

THE INFLUENCE OF CARBAMIDE FEED SUPPLEMENT ON PRODUCTIVITY AND PERFORMANCE OF MILKING COWS

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Summary. Over the last several decades emphasis in ration formulation has shifted from milk volume and fat to include milk protein percentage and yield. Increasing pressure to reduce nitrogen excretion of dairy herds requires feeding rations that maximize conversion of feed nitrogen to milk nitrogen. The present study was designed to assess the influence of feed additive „Optigen II“-0.1 kg/daily, where part of protein was replaced by non-protein nitrogen product on productivity and health in milking cows.

Eighteen milking cows were randomly divided to two groups experimental (Group 1) and control (Group 2) of 9 animals in each. Control milking in both groups was performed once per month and the experiment lasted for 90 days. The following data was registered: milk yield per day, amount/kg, butter fat, protein and lactose level, and urea concentration in milk.

Supplementation with feed additive in Group 1 increased milk yield on 4 %, lactose concentration on 6%, and standartised milk yield on 12–20% compared to Group 2. At the end of experiment urea rates in both groups decreased from 14,3 and 19,8 mg% to 10.2 and 10.5 mg% in Groups 1 and 2, respectively. In conclusion, supplementation of feed with carbamide significantly increased standartised milk yield and helped to maximize conversion of feed nitrogen to milk nitrogen.

Keywords: carbamide, feed supplementation, ration, milk, cows.