

Training without stress

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The horse's digestive tract is very sensitive and susceptible to disruption. It can very easily be thrown out of balance by management errors such as mistakes in husbandry conditions or feeding. Especially during strenuous training phases!



Brewers' yeast is a tried and tested feed with a long tradition in horse feeding. Its use is often recommended in the scientific literature, for example for:

- | digestive disorders, damage to the intestinal flora, loss of appetite, or general poor performance (COENEN and VERVUERT 2020)
- | tendency to colics or diarrhoea (ZENTEK et al. 2008, COENEN and VERVUERT 2020)
- | rations rich in concentrated feed and low in structure (COENEN and VERVUERT 2020)
- | rations with low hay qualities (MORGAN et al. 2007)

Scientifically proven!

In a scientific study at the University of Osnabrück using Leiber YeaFi® BT Brewers' Yeast, 20 young warmblood horses were exposed to various stress factors within a very short period of time. At the same time as the change in husbandry (year-round pasture -> stable husbandry), the feed was changed (grass -> concentrated feed and hay). Training also began. Changes in husbandry or feeding management can result in digestive disorders. In addition to the animal's external appearance and willingness to perform, the assessment of faecal consistency is a means of evaluating the horse's state of health. Changes in faecal consistency indicate, among other things, changes in the digestive process and thus provide early indications of any digestive disorders.

Stabilization of faecal consistency during change of feed

The use of Leiber YeaFi® BT showed positive effects in terms of faecal consistency within a short period of time (one to four weeks) (see Fig. 1).

Fig. 1: Change in faecal consistency

Faecal consistency			
in %	Start 1st-4th week	Middle 5th-8th week	End 9th-13th week
Control	1.83 ^a ± 0.70	2.13 ^{a,c} ± 0.64	2.4 ^c ± 0.49
Trial	2.58 ^b ± 0.89	2.35 ^{b,c} ± 0.69	2.43 ^b ± 0.64

^{a,b,c} Values with different letters within a row or column show significant differences $p \leq 0.05$.

When switching from a low-structure diet (pasture) to a high-structure diet (stable), there is a risk of very dry faeces and even constipation. In the practical trial, the control and experimental groups differed significantly in faecal consistency.

Leiber YeaFi® BT -fed horses showed optimal to softer faeces, while the control group showed significantly drier faeces and thus a tendency to constipation.

The examination of the faeces for short-chain fatty acids (SCFA) also showed a higher SCFA production (+32%) in the Leiber YeaFi® BT group compared to the control group (+11.6%). In the large intestine, cellolytic bacteria break down cellulose and hemicellulose into short-chain fatty acids (SCFA). Among other things, these serve to supply the horse with energy (propionate) and promote intestinal health (butyrate). The horse can cover up to 70% of its daily energy intake in maintenance metabolism through SCFA production.

Better digestibility!

In a study by MORGAN et al. (2007), the effect of brewers' yeast on the digestion of different roughage qualities was investigated in horses. The trial showed that the use of brewers' yeast increased the digestibility of low roughage qualities. Feeding low crude fibre qualities with the addition of brewers' yeast showed a significant increase in protein digestibility and a significantly higher digestibility of cell wall components such as NDF (neutral detergent fibre) and hemicelluloses. According to MORGAN et al. (2007), brewers' yeast can therefore have a positive effect on the digestion of low quality hay.

Stabilization of body measurements with increasing work performance

The study with the young horses also showed evidence of better nutrient conversion with Leiber YeaFi® BT Brewers' Yeast. In addition to the BCS (body condition score), the subcutaneous fat thickness was measured by ultrasound when assessing body measurements (NORDHOFF 2014). This measurement serves to objectively assess the body constitution. The subcutaneous fat thickness of the horses in the test group was significantly increased at all three measuring points during the entire test period (see Fig. 2).

