

Feeding Level of Ewets in Different Physiological Conditions

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Annotation: The results of studies on the level of feeding of ewes under different physiological conditions are presented. Feeding norms for pregnant, suckling and single queens have been established.

Key words: level, feeding, astrakhan uterus, physiological condition

In the agricultural sector of the economy of Uzbekistan, animal husbandry is of decisive importance, on the development of which the solution of socio-economic problems largely depends. Astrakhan breeding is called upon to play a significant role in solving this most important task, since it is an important branch of desert and semi-desert animal husbandry in our country.

One of the urgent problems of the implementation of genetically determined productivity of sheep is research on the development of the level of feeding of ewes in different physiological states.

Purpose of the study. The study of the level of feeding of ewes under different physiological conditions. Establishment of feeding norms and feeding levels.

Material and research methods.

Pasture forages were studied by the seasons of the year. The entire set of feeds is subjected to zoo technical analysis [1,4,5]. Digestibility was determined by the method of fecal index, palatability, mowing - zoo technical method [5,6].

The duration of the experiment in the winter period corresponded to the second period of pregnancy of the queens, and the completion of the experiment was timed to coincide with the assessment of breeding qualities (bonitation).

Experience in the spring season - corresponded to the lactation period - milk production, growth of lambs. The milk content of the queens was determined by the weight gain of the offspring for 20-25 days of his life, taking the consumption of 500-600 kcal or 0.5 kg of milk per 100 g of weight gain.

Experiments in the autumn season corresponded to the idle state of the queens - while considering live weight, fatness.

Animals were weighed at the beginning and end of the experiment for 2 consecutive days before pasture feeding.

Research results.

To develop feeding standards, first of all, it is necessary to know the chemical composition, palatability and nutritional value of pasture diets. Table 1 shows the data on the chemical composition of the feed ration for the seasons of the year.

Table 1. Chemical composition of feed diet by seasons of the year (% air dry matter)

Stern	Raw materials				BEV
	Protein	Fat	Cellulose	Ash	
Winterfeed					
Has	8,38	1,18	34,09	10,58	45,77
Solyanki	12,4	2,08	37,47	12,11	30,20
Yantak	10,30	1,89	34,37	8,18	45,26
Spring feed					
Ephemera	15,8	3,7	21,4	6,4	47,5
Rough grass	24,9	3,6	26,2	4,0	41,3
Summer feed					
Has	7,45	2,34	32,60	6,24	51,3
Rough grass	15,90	10,4	24,90	6,97	41,7
Keyreuk	14,22	1,67	18,4	10,70	55,0
Autumn feed					
Has	8,59	0,84	27,61	18,0	44,9
Solyanki	12,9	5,44	21,05	22,2	37,8
Yantak	10,31	5,0	29,92	10,54	44,0

Experiments on pregnant sheep were carried out in winter on the uterus in the last third of pregnancy. The main requirements during the period of pregnancy is to maintain the fatness with which they entered the wintering. Pasture and fodder conditions of the year were good. The yield of pastures was at the level of 2.7-3.0 c/ha with a total nutritional value of 0.30-0.32 fodder units. Sheep in the pasture ate air-dry matter in the control group 2.12 ± 0.1 kg; 1 experimental - 2.15 ± 0.2 kg; 2 experienced 2.19 ± 0.1 kg. The nutritional value of the pasture diet in the control group is 0.65 feed units and 63.3 g of digestible protein; in the 1st experimental group - 0.66 feed units and 64.5 g of digestible protein; in 2 - 0.67 feed units and 65.7 g of digestible protein. In order to replenish the general nutritional value of pasture rations, in accordance with existing norms, additional feeding was carried out with feed mixtures.

In the control group, 0.48 kg of the mixture was fed, which corresponded to 0.30 feed. units and 39.1 g of digestible protein. In the 1st experimental group, the amount of the mixture was 15% higher than in the control and amounted to 0.55 kg with a total nutritional value of 0.35 fodder. units and 44.8 g of digestible protein. In the 2nd experimental - 15% below the norm - 0.44 kg; 0.25 feed units and 32.6 g of digestible protein.

Different levels of feeding made it possible to obtain lambs at birth with a live weight in the control group - 3.9 ± 0.1 kg, 1 experimental - 4.1 ± 0.1 kg; 2 experimental - 3.8 ± 0.1 kg ($P < 0.005$).

The level of nutrition also had a certain effect on the characteristics of the offspring of the fawns (Table 2).

