



The Effect of the Drug Butamine on Morphological and Biochemical Parameters of the Blood of Karakul Lambs

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Annotation: The article presents information about the Karakul sheep, the history of its origin, the effect of the drug Butamine on the morphological and biochemical parameters of the blood of Karakul lambs, as well as the effectiveness of the use of this drug in accelerating the growth of animals, for adjuvant therapy, intoxication, accelerating the recovery of animals, in the recovery processes after diseases.

Keywords: Karakol breeds, “BIVECO”, Butamine, Karakol lambs, Tetramag, Butaphosphane, Methylcobalamin, morphological, biochemical, intensive, ration, concentrate, vitamin, avitaminosis, mineral, productivity.

Relevance of the topic. Today, large-scale practical changes are being carried out in our country aimed at increasing the volume of production of products from Karakul Sheep and increasing their range.

The blackcurrant network is one of the leading commodity-producing sectors of livestock, second only to cattle raising in meat production. 20% of the meat grown in our republic is mutton. 28-30% of sheep and goats are brown, 53-55% are jaydari and hisori sheep, and 16-18% are goats. Karakol sheep are the pride of the Republican sheep industry.

The history of the origin of the Karakol sheep. The karakul or karakul sheep breed is a breed of coarse-wooled sheep that is bred for its furry skin. The breed was created several hundred years ago as a result of the long selection and interbreeding of jaydari sheep in the folk selection method in the territory of present-day Uzbekistan (Karakul District of Bukhara region). According to some archaeological records, the Karakol sheep were kept there continuously from 1400 BC.

The blackbuck sheep of the desert regions of Central Asia are known for their ability to grow in extreme living conditions. They can survive in severe drought conditions because they store reserves in their tails in the form of fat.

The black sheep breed belongs to the type of tail sheep, on the tip of the tail there is a non-ferruginous tumor characteristic of the breed. The wool cover belongs to the coarse wool type. Most Karakul Sheep breeds have a large head, an energetic body, and a lot of fat accumulates in the tail. Lambs can be bopled with Black (80 %), gray, brown, sur and other shades.

After the age of one and a half years, black wool from the beak, ears and legs elsewhere begins to turn white. Adult mother sheep have a hornless weight of 42-45, Rams are large, with a twisted Horn weight of 55-60 kg, and newborn lambs have an average weight of 4-4.5 kg. Serpushtlik 90-95 %. The karakul breed is bred mainly to obtain the skin of the karakul. In addition to fur, milk is obtained from mother sheep, where lambs are slaughtered, and meat from Rams with poor skin quality. Grazing of sheep of this breed on pastures and on the wet ground has worsened the quality of the skin.

The black sheep breed is bred in more than 50 countries on all continents of the world (except Australia) (15 million. around the head). Afghanistan, Uzbekistan, Turkmenistan, Kazakhstan, Iran, the Republic of South Africa are the countries where the most Karakul Sheep breed is bred. It is bred in some regions of the Moldavian and Ukrainian republics (Kherson, Odessa, Poltava, Mykolaiv regions), Volgograd, Astrakhan, Orenburg regions, Krasnodar Territory. Currently, the karakul breed is grown in 50 countries of the world, the total number of which reaches 31 million heads.

In the 50s of the last century, there were special slaughterhouses breeding Quail sheep. Karakul Research Institute operated in Samarkand. In 1976, the breeding of four new species of Brown sheep was completed: "Kenimex" ("Kenimex" at the state breeding farm), "Nishan" ("Nishan" at the state breeding farm), "Mubarak" (in the state). "Mubarak" breeding farm) and" Karakum "(under the state livestock plant" Karakum"). In 1977, three new plant types of Karakul Sheep were introduced in the breeding plants of the Uzbek SSR named after Karnab and Gagarin: "Gagarin" – White, "Samarkand" – white ermine color, and "Saykhan" - pink color.

