

# YEAST – WHY IS IT BENEFICIAL?

Maintaining a healthy hindgut relies on a stable microbial population.

Diets high in fibre diet can support a healthy hindgut, however supplementing your horses' diet with a live yeast can help to optimise growth of the fibre digesting bacteria and reduce the incidence of hindgut disturbance. Research has shown that the hindgut microbes are essential to the overall health of the horse and you can support your horses well being by looking after their hindgut.

Anaerobic bacteria play an important role in supporting fibre digestion. These bacteria colonise the fibre particle and using their hyphae they pull the fibre particle apart allowing colonisation to happen quicker. Bacteria are found throughout the gut and are the most abundant type of micro-organism. They display a large range of functions and are essential to effective digestion from the stomach through to the hindgut.

HINDGUT ACIDOSIS describes excessive acidity in the horse's hindgut and is characterised by a drastic drop in hindgut pH commonly caused by starch overload. This leads to a reduction in the activity and growth of bacteria which in turn leads to a reduction in fibre digestion and utilisation.

## HOW DOES LIVE YEAST WORK?

- Live yeast scavenges for oxygen, which is toxic to the microflora as they are anaerobic
- Microbial numbers are stimulated due to improved anaerobicity which supports optimum fibre digestion
- Live yeast competes with streptococci for sugars and reduces the number of streptococci in the gut
- Live yeasts produce metabolites stimulating the growth of lactic acid utilising bacteria which resist pH drop

The GUT-BRAIN BARRIER can be adversely affected by stress i.e. travelling, competing, breeding and this stress can change the microflora leading to reduced hindgut function and upset i.e. diarrhoea. Supplementing with live yeast can restore the gut to pre-stress conditions much quicker once the stressful period is over.

The more stable numbers of microbes that populate the hindgut the less of a chance there is that pathogenic bacteria can get a foothold and cause disease. The yeast acts like a piece of Velcro by sticking to the pathogenic bacteria and removing them from the gut, as well as helping to stimulate the gut secretions helping to reduce the likelihood of the pathogens successfully being able to attach to the gut wall.

The only micro-organisms currently permitted for horses in Europe are 4 strains of yeast (*Saccharomyces cerevisiae*):

- Yea-Sacc 4a1704
- Actisaf 4a1702
- Vistacell 4a1710
- Levucell 4a17111



These names and numbers will appear on the packaging of products that contain them and are a good thing to look out for if you want to ensure you are providing your horse with an approved live yeast supplement.

Saracen PRO-YEAST contains the Vistacell *Saccharomyces cerevisiae* strain which helps to balance the gut flora in the hindgut. Research has shown that it aids and supports the maintenance of a normal hindgut environment and stable pH. It is suitable for all types of horses and ponies and is particularly useful for performance horses to help maintain gut health.

Saracen Horse Feeds incorporate live yeast into their PERFORMANCE and BREEDING rations, as well as some of our more specific special needs rations, such as CONDITION-IMPROVER MIX AND CUBES, COMPETITION-FIT BALANCER and ESSENTIAL BALANCER.

## WHEN WILL MY HORSE NEED A YEAST SUPPLEMENT?

- Changes in digestive function i.e. loose droppings, smelly droppings, colic, lack of appetite, gassiness
- Periods of stress i.e. travelling or competition
- Changes in feed or forage i.e. spring grazing, changing hay to haylage, introducing a new feed
- If high starch diets or cereal based feeds are being fed