

UDK: 636.39:636.084.51:591.13

## DIGESTIBILITY OF NUTRIENTS IN THE DIET DURING THE EARLY GROWTH PERIOD OF GOATS

**Fayzullayev Ikrom Alisherovich**

*Samarkand State Veterinary Medicine University of Animal Husbandry and  
Biotechnology assistant*

[ikromgoldfayzullayev@gmail.com](mailto:ikromgoldfayzullayev@gmail.com)

**Nakhalboyev Alisher Aliboyevich**

*Doctoral student of the Samarkand State Veterinary Medicine University of Animal  
Husbandry and Biotechnology, Uzbekistan*

**Annotation:** *In the article goats digestion of nutrients in the diet during the initial stage of constipation about info given.*

**Keywords:** *goat, goat, goat, breed, ration, stomach, intestines, system, stomach, intestine, digestion, coefficient, organic matter, protein, cell and AEM, animal, metabolic process, substance, crude oil, crude fiber.*

**Login:** Feeding of modified rations by Zanen breed goats significantly affected the nutrient digestibility of the ration in the stomach and intestinal system. According to the data obtained from the balance experiments carried out at the end of the scientific-production experiment, it was found that the digestibility coefficients of the substances digested in the gastrointestinal system of the goats used in the experiments differ from each other. Differences were detected in the digestive tract of the experimental group of goats, which had 10% dried Eichhornia algae added to the dry matter of the normal level due to the nutrients in the diet. It was 3.27 and 3.03%, 2.91, 4.16 and 2.65% of the content of dry and organic matter, protein, fiber and AEM in the control group of goats, respectively. It can be seen that the goats of the experimental group fed with the diet supplemented with Eichhornia algae digested the nutrients better and efficiently utilized the nutrients in the diet compared to the control group goats fed with the conventional diet.

Digestion of nutrients in the 1st half of the rumen of experimental goats

Indicators	Groups		Control to the group on the account of %
	Control	Experience	
Dry matter	60.1	63.2	103.1
Organic substances	63.4	66.5	103.1
Crude protein	56.5	59.3	2.8
crude oil	60.3	70.1	106.8
Raw tissue	49.1	53.5	104.4
AEM	60.2	62.7	102.5

In order to assess the level and direction of protein metabolism in the body of experimental goats, we determined the nitrogen balance in their body according to the purpose of the research work. According to the obtained data, it was found that the differences between the experimental and control groups regarding the amount of nitrogen consumed with food in the 1st half of the estrus period of goats were reliable. The goats in the experimental group consumed an average of 5.54 g more nitrogen per day than their peers in the control group. The amount of nitrogen excreted in feces, urine and milk was also 11.6% more in the experimental group fed with the diet supplemented with Eichhornia algae than in the control group, and 4.93% in urine. was found to be poorly separated.

*Average daily nitrogen balance in the 1st half of the estrus of goats*

Indicators	Groups		Control to the group on the account of %
	control	experience	
Taken with food, g	19.08	21.4	112.6
Discharged with feces, g	6.34	7.29	111.47
Digested, g	12.5	14.11	112.90
Digestion coefficient,%	65.5	65.9	=
Excreted with urine, g	6.24	5.93	95.03
Sitting on the body	6.26	8.18	130.67
Absorption coefficient,%			
Accepted	32.8	38,22	115.52
From digestion	50.8	57.9	113.97

From the data presented in the table, it can be seen that the nitrogen balance was positive in the experimental goats, we note that the goats in the experimental group assimilated a large part of the nitrogen of the digested food compared to the goats of the control group (57.9%). It was found that the levels of nitrogen in the body of experimental group goats were higher than that of the control group goats (15.5 and 13.9%) both from the consumed nitrogen and from the amount of digested food. At the same time, it was found that the amount of calcium sitting in the body of goats of the experimental group was 5.5% and 4.67% lower than the consumed and digested amounts, respectively. According to the analysis of the obtained data on phosphorus metabolism, it was observed to be higher (20.9%) in the goats of experimental group 2 compared to the control group. A similar situation was observed in the metabolism of sulfur.

*Balance of calcium and phosphorus elements*

	Groups			
	Control		Experience	
	Calcium	Phosphorus	Calcium	Phosphorus
Received, g	7.7	4.1	9.6	4.8
Discharged with feces, g	3.9	1.3	4.1	1.5
Digested, g	3.8	2.8	5.5	3.3
Digestion coefficient,%	49.4	68.3	57.3	68.8
Excreted with urine, g	0.28	0.1	0.27	0.1
Sitting on the body, g	3.8	2.7	5.2	3.2
The mastered,, g	2.6	2.8	4.9	3.3
From consumed, %	33.8	65.8	51.0	68.8
% of digested	68.4	96.4	89.1	96.9

According to the data of the balance experiments on the use of calcium, phosphorus and sulfur elements in the control and experimental groups in the experiment, it was found that calcium in the body was positive in the control and experimental groups. However, the amount of consumed calcium was 31.5% more than the amount consumed by the animals of the experimental group compared to the control group, and 8.0% more digestibility was observed in the goats of the experimental group compared to the control group. Regarding the phosphorus element,

it was found that the amount consumed by the goats of the experimental group was 0.7 g more digested in favor of the goats of the experimental group, but the digestibility coefficient of consumed phosphorus was almost the same in both compared groups (68.3 and We acknowledge that it made up 68.8%. The absorption coefficient of goats from the amounts consumed and digested by the goats of the compared groups was almost the same (65.8 and 68.8%) (96.4 and 96.9 %) data were obtained. Analogous data were also obtained on the exchange of element sulfur in the body of experimental goats.

