

## Impact of Length of Straw by the Use of a Straw Mill on the Selective Feeding of Young Cattle and Their Effects for the Cattle

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**Abstract :** When feeding high quality silage to heifers from the age of two, there is a risk of energy oversupply. Depending on the feeding value or scarce availability of silage or corn silage diets with high proportions of straw is often incorporated. For an energetically standardized young cattle supply of straw proportion can be more than 20% of dry matter. It was investigated whether the grinding of straw with the straw mill selective feeding significantly limits. The investigation has been carried out with young cattle in the second year. 78 animals were kept and fed under similar conditions in two groups. The experimental group (EG) consisted of cattle 12 to 15 months, and in the control group (CG), the cattle were 15 to 20 months old. The experimental feeding took place in five days of feed distribution, and residual feed were weighed. The ration of EG contained ground with the straw mill straw, and CG was further fed rotor-cut pressed straw. To determine the selective seizure samples of feed distribution and the remaining food with the particle separator box and the crude protein and energy content have been determined. The grinding of the straw increased the daily feed intake. In the EG an increase in feed intake was observed by grinding of the straw. Feed intake directly on the day for changing the diet of long ground straw increased by more than 2.0 kg of DM per animal. In the following days, the feed intake was increased by 0.9 kg DM per animal and day on average (7.4 vs. 8.3 kg DM per day). The results of the screen distribution of residual feed point to a differentiated feeding behavior between the groups. In the EG, the particle length of the residual feed to a large extent with the template matches. The acid-base balance (NSBA) values of EG are within normal limits. If straw shares of 25% and more are fed to young cattle (heifers), the particle length of straw has significant impact on the selective feeding behavior. A particle length of 1.5 cm compared to 7.5 cm long prevented straw certainly discarding of the straw on the feeding barn. The feed intake increases when short straw is mixed into the TMR.

**Keywords :** straw mill, heifer, feed selection, dry matter intake

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