DIAGNOSTICS OF METABOLIC CHANGES IN ORGANISM OF CATTLE OF DAIRY CATTLE PRODUCTIVITY IN THE CONDITIONS OF SILAGE - CONCENTRATE TYPE OF FEEDING

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Metabolic changes can be timely prevention using laboratory methods of clinical diagnosis, in particular clinical and biochemical, which will scientifically prove the pathogenesis of disease, diagnosis at an early stage, to follow the course of disease and complications, adjust and monitor effectiveness of treatment. Therefore, the aim of our work was to determine the metabolic changes in the body of dairy cattle productivity in a silage-concentrate type of feeding.

Clinical and biochemical studies of blood obtained from cows from four dairy farms the introduction of livestock carried out on the basis of clinical diagnosis and clinical biochemistry of Kharkiv State Zooveterinary Academy with conventional methods by spectrophotometry («SHIMADZU UV-1800», Japan).

The results of research were statistically processed using the software package of Microsoft excel, the accuracy of results was evaluated by Student's test.

According to historical data included in the diet of cows silage corn, bran cereals (mainly barley, wheat), sunflower and soybean meal or pomace. From the apparent clinical symptoms, a milk decrease up to 20%.

It is found that the silage-concentrate type feeding dairy cows productivity leads to metabolic changes in the body cows, which is manifested by increased total hemoglobin content at an average of 10,7 % of total protein – 13,6 %, along with albumin – 16,5 %, creatinine – 1,3 times, ALT activity – 4,7 times, lower level of urea in 3,6 times (p<0,001), respectively, indicating that the initial stage development of hepatorenal syndrome, which is obviously caused by the breach digesting the proteins in animal (assuming their full intake of feed with) or in case of unbalanced feed on protein component.

After correction of the diet clinical and biochemical parameters of blood cows all of 4 households received the values of their reference levels, reflecting normalization of metabolism.

When using the silage-concentrate type of feeding dairy cows productivity is desirable to hold regular (3-4 times a year) clinical and biochemical blood tests for timely diagnosis of metabolic changes in the body highly productive animals.

For their prevention is necessary to determine actual content and balance of
nutrients in the diet of fattening (especially the protein and carbohydrate components).

**Keywords:** METABOLIC CHANGES, CATTLE, DAIRY PRODUCTION LINE, SILAGE-CONCENTRATE TYPE OF FEEDING.