

A. Steinwigger and L. Gruber (2000): **Feeding and animal factors influencing milk urea content of dairy cows** (in German). Die Bodenkultur 51, (1), 49-57.

Summary

Experimental data (n = 1567) were statistically analysed regarding the impact on milk urea content of dairy cows, using nutritional and animal factors.

In partial correlation analysis a weak stochastic relation between milk urea content and selected parameters for the description of rumen metabolism was found (r = 0.3 to 0.5). The highest correlation to milk urea content was found when digestible crude protein intake was related to energy intake (r = 0.5). Regression analysis showed a significant influence of breed and animal, but protein and energy supply of rumen microbes was most important. Additionally, stage of lactation, milk protein yield, supply of utilizable protein in duodenum (nXP) and feed intake proved to be significant. The lowest residual standard error was found when using carbohydrate and digestible crude protein intake for describing the rumen nitrogen metabolism in regression analysis. Nevertheless the relative high residual standard error of 3.9 mg/100 ml of milk urea shows, that a remarkably high proportion of variation is caused by factors not considered in the model. This corresponds to numerous data in literature. When milk urea data are interpreted, this inaccuracy should be taken into account.

Keywords: Milk urea content, dairy cows, influence factors, energy and protein supply

Zitat (Deutsch):

A. Steinwigger und L. Gruber (2000): Fütterungs- und tierbedingte Einflußfaktoren auf den Harnstoffgehalt der Milch von Kühen. Die Bodenkultur 54, (1), 49-57.