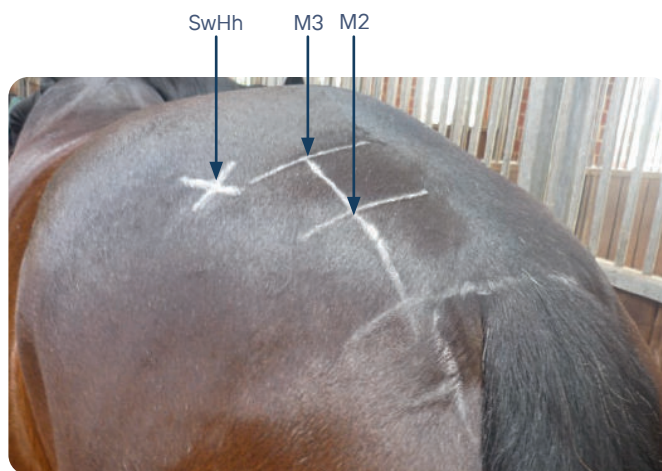


Fig. 2: Subcutaneous fat thickness measurement by ultrasound

Characteristic	Control			Trial		
	Start	Final score	Diff.	Start	Final score	Diff.
Subcutaneous fat thickness in mm M2	14.4 ^{a,b} ± 3.7	18.7 ^a ± 5.7	4.3	13.0 ^b ± 4.6	19.0 ^a ± 5.2	5.7
Subcutaneous fat thickness in mm M3	9.0 ^a ± 1.5	10.9 ^b ± 2.2	2.0	8.4 ^a ± 2.9	11.7 ^b ± 2.3	3.0
Subcutaneous fat thickness in mm SwHh	5.3 ^{a,c} ± 1.5	6.6 ^{b,c} ± 1.5	1.3	4.9 ^a ± 1.7	7.8 ^b ± 2.2	2.1

^{a,b,c} Letters indicate significant differences ($p \leq 0.05$).

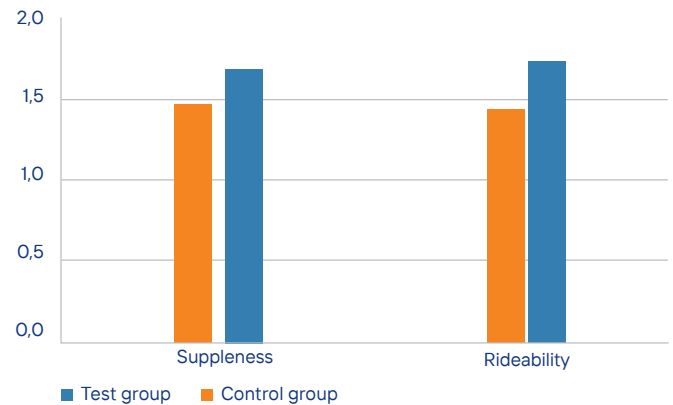
Subcutaneous fat thickness measuring points:



Impressive young horses!

The good physical condition of the horses fed Leiber YeaFi® BT was also confirmed by the riders. After each training session, they completed a questionnaire without knowing which horse was in the test group and which was not. The riders rated the young horses in the test group as having better suppleness and rideability (see Fig. 3). In addition, the horses were in very good nutritional condition and made an excellent overall impression during the entire test period.

Fig. 3: Assessment of work behaviour



Better coat quality and better overall impression

An improved overall impression of Leiber YeaFi® BT was also demonstrated in a nine-month scientific study with old horses. Here, almost all participants described a poor overall impression in the preliminary report and in particular a poor coat quality of their horses.

At the end of the trial, the horses in the test group (Leiber YeaFi® BT Brewers' Yeast) not only had a faster shedding. 75% also showed significantly better coat quality, shinier or smoother coats and a significantly better overall impression than horses without brewers' yeast supplement.

Leiber YeaFi® BT:

- | stabilization of faecal consistency when changing feed
- | stabilization of body mass with increasing work performance
- | better suppleness and rideability
- | better coat quality and better overall impression

Studies available on request!

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