
Did you know?

It is important that horses chew as much as possible!

MAAAX™ LONGfibe™ cubes increase chewing behavior and saliva flow to increase gastrointestinal health!

The chewing intensity and chewing rates of horses are the crucial factor for gastrointestinal and mental health. Horses must chew in order to maintain an optimal balance of their digestive fluids. The production of digestive fluids such as saliva, gastric acid, mucus and bile within mouth, stomach, small and large intestine is initiated by presence of feedstuff within the mouth cavity (Alexander, 1966). It is not only the production of saliva that depends on chewing, but also the gastric acid production which starts the moment the horse begins to chew. This is the body's reaction to the incoming feed and to prepare the feed to be digested, and also to minimize the passage of too many microbes at a time into the horse's body.

The production of gastric acid is consistent in the amount depending on the amount of time of chewing and feeding while saliva is only secreted in the presence of food in the mouth cavity. By feeding forages, the production of gastric acid is maximized

The amount of saliva produced varies with the size of the animal between 20 ml and 90 ml per minute (Meyer, 1980). The longer and coarser the feedstuff is, the more saliva will be produced during the chewing process. Feeding pure forage such as alfalfa or hay, the horse will produce 3-5 liters of saliva per kg of forage; while there will be only 1-1.5 liters of saliva per kg concentrates (Meyer, 1980). In total, the horse will produce 10-25 liters of saliva per day (Meyer et al, 2002, Frape, 2004). This is very important to buffer gastric acid. The largest amount of the total saliva production takes place within the parotid gland. If the horse does not have the opportunity to chew, the gland may swell and can influence the horse's suppleness and willingness to work. This can be prevented by feeding MAAAX™ LONGfibe™ cubes from a low sited trough.

We recommend further reading:

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Meyer H. A report on the regulation of feed intake by horses. Dtsch Tierarztl Wochenschr. 1980;87(11):404-8.

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Frape, D.: Equine Nutrition and Feeding, 4. Edition. Oxford 2011

NRC National Nutrition Council: Nutrient requirements for horses, 5th Edition, 2007.

Geor, R.J., Harris, P.A., Coenen, M. : Equine Applied and Clinical Nutrition, Saunders, 2013