**CONCLUSION;** Based on the obtained data, we can say that the content of dry and organic matter, protein, fiber and AEM in the diet was 3.27 and 3.03%, 2.91, 4.16 and 2.65%, respectively, compared to the control group goats. We observed that it was %. It can be seen that the goats of the experimental group fed with the diet supplemented with Eichhornia algae had better digestibility and efficient utilization of nutrients in the diet compared to the control group goats fed with the conventional diet. But we observed that the amount of consumed calcium was 31.5% more than the amount consumed by the animals of the experimental group compared to that of the control group. Regarding the phosphorus element, it was found that the amount consumed by the goats of the experimental group was 0.7 g more digested in favor of the goats of the experimental group, but the digestibility coefficient of consumed phosphorus was almost the same in both compared groups (68.3 and It was found that it was 68.8%.

## REFERENCES

1. Nakhalboyev AA Yuksak water herbs and them learning history ( literature analysis on ) //Scientific progress. - 2021. - T. 2. – no. 4. – S. 999-1002.
2. Egamberdiyev KE, Rakhmonov FX, Islamov XI Endemic of icterohemoglobinuria biochemical mechanisms //Oriental renaissance: Innovative, educational, natural and social sciences. - 2022. - T. 2. – no. 3. - S. 338-342.
3. M. \_ N. \_ Hayitova , A. \_ A. \_ Nahalboev , Z. \_ T. \_ Rajamuradov , S. \_ S. \_ Haydarov , Turle in the genotype milk direction a goat breeds organism natural to durability year of the seasons effect Khorezm Ma'mun academy newsletter : scientific magazine .-#7/1 (91), 2022 . - 181 p . - 128-132 c
4. Nakhalboyev A. et al. History of feeding animals with spirulina //Zbírnik naukovix prats SCIENTIA. - 2021.
5. Aliboyevich NA, Jumanazarovich SO Effects on the Microflora of the Gastrointestinal Tract When Feeding Goats with High Algae //Central asian

- journal of social sciences and history. - 2023. - Т. 4. – no. 4. – S. 30-34.
6. R. F. Rozikulov, & I. A. Fayzullaev. (2023). CHARACTERISTICS OF THE CONSTITUTION OF ANTI-INFECTION RESISTANCE OF KORAKUL SHEEP. Academia Science Repository, 4(5), 375–380. Retrieved from.
  7. Change of Biochemical Indicators of the Blood of Goats during Throat NA Aliboyevich, FI Alisherovich - Best Journal of Innovation in Science, Research and ..., 2023
  8. Saparov O., Salimov Y., Kamol E. MEDICINAL PROPERTIES OF THE FERULA PLANT AND TECHNOLOGY OF PREPARATION OF MEDICINES //Galaxy International Interdisciplinary Research Journal. – 2022. – Т. 10. – №. 4. – С. 254-256.
  9. Сапаров О. Ж. и др. ҚУЁНЧИЛИКДА ҚЎЛЛАНИЛАДИГАН АЙРИМ БИОСТИМУЛЯТОРЛАРНИНГ ҚОННИНГ ГЕМОТОЛОГИК КЎРСАТКИЧЛАРИГА ТАЪСИРИ (Адабиётлар тахлили) //PEDAGOGS jurnali. – 2023. – Т. 31. – №. 1. – С. 185-188.
  10. Saparov O. J., Eshimov D. The Effect of a Decotion Prepared From Ferula Assafoetida Plant Grain on Clinical Indications of Male Rabbits //Miasto Przyszłości. – 2023. – Т. 41. – С. 398-400.
  11. Aliyarov Soatmo‘min Abdixamid o‘g‘li, Eshburiyev Sobir Baxtiyorovich, & Qarshiyev Usmon Temirovich. (2023). Prevention of Mineral Exchange Disorders in Rabbits. Best Journal of Innovation in Science, Research and Development, 2(11), 376–383
  12. Ибрагимова, Ф., Ибрагимов, Д., Эшимов, Д., & Алияров, С. (2022). Эффективность некоторых кокцидиостатиков при эймериозе птиц и их влияния на интенсивности инвазии. Перспективы развития ветеринарной науки и её роль в обеспечении пищевой безопасности, 1(2), 358-362.
  13. Алияров, Д., Ибрагимов, Д., Эшимов, Д., Ибрагимова, Ф., & Тошмуродов, Д. (2021). Влияние иммуномодуляторов на физиологическое состояние организма птиц
  14. Тошмуродов, Д., Эшимов, Д., Ибрагимов, Д., Ибрагимова, Ф., & Алияров, С. (2021). Влияние транквилизаторов на морфологические показатели крови цыплят