Feeding a Fibre diet to Polo Ponies

Polo Ponies are bred for Speed, Stamina and Agility.

Feeding can affect both Speed and Stamina, but not Agility.

For Speed energy needs to be "instantly available" and also concentrated

For Stamina slow release energy is needed providing a lower level of activity, but avoiding metabolism that can increase muscular weariness.

With a mix of Speed and Stamina the right balance must be met.

Increasing the availability of slow release energy allows you to place your pony on a higher plane of nutrition, and reduce the need to oversupply "instantly available energy".

By replacing a proportion of forage with Fibre-Beet the availability of nutrients is increased, more slow release energy is produced and the variability of the grass/hay is reduced.

Lesser amounts of concentrate can be fed. As the pony receives a higher base line of energy form Fibre-Beet that from the concentrate can be utilised solely for extra muscular activity and this reduces the risk of lactic acid build up, tying up and ,a day or two later, Monday Morning Sickness.

A very wet mix of Fibre-Beet can be fed (although for this Speedi-Beet would be better) immediately after cooling down to help speed recovery and re-hydration.

Fibre is the best source of energy for the horse. Under some activity fibre cannot produce enough, or produce it quickly enough. Supplementation with cereal based concentrates should be used.

It is always best to improve the nutritional availability of the fibre sources and the use concentrates selectively to power the peaks of activity.

Fibre-Beet and Speedi-Beet allow you to do just that.

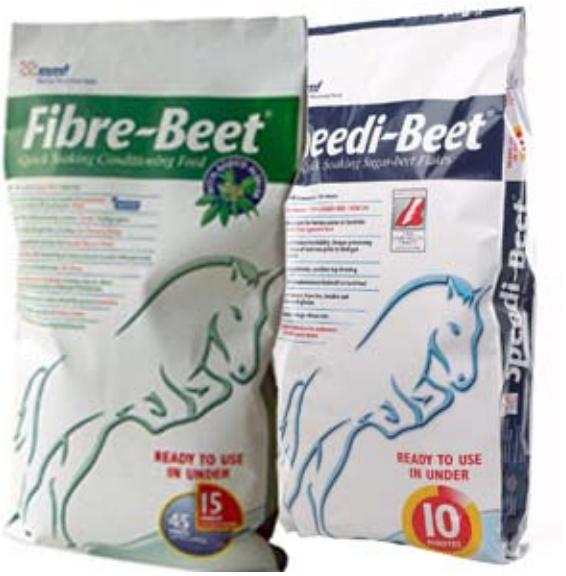
Fibre-Beet the super fibre.

Contact Us

Helena Basson
Importer
Western Cape & Rest of South Africa
Cell: 084 584 1220
Email: speedibeet@webmail.co.za

Carl Bronner
Agent
KwaZulu-Natal
Cell: 082 807 7772
Email: info@horseplay.co.za

Nicky Meyer
Agent
Freestate
Cell: 082 783 1068
Email: speedibeet-fs@webmail.co.za



www.speedi-beet.com
www.fibre-beet.com

Polo Ponies: The Equine Soccer Stars?

The polo pony needs to have speed, stamina and agility. And, unless the owner can keep a string of ponies so there is one for each chukka, needs to recover fast.

Although traditionally they were small animals, in the modern game they can be between 15 and 16 hands and are increasingly becoming a specialist breed.

When you look at human athletes you can see how the physique fits the event; a 100 metre sprinter is heavily muscled, whereas a marathon runner is leaner. Their metabolisms differ too. So what about a footballer – bursts of speed, endurance and stamina, and agility, he's just like a polo pony. The footballer tends to be moderately muscled, in between the sprinter and the long distance runner.

This analogy is less pronounced when transferring it to the equine world, certainly in terms of physique or conformity, but there is a well defined difference in how the metabolism of a racehorse and that of the endurance horse works.

Rapid muscular contraction (racing) is powered by the actions of the chemical ATP and its transformation to ADP and back. In skeletal muscles the most abundant provider of ATP is glucose. So a racehorse burns glucose to work its muscles and, as long as there is plenty of oxygen flowing to the muscles the system works. After a while however the oxygen supply reduces and the biochemistry produces lactic acid that interferes with contraction and causes the muscles to ache. It takes a while for the blood to remove the lactic acid to the liver where it is transformed back to glucose.

The endurance horse works by a different mechanism. Muscular activity is not as extreme, rather it is prolonged and energy derived from the fermentation activities in the hindgut is sufficient to generate ATP. Although glucose breakdown is also involved the intensity of exercise means that there is unlikely to be a shortage of oxygen and the debilitating effects of lactic acid build up, and activity is not restricted by a lack of muscular activity.

In simple terms one uses "instantly available" energy, whilst the other uses a constant stream of lower energy (VFA) to power activity.

So where does the polo pony lie? As with the footballer it is a mix between the two.

A polo pony needs to be fed for both speed and stamina. Agility is not a factor we can feed for, but the others we can. What is important is to get the mix right without depriving the animal of "instant energy" but avoiding the risk of tying up or of Monday Morning Sickness. These conditions are linked with the generation of ATP, and its possible oversupply. Most biochemical reactions are reversible. That is for example ATP can be changed to ADP and back again and it is this mechanism that contracts and relaxes the muscle strands. However if there is too much ATP being generated then the reaction to ADP dominates, and the muscle strands may lock. With all mechanisms in the body it is a matter of balance.

To achieve the balance we need to look at the requirements of the pony. He will be exercised and trained to maintain peak activity and then, during the season will be expected to perform at a higher rate. However feeding an animal where the level of activity is not always the same can present problems.

So we start with the basis that horses eat grass. For an animal on maintenance or light exercise this is probably sufficient if the grass is of reasonable quantity. If we increase the activity we must increase the input and this has been traditionally achieved by feeding compound or cereal based feeds. However if we increase and then decrease there is a danger that unutilised glucose (stored as glycogen) can lead to several disorders, including those mentioned earlier.

A more favourable alternative is to use a fibre source that is highly fermentable and provides more "slow release" energy (VFA) than grass or hay. Such a product is Fibre-Beet, which has been formulated not only to provide more available energy, but also to "smooth out" variation that occurs in forage.

The nutrition of using a Fibre-Beet/Forage base allows us to maintain the pony on a higher level of nutrition, and when extra activity is required cereal base feeds can be added; this has the added advantage of being able to feed less concentrate, supplying only as much "instant energy" as is needed for the task in hand.

There is another aspect. After a chukka the pony needs to recover, possible in a relatively short time. It will be dehydrated, but may not want to drink. Speedi-Beet, an ingredient of Fibre-Beet, has been shown to help re-hydrate horses by the simple expedient of offering it soaked in the proportion of 1:10 with water. The palatability of the Speedi-Beet encourages intake more so than offering water alone. Also, if electrolytes are offered these will be more readily accepted when incorporated in the Speedi-Beet.

The above regime means that for a pony undergoing reasonable levels of exercise, Fibre-Beet can replace some of the forage and allow most of the energy required to come from hindgut fermentation VFA's, When training is increased concentrates can be added, but at lower levels than traditionally used. Instant energy is available but in moderation and only for the period required. Intensifying activity can be accompanied by in increase in the concentrate, again only for the period required. As the level of activity decreases (rest days etc.) the concentrate can be reduced. An important effect is that, throughout the different activity cycles, there are not large changes in diet, which in itself can avoid serious impact on the microflora activity in the hindgut.

In addition recovery and re-hydration can be aided with Speedi-Beet and, as this is also a component of Fibre-Beet, again there is no conflict with rapid diet change and negative effects on digestion.