

Effect of the supplement of ammonium phosphate-containing mineral mixture, buffering the rumen content in cows on their performance

Part I. Macro- and microelements' content in milk

S u m m a r y

The research covered 147 Black-and-White Holstein-Friesian cows in the age between 2 and 5 (I-III lactation). The cows were kept in three cow byres which differed in keeping system, production level, milking system and feeding system. In all cow byres, 3 groups of cows were distinguished, i.e.: control group and two testing groups. The experimental index was mineral mixture. The cows in testing group were fed the testing mixture containing $(\text{NH}_4)_2\text{HPO}_4$, CaCO_3 , dolomite 18%, NaCl, CuSO_4 , ZnSO_4 in quantity from 150 to 250 g per day. The cows from control groups received the standard MMB mineral mixture in quantity of 150 g per day. In own studies, the influence of nutrition and the tested mixture on the content Ca and P in milk was not found. The cow byre had a substantial influence on Na, Mg and Zn content in milk. The addition of the tested mixture did not affect Na, Mg and Zn content in milk.

KEY WORDS: nutrition / dairy cows / microelements / macroelements / buffering additives / ammonium phosphate