In 1983, the breeding of new plant-type Boz Karakul Sheep was completed by specialists of the Research Institute of Karakul culture of Kazakhstan and the Talas state breeding plant of the Jambul region. In 1984, breeding of new plant-type Karakol sheep by selection was completed by specialists of the Turkmen branch of the All-Union Research Institute of Karakolics and the breeding farm "Udarnik" in the Tejen District of the Ashgabat region.

In terms of improving the breed, there is mainly selection work on the creation of the Black, Blue, sur, White, zarmalla, silvery, tillasimon, diamond, apostlang, candlestick, steel, Platinum, Bronze, Amber, anthracite (black polished) breeds. As a result of the selection and breeding work carried out by scientists for many years, 27 factory types of Karakul Sheep have been created in Uzbekistan with high hereditary and productive characteristics. They are a valuable hereditary gene pool of the Brown sheep breed. The black sheep breed is also used to improve other breeds. Many of the biological and productive characteristics of the breed have been preserved naturally for many years due to its mating in extreme temperate, low-yielding desert pastures[5].

Currently, the frequent occurrence of shortcomings in nutritious feeding of sheep, in particular, the quality, quantity of feed, as well as the content of the diet and the fact that their satiety does not meet the body's requirements, naturally leads to the fact that young animals become infected with various non-infectious diseases and lagging behind growth and development, the emergence of.

The deficiency of nutritious substances necessary for the body is more manifested by hidden disorders of the processes of metabolism. At such a stage, special laboratory methods are used for diagnosis. Hypo and avitaminoses found in animals, new drug preparations are being produced to treat and prevent disorders of metabolism [1; 2; 3].

One of the important factors is the application of intensive technologies aimed at the development of blacksmithing in the further improvement of the supply of quality meat and other products to the population. In this regard, improving the breeding characteristics of the Karakol sheep in particular, as well as improving the health and productivity of the Lambs obtained, is considered one of the most pressing problems in veterinary practice.

Research objects and styles. The experiments were carried out at "Sahoba ota Karakol nasl" Karakol specialized LLC in Nurabad district, Samarkand region and at the laboratory of "Pharmacolo-Gia and Toxicology" Department of Samarkand State Veterinary Medicine, livestock and Biotechnology University.

For experiments, 20 heads of 4-month-old lambs were isolated. The physiological condition, pharmacological effects of the drug Butamine on growth and development of lambs have been studied. The live weight of the Lambs was determined by weighing on the scales every 10 days.

Butamine is a drug consisting of a vitamin-mineral mixture-intended only for animals (horse, cattle, sheep-goat, pig, dog, cat). It is a sterilized aqueous solution produced in 10, 20, 50, 100, 200 and 250 ml vials. 1 ml of the drug contains butaphosphane - 100 mg, vitamin B12 0.05 mg maintains an active acting substance. The drug butamine provides an additional increase in vitamin B12 in the blood and liver and stimulates the metabolism in animals. The drug is used in animal extreme weight loss, especially in acute and chronic substance metabolism disorders caused by poor-quality feed feeding, as an adjuvant in secondary anemia and resistance attenuation, to stimulate animal growth, in intoxications for the purpose of adjuvant therapy, in accelerating Animal Recovery, in post-disease recovery processes [4].

Results and their analysis. For experiments, 20 heads of 4-month-old lambs were taken and separated from 5 to 4 groups. Experimental groups 1-2 were administered to lambs in different doses from butamine, which was produced at the pharmaceutical company BIVECO, a joint venture of Uzbekistan with Britain and Russia.

The first experimental group administered 2 ml of the butamine drug to lambs, the second experimental group administered 2.5 ml of the butamine drug to lambs, and the third experimental group administered 1 ml of the tetramag drug to the muscle every 10 days, while the fourth control group administered no drug. The experiments took 30 days. In the diet of all groups, a mixture of concentrated Foods was additionally mixed and fed.

Changes in the live weight of lambs were measured on the scales every 10 days. We found that when injected into the organism of lambs from the drug butamine in the experiment, the processes of metabolism are increased, the living weight increases intensively compared to those in other groups (Table 1).

