

newsletter

SEPTEMBER 2016

B L E N D I N G N A T U R E A N D T E C H N O L O G Y



in this month's issue

1. Prebiotics and Probiotics – What are they?
2. Feeding before and during competition

PREBIOTICS AND PROBIOTICS - WHAT ARE THEY?



In short, **Probiotics** are live or “good” micro-organisms, such as bacteria and yeast. At present, there are no specific equine bacteria approved, as it is still unclear whether bacterial forms of probiotics can survive the acid and enzymes found in the stomach and small intestine during digestion. A product described as a probiotic is therefore more than likely to contain live yeast. It is important to note that when referring to yeast, this is referring to viable yeast cultures containing strains such as *Saccharomyces cerevisiae*, not simply Brewers yeast. Brewers yeast is a byproduct of the brewing industry and is a dead yeast used as a protein source in feed rather than for its digestive benefits. Viable yeast cultures are cultures that have been shown to interact with microbes and help increase the digestive efficiency of the gut.

Prebiotics however, feed the Probiotics. Examples of prebiotics included in equine supplements are: fructooligosaccharides (FOS), xylooligosaccharides (XOS), mannoooligosaccharides (MOS), galactooligosaccharides (GOS), pectin and psyllium. A horse’s GI tract does not digest these food ingredients but they are digested by the “good” micro-organisms and probiotics in the horse’s digestive system to increase their numbers or activity. If bad bacteria can’t establish themselves within the gut, the horse stays healthy. In terms of research, the prebiotic that has shown to be most beneficial to horse hindgut health and which has the most extensive research backing, is mannoooligosaccharides (MOS). MOS is part of the yeast cell wall and helps clear the horse’s hindgut of pathogens and also aids in immune system health.

TESTIMONIALS

Dear Equus

I just wanted to write to tell you about my fizzy, off the track TB, which at four years old and 18hh is no joke!

Since changing him to the Equus range of products, he has shown fantastic weight gain and muscle development with an ultra laid back attitude towards everything.

On any other feed I would be bankrupt with a nutcase under saddle! With Equus, I don't have to feed much and the **Equus Cool 'n Perform 12%, All Time Balancer** and **Nice 'n Easy** all describe Royal Chief: cool and performing, well balanced, and very nice 'n easy!

Thank you Equus

Angie Storm and Royal Chief



When Prebiotics and Probiotics are supplemented together, the products are referred to as synbiotics because they work synergistically and thus are generally recommended together.

In humans pre and pro biotics have been shown to help with ° Infectious diarrhoea; ° Inflammatory bowel disease ° Gastric ulceration; ° Tooth decay/periodontal disease; ° Skin infections and atopic dermatitis (chronic itchy, scaly skin); ° Weight loss;

It is generally felt that the same should be true of horses. However, veterinarians primarily recommend prebiotics and probiotics to encourage growth of the good microbes and to reduce the invasion and growth of disease-causing bacteria.

Studies have shown specifically that probiotics such as yeast help the horse's GI tract break down and ferment grass and hay better than when not provided. This fermentation process results in the production of volatile fatty acids that provide a significant energy source to the horse which allows the horse to get more energy from their roughage component. This generally means less concentrates will need to be fed, which in itself has positive effects on the gut. Probiotics also produce B vitamins (such as biotin, which is needed for maintaining healthy hooves) and other nutrients essential to the horse's overall health.

Live yeasts are considered to be additives and should be approved under legislation. To gain approval, scientific evidence supporting the effectiveness, safety and quality of the product has to be provided.

Which horses could benefit from Pre and Probiotics?

