

# The horse's stomach does not like stress!

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

Stress increases the production of gastric acid. At the same time, perfusion of the stomach lining is reduced – both are high risk factors for the development of stomach ulcers. In addition to feeding errors, psychological stress in particular is now seen as the main cause for the development of gastric ulcers in horses. Among other things, stress can be caused by difficult births, weaning foals, breaking in young horses, transport, tournaments, or social stress.



## Stress with the stomach – only a problem of performance horses?

Many scientific studies show that more than 70% of all horses suffer from gastritis and gastric ulcers (equine gastric ulcer syndrome = EGUS). It is not, as is often assumed, only the sport horses (60%) and thoroughbred racehorses (90%) or trotting horses (60 to 80%) that are affected. In the meantime, it is known that already weanlings, young rearing horses, or even 30% of all leisure horses suffer from stomach ulcers. Stomach ulcers are bleeding injuries of the stomach lining caused by too much acid in the stomach.

## How do you recognize stomach problems?

Often gastritis and stomach ulcers go unnoticed by the horse owner. This is because they are almost impossible to diagnose without a gastroscopy (endoscopy) by an experienced veterinarian. Therefore, it is all the more important to pay attention to symptoms such as:

- | sour odour from the mouth
- | constant chewing without food (empty chewing)
- | constant gnashing of teeth
- | constant flehming, yawning, and belching
- | bloated belly (straw belly)
- | poor feed intake, weight loss, emaciation
- | lack of willingness to perform, inertia

## If you don't chew, you get sick ...?

Within one day, a horse produces between 5 and 10 l of gastric juice per 100 g of body weight. The horse's stomach naturally contains a high proportion of hydrochloric acid, which is continuously produced. Saliva, on the other hand, has an alkaline effect and buffers the acid with the help of sodium bicarbonate. If the horse does not eat or rather "chews" sufficiently, not enough saliva is produced. The stomach overacidifies because

the buffering substance is missing or not sufficiently available. The acid in the stomach can now destroy the protective mucous layer and thus damages the stomach wall. Stomach ulcers develop.

## 10 to 12kg of hay a day – the main thing, eat for a long time

The latest recommendations for horses call for an adequate dry matter (DM) intake of approximately 2.5 to 3% DM per kilogramme of live weight. The latest recommendations for ponies and lactating mares are even 3 to 3.5% DM per kilogramme live weight and day. For a normally stressed warm-blooded horse with 600kg body weight (BW), this means at least 10 to 12kg of hay per day.

Even a horse kept in box stabling should spend at least twelve hours a day eating, with a maximum of four to five hours eating breaks between meals.

## First feed basic feed, then concentrate

Apart from the basic feed, our domesticated horses usually receive too much concentrated feed, which causes increased acid formation in the stomach. In addition, concentrated feed is chewed much faster. Saliva production is much lower than, for example, after feeding hay. But the horse needs the saliva to "buffer" the stomach acid. Therefore, the principle applies: "Always feed the basic feed first, then the concentrate." If the horse eats the basic feed first, much more saliva is produced and the stomach is better prepared for the concentrated feed.

## Starch – a risk factor for the gastric mucosa

A major factor in the development of gastric ulcers appears to be the ingestion of starch. In the small intestine, a part of the starch is broken down and absorbed by the body's own enzymes. In the large intestine, the remaining starch is then further broken down by microorganisms. However, this is usually not desirable. Most starch should already be absorbed in the small



intestine at the latest, so that not too much undigested starch reaches the large intestine and massively disturbs the microbial balance here. The ideal daily amount of starch is considered to be up to 1g/kg BW and meal.

## Brewers' yeast can help strengthen the horse's digestive system

Brewers' yeast contains many nutrients and active substances in organically highly available form, such as the vitamins of the B complex. For example, vitamin B<sub>1</sub> (thiamine) is considered as an anti-stress factor.

Vitamin B<sub>1</sub> is involved in the nervous conduction of stimuli as well as in the central nervous system and thus has a direct influence on stress reduction and nerve stability in horses.

There are a number of things that can be done to prevent gastric ulcers, in particular by feeding and keeping the animals in a manner appropriate to their species, and avoiding stress. Brewers' yeast can ensure that the horse's digestive system and thus also the immune system are optimally supported and strengthened.

## Real Leiber Brewers' Yeast! Really good effects for your horse!



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.