The growth of lambs in the experiment, kg Table 1.

Pointers	Groups			
	Experiment group 1	Experiment group 2	Experiment group 3	Control group
Average live weight at the beginning of the experiment, kg	18,1±1,5	17,4±1,3	19,2±1,5	18,3±1,2
Average live weight at the end of the experiment, kg	24,1±1,3	25,4±1,4	24,2±1,3	22,3±1,4
Total growth of living weight, kg	6,0±0,3	8,0±0,2	5,0±0,3	4,0±0,2
Average daily growth, g	0,2	0,26	0,16	0,13
In relation to the control group %	150	200	125	100

From the data of the table, it was found that the live weight of lambs in the first experimental group of the butamine drug was 6.0 kg, the live weight of lambs in the second experimental group was 8.0 kg, the live weight of lambs in the third experimental group was 5.0 kg, and the live weight of lambs in the fourth control group increased by 4 kg.

An analysis of the results of the experiment conducted showed that as a result of the use of the drug butamine in doses of 2-2.5 ml, processes such as the treatment and Prevention of disorders of metabolism in the body of lambs,improving their physiological state and increasing live weight are activated.

Morphobiochemical indicators of blood have also been found to know the pharmacodynamics and pharmacokinetics of butamine in the body of lambs.

Morphobiochemical indicators of lamb blood Table 2

Pointers	Experiment group 1	Experiment group 2	Experiment group 3	Control group
Erythrocyte, 1012 / l	9,11±0,21	9,33±0,25	8,65±0,13	8,31±0,56
Leukocyte, 109 / l	7,28±0,22	7,25±0,31	7,26±0,38	7,46±0,28
Hemoglobin, g / l	120,8±0,27	125,1±1,2	117,3±0,39	115,5±0,24
Total Protein, g / l	64,4±0,58	66,4±0,61	62,4±0,57	60,8±1,30
Albumin, g/l	36,9±0,11	37,4±0,13	36,6±0,15	35,7±0,47
Globulin, g/l	36,3±0,22	36,8±0,15	35,25±0,91	35,12±0,72

Analysis of the morphobiochemical (Table 2) rates of lamb blood showed that the number of erythrocytes was found to be 9.6 % higher in the first experimental group compared to the control group, 12.2 % in the second experimental group, and 4.1 % higher in the third experimental group. The number of leukocytes was observed to decrease by 2.4 % in the first experimental group compared to the control group, by 2.8 % in the second experimental group, and by 2.6 % in the third experimental group.

Hemoglobin levels were observed to increase by 4.5 % in the first experimental group compared to the control group, 8.3 % in the second experimental group, and 1.5 % in the third experimental group. The total protein content was found to be 5.9 % higher in the first experimental group compared to the control group, 9.2 % higher in the second experimental group, and 2.6 % higher in the third experimental group. Albumin levels were found to be 3.3 % higher in the first experimental group compared to the control group, 4.7% higher in the second experimental group, and 2.5 % higher in the third experimental group. Globulin levels were observed to increase by 3.3% in the first experimental group compared to the control group, 4.7 % in the second experimental group, and 0.4 % in the third experimental group.

From the analysis of morphobiochemical indicators of blood, it can be seen that the pharmacostimulating effect of the drug butamine is high.

Conclusions:

1. As can be seen from the above data, 20 % of the meat grown in our Republic corresponds to mutton. 28-30 % of sheep and goats belong to karakul, 53-55 % to jaydari and hisori sheep, and 16-18 % to goats, which is an important scientific and practical result in meeting the population's need for meat.
2. The drug butamine is recommended to be administered in a dose of 2.5 ml to the venous blood vessel, muscle and subcutaneous lambs in order to treat or prevent alimentary diseases.
3. In experimental groups using the drug butamine, the morphobiochemical indicators of blood were found to be 12.2 % erythrocytes, 8.3 % hemoglobin, 4.7 % albumin, and 4.7 % globulin higher compared to control.

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