

## More muscles, more power. With brewers' yeast.

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Persevering endurance horses, strong cold-blooded horses, fast racehorses – they all need one thing above all: muscles. Brewers' yeast can have a positive effect on muscle growth.



### Energy for the muscle cells

One of the most important sources of energy for the muscle fibres are short-chain fatty acids such as propionate, which are formed from cellulose by microbial synthesis in the large intestine. This is a slow-flowing, continuous source of energy. If the pH level in the gastrointestinal tract changes and the horse becomes acidic, this has an effect on microbial activity and therefore on the conversion of food such as crude fibre/cellulose into short-chain fatty acids (SCFA). If the short-chain fatty acids are no longer available as an energy source, this in turn has a negative impact on muscle performance and muscle growth.

### Amino acids: the building blocks of proteins – the building blocks of muscle!

Muscles consist of proteins and these in turn consist of building blocks: the amino acids. Without sufficient proteins or amino acids, a horse cannot build muscles. Amino acids are divided into non-essential, semi-essential and essential amino acids. Essential amino acids are vital, they cannot be produced by the body itself and must therefore be supplied regularly through feeding.

### Amino acids in high biological availability

The decisive factor is therefore not the quantity of protein, but the quality, i.e. the proportion of essential amino acids and their availability. Classic protein sources are soya meal or rapeseed meal, but also brewers' yeast. Brewers' yeast contains amino acids, nucleic acids, and nucleotides (building blocks of muscle cells) in highly biological availability. Brewers' yeast has a very good protein quality with very high prececal (small intestine) digestibility, including amino acids. Especially the natural content of essential amino acids such as lysine or threonine is relatively high.

Brewers' yeast therefore has a direct influence on muscle growth.

In addition, the use of soya meal in horse feed is often discussed negatively today due to possible genetic modifications. Brewers' yeast, on the other hand, is genetically completely unchanged. It comes primarily from breweries that brew according to the German purity law. Just a genuine natural product!





## Can muscles be fed?

A balanced diet, especially in terms of protein quality, makes a decisive contribution to muscle building. However, actual muscle building can only take place if muscles are also developed, i.e. trained, at the same time. Training must always be adapted to the horse's level of training. Depending on the type and intensity of the training, the horse builds up less strong or stronger muscle areas. This defines the musculature and therefore the body structure. If a horse is not trained for more than four to five weeks, it will lose muscles. Diseases such as the Equine Cushing Syndrome (ECS) or Equine Metabolic Syndrome (EMS) often result in muscle regression or muscle atrophy. The horses are more susceptible to lameness and other secondary diseases.

## Brewers' yeast for muscle growth

Brewers' yeast is rich in valuable nutrients and active ingredients. It has an excellent amino acid pattern with high biological availability. Amino acids are the building blocks of muscle. Feeding brewers' yeast therefore has a direct influence on muscle formation. However, only if training is done at the same time.



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