

MILK UREA NITROGEN AS AN IMPORTANT INDICATOR OF DAIRY COW NUTRITION. REVIEW

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Summary. Urea is a very small molecule yet a very important part of milk component. A large concentration of milk urea show dietary disbalance, potential milk losses and risk of infertility. A reduced concentration of milk urea nitrogen often indicates the first positive change in the ecosystem of the rumen. Ammonia formation in the rumen is the main cause of urea excretion into milk. Urea may be produced by catabolism of tissue proteins and amino acids absorbed from the intestinal tract particularly in cases when an animal receives an inadequate amount of proteins. Urea also is produced by pyrimidine catabolism and may be recycled into different parts of the intestinal tract. This process influences the concentration of urea in milk.

The quantitative significance of these phenomena is unknown yet it is assumed that fluctuations of urea concentration in milk may be rather important and can be used as biological markers of feeding.

Keywords: urea nitrogen, milk, proteins, cows.