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Premium horse feed

marstall feeding knowledge

Muscle maintenance in senior horses, horses in rehabilitation and horses that should lose weight

Keeping senior horses in shape is in itself quite a feat. Muscle building and muscle maintenance have the first priority, since the owners are ultimately fighting against cell ageing. A training routine that matches the horse's needs and special feeding, however, may extend the animal's life expectancy by many years. Below, we also present measures that help horses in convalescence and horses that have been put on diet to retain their muscles!

The metabolism is slowing down

The metabolism of a healthy horse is less effective in old age. That implies, for instance, that senior horses need more energy in order to maintain their body weight. The ability to utilize proteins and to break them down into their smallest components, the amino acids, decreases. The muscles, whose functioning depends on amino acids, are no longer sufficiently supplied. As a result, the horses develop a haggard appearance.

Horses that receive a reduced feed ration due to an acute injury or to induce weight loss also receive a reduced amount of proteins. Proteins, however, are absolutely necessary for maintaining the horse's musculature, even when low-energy rations are fed. Therefore, it is vital to feed essential amino acids to senior horses, horses

that need to pause with training and horses put on a diet to make them lose weight. Essential amino acids are amino acids horses cannot produce themselves, i. e. they need to be taken up through the food.

Threonine and lysine for muscle building

The essential amino acids threonine and lysine are particularly important for senior and convalescent horses. They help to maintain and — if the training scheme allows for it — rebuild the horse's musculature. To ensure that the essential amino acids actually arrive where they are needed, it is useful to pay attention to the amount of raw protein with precaecal digestibility (marked as pcv in the declaration of ingredients) contained in a foodstuff. Horses can only absorb and utilize amino acids in the small intestine. marstall Senior Plus is precisely tailored to the needs of senior horses and contains plenty of natural, easily digestible amino acid sources. Proteins that cannot be absorbed in the small intestine have to be metabolized in the large intestine, which puts a strain on the horse's liver and kidneys.

In addition to natural amino acid sources such as brewer's yeast or soy*, it is possible to feed amino acids in the pure form, which has the advantage of making them utilizable to almost 100 % so that they do not burden the horse's metabolism. Amino acids in their pure form are suitable as feed supplements for senior horses, convalescent horses and horses put on a diet to make them lose weight. marstall Amino-Muskel PLUS provides amino acids in the pure form. It can be combined with other feedstuffs like hay cobs or cereals. Amino acids in their pure form are also contained in marstall Amino-Sport Müsli, Zuchtmüsli, Fohlenmüsli, Fohlen-Mix, Western Struktur Müsli and Condición.

How much protein is necessary to maintain a horse's muscles?

It is recommended to feed senior horses 10 to 20 % more proteins compared to their general maintenance requirements. For a 600 kg warm-blood, for example, this translates to 365 g of digestible raw protein. An increased supply of raw protein with precaecal digestibility is even more appropriate when signs of aging appear, such as a reduction of muscle mass or a dip in the back, when the saddle area sinks and the withers become more prominent.

Supplements for robust horses and bad doers

There are robust horses and (senior) horses that are prone to obesity. Amino-Muskel PLUS can be added to almost any ration – regardless of the ration's quantity. Therefore, Amino-Muskel PLUS is a good choice not only for good doers, but also for senior horses with rather high feed requirements and for bad doers. It is an amino acid supplement that can be perfectly adjusted to the horse's needs.

Keeping to a diet – without risking muscle loss

Owners of horses that need to lose weight tend to forget to continue to supply their animals with everything they need for their muscles. Supplements like Amino-Muskel PLUS are also recommended for horses that are put on a diet, because any reduction of a feed ration automatically implies a reduced supply with proteins (which consist of amino acids). Horses need protein not only for muscle development but also for muscle maintenance. It should therefore be kept in mind that while reducing feed rations, e. g. because the horse is suffering from an illness, the horse must still be supplied with a sufficient amount of amino acids. Owners who prefer to feed their animals late-cute hay, as this type of hay is not as rich as hay cut before or during flowering, should provide their horses with

additional amino acid sources, since the amount of usable protein contained in late-cut hay is relatively low. If well-fed horses are put on a diet of coarse late-cut hay, it will certainly benefit their overall shape, but still an amino acid supplement should be added to their diet to ensure that their muscles are being preserved. The same applies to horses that should be given feed that is low in fructans and sugars, e. g. horses suffering from Cushing's disease. They also benefit from an extra portion of amino acids for the muscles. We have compiled some examples of cereal-free feed rations.

Conclusion

Whether your horse has to remain at rest in its stable, has to keep to diet in order to lose weight or has simply reached senior age, in order to maintain or train its muscles, it is essential to pay attention to the amount of raw protein with precaecal digestibility (pcv) in its daily feed ration.



* marstall is a member of the Verband Lebensmittel ohne Gentechnik e.V. (VLOG), an organisation that advocates the production of foodstuffs without genetic engineering. The production at marstall's follows the organisation's standards and the products are VLOG-certified.

Further reading:

„Pferdefütterung“, Helmut Meyer, Manfred Coenen, Enke Verlag
„Nutrient Requirements of Horses“, National Research Council of the National Academies,
2007

„Empfehlungen zur Energie- und Nährstoffversorgung von Pferden“, GfE, 2014
„Pferdefütterungsmanagement“, Dirk Winter, Hochschule für Wirtschaft und Umwelt
Nürtingen-Geislingen, 2017