- Apart from good doers, all horses will benefit from being able to get more from the fibre that they consume as this means needing less cereal-based feed. Manufactures of quality foods are thus including them in a wide range of products.
- Horses vulnerable to digestive upsets, such as the young and the old.
- Horses with diarrhoea, colic or really foul smelling or loose droppings.
- Underweight horses.
- Horses that get excited or stressed when they compete or travel often urinate more frequently and some also develop very loose droppings. They may also come back from a show all tucked-up and pre- and probiotics are sometimes able to help this.
- Starved horses - bacteria are alive and like any other living organism need a food supply. If a horse has been starved then it is likely that the friendly bacteria will have been too.
- Injured or sick horses on box rest. This often means a sudden change of diet and many also require antibiotics/medications, all of which makes them vulnerable to digestive upsets.
- Horse with gastric ulcers or nutrition-related laminitis. Pre- and Probiotics will not cure the disease but they may help to reduce the risk of further problems such as colic.

Although they are generally inexpensive, easy to administer and can potentially have a beneficial impact, only a limited amount of research has been conducted in horses. There is evidence in both human and veterinary medicine that probiotics might not be suitable for use in all situations.

As with any nutritional supplement, the quality of the product must be evaluated and whether any claims related to the product are supported by proper scientific research or are just anecdotal.

Always seek guidance when using nutritional supplements.

FEEDING BEFORE AND DURING COMPETITION!

Below are a few tips on the best way to feed horses during multi-day competitions to reduce the risk of ulcers, maintain appetite and ensure an appropriate calorie intake for the duration of the competition.

1.

Try to keep the horse's feed (and water) as close to what he has at home whilst away. Some elements are easy to keep the same, for instance, any concentrate feed, but some things may change such as giving additional electrolytes, or time at grazing. In this case, try to keep hay used whilst away as close as possible to what is used at home.

2.

Try to change the horse's diet to what he will be eating during the time of the competition long in advance while still at home. Introduce new dietary additions ahead of time to ensure the horse is not put off by the change.

3.

If the horse becomes fussy with his food while away, try dividing the daily amount into more small meals to encourage eating. Feeding up to 4-5 times a day is no problem and can be introduced before leaving home to establish a good routine.

4.

Travel with as much hay as possible so that the horse always has something to chew on. This can help to reduce the risk of ulcers. Provide access to damped down hay while on the road (dampening reduces the risk of dust and other airborne particles ending up in the lungs) and stop at regular intervals (at least every 4 hours) to allow some grazing time and access to hay and/or the normal feed should the journey be over a long distance (eaten at ground level).

5.

If a horse gets very stressed while traveling and away from home and is prone to ulcers, speak to your veterinarian about using either an omeprazole based medication to reduce or stop gastric acid production during travel and competition to reduce the risk of ulcers forming. This should also help with appetite and general attitude while away.

6.

Go easy on salt and electrolytes in horses' feeds! Sometimes we tend to get carried away with wanting to add a lot more salt and electrolytes while on the road BUT too much will make the feed unpalatable. It can also aggravate any ulcers that may be present. If electrolytes are added to water, ensure that there is also access to plain water, so the horse is not put off from drinking.

Be mindful of the fact that horses sweating very heavily will need to have extra salt and electrolytes (e.g. polo and polocrosse horses, endurance horses, eventers etc) so you will need to discuss with your experienced nutritionist or vet. how to best administer them.

7.

Never restrict food. This can lead to digestive issues such as colic and Gastric ulcers. No horse should go longer than 4 hours without something to eat, even if this is hay while waiting for your class. Although timing of meals may change, providing the same routine is key as it makes no difference to the horse whether it is 7pm or 9pm but he will know the sequence of events.

8.

Don't forget to feed enough forage. Often those traveling for long periods at a time frequently underestimate how much hay they should feed and, as a consequence, the horses lose condition while away from home. For horses who do struggle to hold weight while away, feed as much hay as they want and always try to have their preferred hay. A huge amount of nutrition is derived from hay which keeps the horses entire gut and mind in balance leading to the creation of better appetites and performance at the desired level. Never restrict hay intake in an attempt to force horses to eat their hard feeds as this will most likely have the opposite effect.

Adapted from FeedXL.com