

## AMOUNT OF ALANINE AMINOTRANSFERASE, ASPARTAT AMINOTRANSFERASE AND ALKALINE PHOSPHATASE IN BLOOD SERUM OF LITHUANIAN BLACK AND WHITE COWS

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**Summary.** We have investigated the amount of alanine aminotransferase (ALT), aspartat aminotransferase (AST) and alkaline phosphatase (AP) in blood serum of 120 Lithuanian Black and White cows of different age and condition. Investigation was carry out by analisator of biological fluids „Hitachi” in autumn and winter months of 2001 and 2003 years.

It was established that in blood serum of Lithuanian Black and White cows the amount of enzyme ALT was 19 – 53 IU/L (average 28,24 IU/L), AST was 78 – 140 IU/L (average 91,56 IU/L), AP was 29 – 162 IU/L (average 78,43 IU/L).

The animal age had influence on quantity of enzymes ALT, AST and AP in cow's blood serum. More enzymes ALT and AST were in blood serum of older (6 to 9 year old) cows. More enzymes AP were in younger (3 to 5 year old) cow's blood serum. Physiological status of cows had influence on quantity of enzymes ALT, AST and AP in animal's blood serum. More enzymes ALT and AST were in blood serum of pregnant cows. More enzymes AP were in blood serum of not pregnant cows.

**Keywords:** cow, blood serum, alanine aminotransferase, aspartat aminotransferase, alkaline phosphatase.