

# Digestion good, all good!

Author: Maike RAKEBRANDT; Senior Product Management Equine & Pet, Leiber GmbH

The horse is less willing to perform, it often grumbles and hurts in the gut (abdominal pain) and the horses become tense. Loose riding over the back is then out of the question. If the gut is weakened, the immune system also loses strength. The immune cells in the gut are overtaxed. The body's defences decline and pathogens no longer have an effective defence. The horse now has a high risk of contracting additional infections.



## How do problems show up with the digestion?

- | Flatulence
- | Cramps in the intestine
- | Foul-smelling faeces
- | Diarrhoea up to faecal water
- | Acute colic

## Flatulence – the first alarm signals for indigestion

Initial alarm signals such as flatulence are often not taken seriously. However, flatulence is often very painful for the horse, especially if additional pressure is exerted by the saddle girth and the rider. Horses become tense, walk stiffly and lack motivation: the first signs of hyperacidity of the gastrointestinal tract. It is often hasty eaters who suffer from flatulence, but also horses under great stress, such as social stress, transport, or competition stress. The most common cause of flatulence is the breakdown processes of the intestine or the gases produced by fermentation. These include odourless carbon dioxides, sulphur-containing gases (so-called fermentation gases) such as methane or hydrogen sulphide, but also nitrogen and hydrogen compounds. Fermentation also produces biogenic amines, which can cause flatulence as well as diarrhoea and faecal water.

## Eubiosis – the balance of the gut microbiome

The term eubiosis is always used when the microflora in the large intestine is in balance. The intestinal flora is healthy and the microbiome is stable. Dysbiosis, on the other hand, means that the intestinal flora has changed in number, composition, or activity. In short: the balance of the intestinal flora is disturbed. Disturbances in the intestinal flora have a variety of consequences, such as the development of colics (especially gas colics), diarrhoea, faecal water, liver metabolism disorders, and unexplained weight loss. The most common cause of dysbiosis is errors in feeding or feeding management.

## A dangerous cycle

In particular, excessive amounts of starch and sugar often lead to hyperacidity, gassing, poorer feed conversion and thus to weight loss (poor feed converters, thin horses) and weaken the immune system. A weakened immune system in turn makes it easy for pathogenic germs, and viruses, as well as stress factors, to further weaken the immune system and thus trigger allergies and chronic diseases.

Poor forage quality such as mould growth, high clostridia levels in grass silage or mycotoxins in straw, hay or grain and heavily contaminated forage (soil) can also have a negative impact on the intestinal flora. Many medications, antibiotics, or worming treatments also affect the microbiome, as do various stress factors such as weaning, competition, transport, or pain.

A healthy intestinal flora always means increased viability and stability of the microorganisms in the gastrointestinal tract (eubiosis) and this is the best prophylaxis against digestive disorders and their negative consequences for the horse. The body produces many water-soluble vitamins such as vitamin H (biotin) itself with the help of a healthy intestinal flora. If this is weakened, there is a shortage of biotin, for example. This often manifests itself in the form of delayed shedding, dull coat, skin problems, brittle hair, and cracked hooves.

## Undigested starch in the intestine

Diseases such as laminitis are also primarily caused by an imbalance in the intestinal flora. Permanent hyperacidity, whether due to increased undigested starch in the large intestine or an excess of fructan or protein, leads to an imbalance in the intestinal flora and thus to the mass die-off of microbes. These release endotoxins, which enter the bloodstream via the intestinal mucosa and ultimately trigger laminitis. Brewers' yeast can help horses with digestive disorders such as colics, flatulence, diarrhoea, or watery stools. Components such as spent grains (**Leiber YeaFi® BT**), apple pomace and unmolassed beet pulp (**Leiber YeaFi® AB**) can stabilize the microflora and thus counteract hyperacidity, bind mycotoxins and other toxins and improve feed intake and crude fibre degradation.



## Brewers' yeast is a tried and tested animal feed with a long tradition in horse feeding

Its use has been tried and tested in practice and is frequently recommended in the scientific literature, for example in the case of:

- | chronic intestinal inertia or resected intestinal segments (COENEN and VERVUERT 2020)
- | horses that are prone to colic or diarrhoea (ZENTEK et al. 2008, COENEN and VERVUERT 2020)
- | prolonged digestive disorders, damage to the intestinal flora, loss of appetite, or general poor performance (COENEN and VERVUERT 2020)
- | stress-induced myopathies or diseases of the liver (COENEN and VERVUERT 2020)
- | rations rich in concentrated feed and low in structure (COENEN and VERVUERT)
- | rations with low hay qualities (MORGAN et al. 2007)



You want to know more about production, differences, effects, and practical use?

[leiber-pferd.de/en/](https://leiber-pferd.de/en/)



We have been upcycling at world-market level since 1954 and keeping the environment and climate in mind.

