

EFFECT OF FOREL LIVER EXTRACT ON BIOCHEMICAL INDICATORS OF KARAKOL LAMB BLOOD

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ANNOTATION

In order to study the effect of trout liver liver tissue preparation on the biochemical parameters of karakul lamb's blood, the results of the study were presented to the lambs prepared for the experiment in accordance with the established requirements.

Keywords: Enzyme, induction, metabolism, ketogen, amino acid, albumin, globulin, protein, aspartate aminotransferase, laninaminotransferase, molecular, biosynthesis, bacterium, cell.

INTRODUCTION

It is planned to further develop the karakul industry in the country and strengthen its economic stability, increase employment and family income through increasing livestock production.

In accordance with the Resolution of the President of the Republic of Uzbekistan dated March 16, 2017 No PP-2841 "On additional measures to deepen economic reforms in animal husbandry", further deepening of structural reforms in agriculture Many practical tasks and tasks have been identified in order to ensure the importance and location, efficient use of pastures, increase the volume of livestock production and increase competitiveness.

Resolution of the President of the Republic of Uzbekistan dated August 16, 2019 No PQ-4420 "On measures for the integrated development of the astrakhan industry" and February 10, 2021 "On measures for the further development of the astrakhan industry" Resolution No. PQ-4984 "On Additional Measures" sets out specific measures for the further development of the karakul industry.

The activity of biochemical processes is important in the growth and development of animals, and all the growing organisms perform the necessary functions in the tissues and organs.

During the growth of Karakol lambs, metabolism is involved in various activities. Decreased blood protein levels in karakul lambs from 2 months of age have been reported in many studies. The study of the effect of trout liver tissue on blood parameters and protein biosynthesis leads to an increase in the quality and quantity of products in karakul.

Lambs separated from their mothers are placed in pastures where barra-ephemeral grasses are preserved and fed with 100-150 g of additional compound feed daily so that they do not lag behind in growth and development. [1]

The balance of the dynamic state of proteins in the blood depends primarily on the specificity, nutrition and metabolism of individual fractions of protein concentrations.

The use of muscle protein for the needs of the body leads to their atrophy, accumulation of intermediates, ketogenic amino acids in the body, as well as parenchymatosis and fatty, protein, amyloid dystrophy in other organs, disruption of vital functions of the body. As a result, animals lag behind in growth and development. [3]

The management of protein biosynthesis is one of the important problems of modern biochemistry and molecular biology. Living cells contain an optimal amount of different proteins and enzymes. This ratio is achieved as a result of the regulation of protein biosynthesis. Living cells have the ability to synthesize a wide variety of proteins. But they do not synthesize all proteins. The amount of protein depends on the degree to which they are involved in metabolism. The control hypothesis of protein synthesis is based on the study of the induction of enzymes in bacterial cells. [2]

Enzymes are biologically active substances that accelerate the body's chemical reactions. They change the substances that enter the body from the environment and are formed in the body itself. The assimilation and subsequent digestion of nutrients, the release of energy from high-molecular compounds during biological oxidation, and the formation of constituents during the growth and development of cells and tissues are based on the direct involvement of enzymes. Changes in substances based on enzymatic reactions form the material and energetic basis of the organism's vital activity.

The activity of the enzymes aspartate aminotransferase and alanine aminotransferase in the blood of lambs during growth and development is also high in 2-month-old lambs, their number decreases in later development, and increases again in adulthood. [2]

MATERIALS AND METHODS

The research was conducted on karakul lambs raised on the farm of Olga LLC in Nurabad district of Samarkand region. To do this, 10 weak 4-month-old lambs were selected on the basis of "similar pairs". The lambs were divided into 2 groups, with 5 heads in each group.

The drug was not administered to the control group of the first group, and the lambs of the second experimental group were tested by intramuscular injection of a tissue drug made from trout liver at a dose of 0.1 ml / kg.

During the experiment, the biochemical parameters of the lambs' blood were determined using the hematological analyzer BIOBASE BK6190, and the biochemical parameters of the serum were determined using the semi-automatic Mindray BA-88A analyzer.

