

Age is just a number

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

Even horses are only as old as they feel! Horses from the age of 20 years are often called old horses. However, the actual ageing process often begins much earlier. In equine dentistry, we speak of an old horse when the teeth lose the enamel on the occlusal surfaces – this varies greatly from individual to individual and can occur between the ages of 15 and 20.









Consider "old" horses individually

How pronounced and how early the outward signs of ageing are seen is closely related to, among other things, previous performance, husbandry, feeding, and other physical health such as chronic diseases.

BUSHELL and MURRAY (EWEN 2014) found in their survey that old horses were more likely to suffer from allergies, equine laminitis, arthritis, and dental problems, among others. FAHLBUSCH and VERVUERT (EWEN 2014) noticed increased problems in the muscular system of horses in the age group of 15 to 20 years, followed by colic and respiratory problems. In contrast, horses in the age group 21 years and older showed colic, followed by muscle problems and dental problems. It was striking that the survival rate after a colic was significantly lower in horses over 21 years than in the age group 15 to 20 years.

Dentition changes increase

Old horses often show very differently worn teeth. Food is chewed very slowly and partly spit out. The horse absorbs fewer nutrients. In addition, interdental spaces can develop in which, among other things, food residues get stuck, which then lead to inflammation of the gums (paradontosis). These can be very painful and in turn lead to loss of appetite – i.e. further nutrient deficiencies. The horse loses weight.

At the latest with tooth loss, a nutritional adjustment should be made!

If possible, use hay cut earlier in case of tooth loss, as it is softer and does not have too much lignin (lignified fibres), but has more ingredients such as protein. In the meantime, there is also a variety of substitute roughage such as hay or meadow cobs, which should always be fed soaked. By the way, these can be mixed excellently with Leiber® Brewers' Yeast or Leiber YeaFi® products. This mash not only increases the protein and energy content in the ration due to the brewers' yeast products, but also promotes digestion and at the same time offers fibre structures with different fermentability for the intestinal microbiome.

Gut microbes produce short-chain fatty acids (SCFA) such as propionate and butyrate. These are used for energy production and intestinal health.

The efficiency of the digestive tract decreases

Possibly due to reduced chewing activity and losses in secretion of gastric acids and pancreatic enzymes, the production of digestive enzymes may decrease with age. Nutrient yields from feed become poorer. This is in contrast to the increasing nutrient requirements of the ageing horse. In addition to energy requirements, in particular also the need for essential amino acids, vitamins, minerals, trace elements, and bioactive substances increases.

Older horses need more energy!

Characteristic for older horses is the decrease of muscle mass, which can be due to reduced training, but also due to changed nutritional conditions. For example, the digestive process in older horses is no longer as efficient, so that the energetic utilization of the feed is often reduced. Also, especially older horses often show chronic diseases, such as osteoarthritis, which then consume additional energy. In old horses, careful monitoring of body condition (weight, BCS) is therefore very important in order to adjust energy requirements in good time. The following factors can additionally negatively influence the energy requirement:

- Ambient temperature: old horses often have a lower layer of fat to insulate against cold and therefore a lower cold tolerance.
- Group housing: stress in group housing leads to high herd dynamics, which in turn consumes more calories.
- Chronic diseases: metabolic diseases can lead to gradual weight loss.



The ageing process brings along a reduced immunocompetence

Intestinal protection is always also immune protection. More than 70% of the immune cells are located in the intestine or, more precisely, in the so-called intestine-associated lymphatic tissue. Poor digestion makes the older horse more susceptible to common diseases. Thus, WILLIAMS et al. (J. Anim. Sc. 86: 576-583; 2008) found that older horses had an increasing number of lymphocytes in contrast to trained horses which means that their immunity is more compromised.

Brewers' yeast is an ideal nutritional supplement for older horses

Leiber® Brewers' Yeast is high in protein and offer high levels of highly digestible essential amino acids such as lysine, threonine, tryptophan et cetera! In addition, brewers' yeast products offer a high natural content of B vitamins. These take over many important functions in carbohydrate metabolism or support the utilization of fat and amino acids. Brewers' yeast is also rich in vitamins and trace elements such as biotin, selenium, zinc, and chromium – organically bound and therefore highly available. If the need for trace elements is not covered, it comes to poor hoof growth, disorders in the change of coat, susceptibility to infections, but also emaciation and loss of appetite.

Brewers' yeast in combination with highly digestible plant fibres (for example Leiber YeaFi® products) optimally supports digestion. In addition, they serve as a nutrient substrate for the intestinal microbiome and thus ensure microbial balance. Improved digestion not only ensures better nutrient utilization and weight gain. It also has a positive influence on the intestinal immune system and the intestinal lymphatic tissue. In addition, the production of endogenous vitamins such as biotin is ensured, which in turn has a positive effect on skin and coat quality.

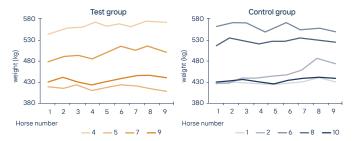
This is a clear advantage, especially for older horses with a slowed shedding or little coat shine. These effects could also be scientifically confirmed.



Read also: Coat shine and coat change

Many field trials also showed improved appetite after administ-ration of Leiber YeaFi® products. Feed intake – especially of basic feeds such as hay – increased and the horses gained weight. This positive effect was also confirmed in a scientific trial on old horses. Compared to the control group (BCS: 4.9), the Body Condition Score (BCS) in the Leiber YeaFi® BT group was 5.5.

Fig.: Live weight (scale) of the test and control group over the entire test period



In another scientific study, the effect of Leiber YeaFi® BT on the subcutaneous fat thickness of young sport horses in training was measured. Among other things, subcutaneous fat thickness is an indicator of a horse's nutritional status. The horses showed a better development of the subcutaneous fat thickness than the test group with a simultaneously increasing workload and unchanged feed quantity.



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

leiber-pferd.de/en/





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

