

EFFECTS OF METABOLASE® ON SEVERAL BLOOD INDICES, AND PRODUCTIVITY IN FRESH DAIRY COWS

Ramūnas Antanaitis, Mindaugas Televičius, Robertas Stoškus

*Department of Non-Infectious Diseases of the Veterinary Academy of the Lithuanian University of Health Sciences
Tilžės 18, LT-47181 Kaunas, phone +370 336 34 53; e-mail: antanaitis@lva.lt*

Abstract. The aim of this work was to assess the possible effects of the medicinal product “Metabolase®” on cows health by several biochemical blood indices and productivity in fresh dairy cows.

Depending on the cow's age, breed, and productivity 30 fresh dairy cows (7 (\pm 1)) days on the average after calving) were selected for the research. During the research, the cows were divided into two groups: experimental group (n=15) and control group (n=15). The cows in the test group were injected 500 ml of solution METABOLASE® into vena jugularis on the 1st and 7th day after calving. During the first stage, blood samples were taken before injecting the solutions. During the second stage, blood samples were taken a week later, before injecting the solution the second time. During the third stage, blood samples were taken a week after the second injection of the solution. During the fourth stage, blood samples were taken 30 days after the last injection. Milk samples for determining milk composition were taken at the same intervals.

The effects of the medicinal product Metabolase® were as follows: reduced beta-hydroxybutyrate (BHB) concentration and milk fat to protein ratio; increased amounts of glucose in blood; increased milk production and thus reduced risk of ketosis; increased albumin concentrations, and reduced aspartate aminotransferase (AST) concentration, which signals a better function of liver.

Keywords: cow, postpartum diseases, blood indices, productivity