RESULTS AND THEIR ANALYSIS

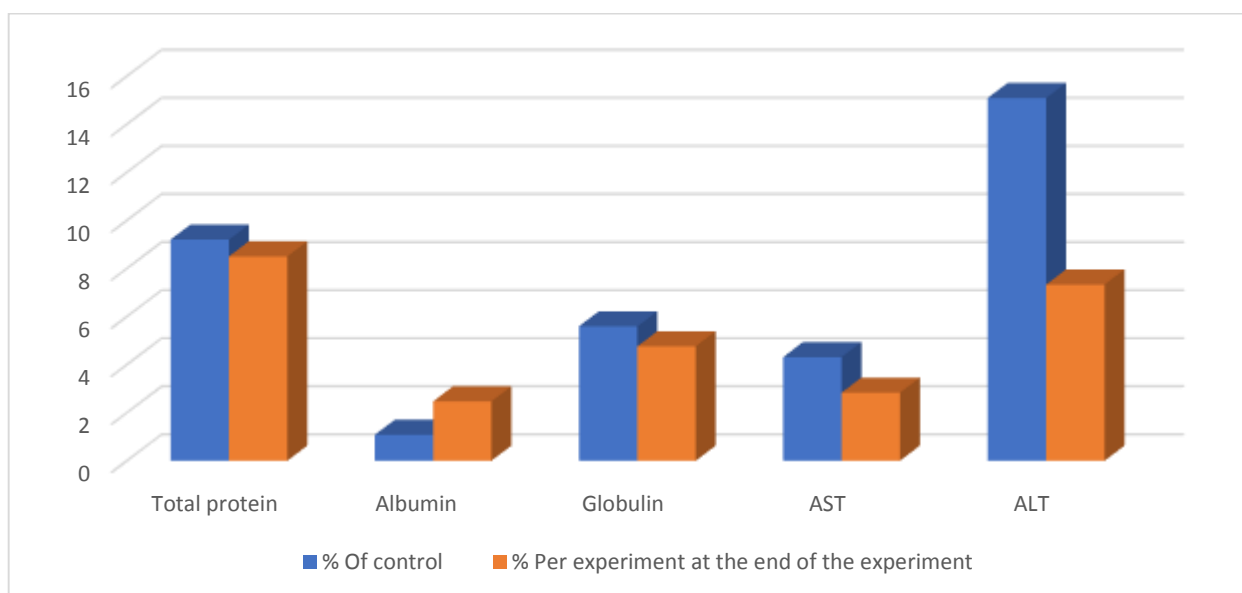
The following results were obtained from the blood samples of lambs at the beginning and end of the experiment, ie 28 days, when the total protein content of albumin, globulins and enzymes aspartataminotrasferase, alanine aminotrasferase was checked.

Table 1 Biochemical parameters of the blood of experimental lambs

Indicators	Groups			
	Control		Experience	
	At the beginning of the experiment	At the end of the experiment	At the beginning of the experiment	At the end of the experiment
Total protein g/l	62,3±2,2	60,8±1,3	61,2±1,2	66,4±0,62
Albumin g/l	37,8±1,8	36,9±0,48	36,4±0,62	37,3±0,14
Globulin g/l	36,1±0,24	35,42±0,75	35,7±0,94	37,4±0,11
α-globulin g/l	10,68±0,65	9,99±0,19	10,62±0,65	11,31±0,31
β-globulin g/l	8,85±0,44	8,79±0,27	8,64±0,44	9,13±0,23
γ-globulin g/l	16,57±0,43	16,64±0,59	16,44±0,43	16,96±0,52
AST mk/moll	42,8±1,3	41,7±2,9	42,3±3,1	43,5±2,2
ALT mk/moll	33,4±1,8	31,8±1,8	34,1±2,7	36,6±4,5

Analysis of the results showed that there were differences in the biochemical parameters of the blood of lambs in the control and experimental groups. The total protein content in the blood of lambs in the control group ranged from 62.3 ± 2.2 g / l to 60.8 ± 1.3 g / l, albumin from 37.8 ± 1.8 g / l to 36.9 ± 0.48 g / l, globulin 36.1 ± 0.24 g / l to 35.42 ± 0.75 g / l, aspartate aminotransferase 42.8 ± 1.3 mc / mol to 41.7 ± 2 , Up to $9 \mu\text{m} / \text{mol}$, alanine aminotrasferase showed a decrease from $33.4 \pm 1.8 \mu\text{m} / \text{mol}$ to $31.8 \pm 1.8 \mu\text{m} / \text{mol}$. In the experimental group, the total protein content during the experiment ranged from 61.2 ± 1.2 g / l to 66.4 ± 0.62 g / l, albumin from 36.4 ± 0.62 g / l to 37.3 ± 0.14 . g / l, globulin 35.7 ± 0.94 g / l to 37.4 ± 0.11 g / l, aspartate aminotransferase 42.3 ± 3.1 mc / mol to 43.5 ± 2.2 mc / mole, alanine aminotransferase was found to increase from $34.1 \pm 2.7 \mu\text{m} / \text{mol}$ to $36.6 \pm 4.5 \mu\text{m} / \text{mol}$.

At the end of the experiments, there were significant changes in the number of experiments and controls. In particular, at the end of the experiment, the protein content per experiment was 8.5%, albumin - 2.47%, globulins - 4.76%, and the activity of aspartate aminotransferase from enzymes - 2.83%, alanine aminotransferase - 7.33%. showed an increase in the amount of 9.2%, albumin 1.08%, globulin 5.59%, aspartate aminotransferase activity 4.31%, alanine aminotransferase 15.09%.



CONCLUSION

When trout liver extract was used, the total protein content of lamb's blood was 8.5%, albumin was 2.4%, globulins were 4.7%, and aspartate aminotransferase activity was 2.8%. alanine aminotransferase was found to increase by 7.3%.

Lambs are characterized by high levels of biologically active substances in their blood, high viability and productivity of lambs.

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