is a physiological winner in the concept of wet feeding of horses. This quick-soaking conditioning feed has a patented lozenge shape to increase surface area (like a radiator) and aid water absorption.

Alfalfa is a leguminous plant, related to peas. Used as an entire forage crop it has been cultivated for many centuries for feeding purposes. It also has low non-structural carbohydrates. These products, such as starch and fructans can cause fermentation problems if overfed. Typically levels are lower than grass and hay, so alfalfa can be fed with confidence to all types of horse. Rich in protein and provides an excellent source of digestible fibre and a high level of slow release energy without fizz. It also provides a good range of minerals, trace elements and amino acids.

Fibre-Beet is ideal for all types of horses and ponies with soaking time only 45 minutes in cold water or 15 minutes in warm water. It is also beneficial to laminitics due to its high fibre, low sugar content and contains Biotin to help maintain hoof integrity.

Fibre-Beet can be fed to replace a proportion of forage sources such as hay and grazing. It can be fed up to 40% of the daily feed and the combination of Speedi-Beet and alfalfa means the bulking will improve the inherent digestion in the horse.

### **Wet Feeding? Does it Matter?**

Increasingly the nutrition of the horse is becoming more widely understood and accepted, and the benefits of maximizing fibre intake have been well received. Companies are producing high fibre mixes to help optimize the utilization of forage and there is now a comprehensive range of possibilities to maintain the nutrition, behavior (chewing, trickle feeding) and welfare of the horse.

So why do we need to look at a new concept? What is different in wet feeding? Your horse has access to water so why do you need to add another layer of complication.

Well, answer me this. How much does your horse drink? The answer may surprise you.

A horse, at rest, may drink up to 7 liters per 100 kg of body weight per day. A 400 kg horse will drink over three bucketful's. During exercise up to 15 l of water per hour can be lost as sweat – another two buckets. And it has been shown that as water intake is restricted so intake of feed reduces.

Water is essential, not only to maintain every aspect of the physiology and biochemistry of the body but also to ensure the correct conditions in the gut.

The gut contents (chyme) in a horse is mainly water in which is suspended food particles and digestive enzymes. Muscular contractions squeeze (and mix) the contents along the length of the gut as the enzymes break down nutrients for absorption and microbes mix with, and attach to, the fibre to release energy. It's only as the chyme passes through the large intestine that most of the water is absorbed and utilized in the biochemistry of the animal.

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Forage varies in its moisture content. However even mature grass contains up to 70% moisture and so a grazing horse can fulfill most of its water needs from grass. Chewing a moist product has less impact on the teeth and localized oral dehydration and "prepares" it for its subsequent journey through the gut, where it will mix easier with additional water than a dry chewed product. It's like the difference between eating porridge and the dry oat flakes!

And that's the nub of the problem. Most feeds where water soaks in well are starchy and current thinking encourages a reduction in these feeds unless the horse's level of activity justifies their use. Fibrous feeds (hay, alfalfa) do not soak well, and soaking will result in a slightly damp product and a bucket of water! Wet feeding of the horse is better as it avoids physiological stress in chewing, swallowing and gut transit. However, for many people access to grazing may not be practical.

Fibre-Beet, a new product from the Speedi-Beet stable, addresses this situation. Exploiting the technology of Speedi-Beet's rapid soaking, Fibre-Beet absorbs at least 3 times its own weight of water, holding the moisture through chewing and swallowing and entering the stomach in an ideal form. Used as a top dressing it will enable dry forage to be moistened with chewing. By maximizing water intake during eating a separate "top-up" from a bucket is more likely to meet the horse's physiological needs. As a separate meal it supplies an ideal profile of fibre, as well as supplementary moisture.

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