Table 2. Valuation evaluation of experimental animals

Indicator	Animal groups		
	Controller	1 experimental	2 experimental
Smushkovytype:	62,8±5,1	51,8±5,4	71,9±4,9
Jacket	12,2±3,5	22,3±4,5	12,5±3,6
Ribbed	9,8±3,2	14,8±3,8	9,4±3,1
Flat	9,8±3,3	11,1±3,4	6,2±2,6
Caucasian	10,5±0,2	10,8±0,3	9,8±0,3
Hair length	9,7±3,2	10,1±3,4	19,9±4,1
Class (%): Elite	65,8±5,1	74,1±4,7	62,5±5,0
1 class	22,1±4,5	11,1±3,4	15,6±3,9
2 class	2,4±1,7	4,7±2,0	2,0±0,9

The study of the ratio of smushka types in lambs left for rearing shows that the level of nutrition of the queens has a certain effect on the manifestation of the smushka type. So, among the black lambs, there are more jacket lambs in the 2nd experimental group of animals, while the lambs with the Caucasian type of smushka were in the individuals of the 1st experimental group. The hair on the sacrum was somewhat longer in the lambs of the control and 1 experimental group. Twice as many lambs-marriage (4.7±2.0) were found in 1 experimental group. Thus, it can be stated that the level of nutrition of queens has a certain effect on the characteristics of their offspring.

Experiments on lactating queens - studies were carried out on the same uterus formed into experimental groups, in the first period of lactation. The queens fed one lamb at a time. Sheep in all groups ate from the pasture per day an average of 2.67 ± 0.3 kg of air-dry weight with a nutritional value of 2.2 feed units, 240 g of digestible protein. This level of feeding made it possible to obtain lambs at the age of 30 days in the control 8.6 ± 0.2 kg, with an average daily gain of 159.3 ± 5.4 g, in 1 experimental lamb - 9.7 ± 0.3 kg, the average daily gain - 185.1 ± 10.5 g; in the second experimental group - 8.3 ± 0.2 kg and 151.2 ± 6.4 g, respectively.

In the second period of lactation, the uterus on the pasture ate an average of 3.5 ± 0.4 kg of air-dry eaten mass with a nutritional value of 1.4 feed units and 155 g of digestible protein. The final stage of the second half of lactation is associated with a summer feed depression to compensate for the lack of feed in the groups, they were fed with a feed mixture of 0.5 kg per head per day, the total nutritional value of the diet was 1.8 feed units and 154 g of digestible protein. In the 2nd experimental group, the nutritional level was 15% lower and amounted to 1.6 feed units and 130.9 g of digestible protein. With such feeding, the live weight of young animals to beating in the control was 22.7 ± 0.4 kg; 1 experimental 26.5 ± 0.4 kg; 2 experienced 23.4 ± 0.5 kg. Additional feeding made it possible to completely preserve the livestock in the experimental groups by the age of 7 months, to obtain gains 6-10% higher than in the control.

Experiments on single queens - Efficient and rational feeding and maintenance of queens during this period helps to increase their fertility. In desert conditions, the cheapest and most effective way to prepare for mating is to keep on good pastures. The uterus after beating the lambs and culling are able to use dry seeded feed on the pasture well and quickly fatten. Therefore, only the very weak are fed, and it is important to properly organize watering and grazing.

Table 3. Approximate mode of the day for single queens for the autumn season

Indicator	Time	In % during the day
Watering place and miscalculation of the flock	15-16 hours	4,1
Grazing	16 -/- – 22 -/-	25,1
Rest	22 -/- – 24 -/-	8,3
Grazing	24 -/- – 3 -/-	12,5
Rest	3 -/- – 6 -/-	12,5
Grazing and driving to the tyrl	6 -/- – 10 -/-	16,7
Watering hole and daytime rest	10 -/- – 15 -/-	20,8

With the start of mating in the morning, the queens are selected in the hunt, they are inseminated and then graze. Watering is one-time with daily, and grazing is round-the-clock, with short rests in the pasture. After the end of mating, with the onset of cold and wet weather, a sparse watering place is used with round-the-clock grazing. Sheep are resting in the pasture [6].

During this period, from the pasture in all groups of sheep, on average, they ate 2.0-2.2 kg of air-dry fodder mass and 76 g of digestible protein. This level of feeding prepared them well for mating, they came together to hunt.

Conclusion

The studies carried out on queens of various physiological states with year-round grazing and feeding additional feeding made it possible to show genetically determined productivity at the following feeding rates;

- pregnant sheep in the last third of pregnancy need a daily ration with a total nutritional value of 1.1 feed. units or 11.1 MJ of metabolic energy and 109.3 g of digestible protein;
- suckling in the first half of lactation - 2.38 feed. units or 23.8 MJ of metabolic energy and 263.3 g of digestible protein;
- suckling in the second half of lactation - 1.8 feed. units or 18.0 MJ of metabolic energy and 154 g of digestible protein;
- single queens need 0.8 feed. units or 8.0 MJ of metabolic energy and 76 g of digestible protein per day.

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