



Fibre, Fibre, Fibre...

Why is fibre so important?

After water, fibre is the most important nutrient for the horse and should be the basic ingredient to any horses diet. In natural state horses have evolved to wander and graze for up to 18 hours a day, constantly trickle feeding on small amounts of feed as it comes along.

- In a natural state horses will graze for up to 18 hours a day
- Fibre should make up at least 50% (by weight) of the horses daily diet
- Most horses should eat up to 2.5% of their bodyweight on a daily basis
- Digestion of fibre is a slow process, often taking up to 40 hours

The digestive system is designed to process small amounts of feed constantly, without adequate fibre the digestive system can't function properly.

Fibre is a major source of energy and is so important to equine digestive health that it always should make up at least 50% (by weight) of your horse's daily diet. For the vast majority of adult horses, that percentage can be pushed up considerably higher even to 100% if the horse is an easy keeper or is not being asked to do much work. Even horses in the hardest amount of work should receive no fewer than 50% fibre in the diet.

Sufficient forage in the diet will also help prevent stereotype behaviour such as crib-biting, weaving and box walking which are often exhibited after the provision of a meal and may therefore be a response to a low-gut fill, often seen in horses receiving less forage and a higher concentrate ration.

The Digestive System

Digestion is the process by which feedstuffs are broken down to their simplest forms. The resulting nutrients can then be absorbed into the bloodstream and provide fats, carbohydrates, amino acids, vitamins, and minerals for maintenance and/or growth, or they can be stored for future needs.



Horses are predominantly fibre digesters or hindgut fermenters and are evolved to eat a fibre diet and their intestinal system is designed to process large amounts of low-quality forage, ingested on an almost continual basis.

Within the hindgut, are millions of micro-organisms that play a vital role to break down digestible fibre content releasing energy which the horse then uses. Over history horses digestive systems have adapted to support grazing for many hours of the day. Horses have an enlarged cecum and large intestine (large and small colon) which act as large fermentation vats for the microbial organisms living there.

Horses also have a strong desire to spend time foraging and chewing. This desire is easily satisfied through providing long stem forage sources and by trickle feeding fibre this encourages horses to chew, producing saliva. This alkaline saliva then buffers the stomach acid, helping to naturally reduce the incidence of gastric ulcers.

Feeding little and often also helps mimic the horses natural grazing style and is healthier than feeding large amounts of feed in one or two big meals a day. However, not all fibre is the same and can vary considerable in terms of digestibility and quality but unfortunately without having your hay regularly analysed the energy value and nutrient content is unknown. However it should be checked to make sure that it is free from moulds and fungi.

If your horse struggles to chew and digest long stem fibre such as hay and grass there are many alternatives available to you including chopped hay, alfalfa, dried grass and straw and high fibre feeds to help increase the fibre content of the horses diet.

Winter Months

Many people reduce turnout during the winter months meaning that horses are confined to their stable and while some horses can cope quite well with this it may lead to irritable or excitable behaviour in some which can result in weight loss. A major problem with stabled horses is boredom so if possible you should try to turn out daily or walk in hand.

If you decide to winter your horse out remember that grass growth slows down once the soil temperature drops to 5°C and the falling nutrient levels in the grass results in less feed energy that can be used to generate heat. This can contribute to a horse losing weight



during winter. Therefore, you must provide your horse with adequate food, water and shelter enabling the horse to escape from the elements and rug up where appropriate, especially if the horse lives alone

As a general for every ten degrees below freezing you can increase the horses forage ration by another 10 percent.

By providing your horse with ad-lib fibre this will also help maintain body temperature in cold weather, as heat is produced through the digestion of feed and fibres, which is a slow process, often taking up to 40 hours. During the digestion process, slow release thermal energy is created. The greatest amount of heat is released when microbes in the hindgut digest high fibre feeds, which help keep the horse warm.