

UDC 636.32/38:637.5

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**COMPARATIVE CHARACTERISTICS OF SLAUGHTER INDICATORS OF DIFFERENT CROSSBRED SHEEP GENOTYPES****Abstract**

In the article dynamics of body weight and slaughter indicators of sheep different genotypes in 4 and 8 months are considered age in «Kuanysh» farming of the West Kazakhstan region.

**Keywords:** *semi-fine-wooled sheep bridging, meat-wool direction, meat qualities, slaughter weight, coefficient of meat.*

Sheep semi-fine-wooled meat is wool directions of productivity which are characterized by good energy growth, high meat productivity, early economic maturity, they pay well forage products and it is the main source of crossbred wool and fur products [1-3].

In «Kuanysh» farm of Akzhaik district of West Kazakhstan region, selection and breeding work is carried out for the use on Akzhaik meat and wool umbrellas along with Akzhaik sheep of the producers of North Caucasian and Kuibyshev meat and wool breeds.

The purpose of the work is to improve the meat qualities of the sheep of Akzhaik crossbred breed by introductory crossing.

The task of our research was to study the meat productivity of mutton varieties of different genotypes in the conditions of the peasant «Kuanysh» farm.

The elite sheep used in the experiment which were characterized by the following productivity: North Caucasian meat - wool had an average body weight of 102 kg, a wool shaving - 8.0 kg, a length of wool - 15 cm and 48 tons of quality, Kuibyshev 110 kg, 7.5 kg, 13 cm, 50 quality.

For the experiment, two groups of Akzhaik meat and woolen ewes of the first bonning class were formed. In terms of body weight and wool productivity, the ewes were analogous, they had an average body weight of 55,5 kg, a dirty wool shaved - 4.3 kg, a length of 12 cm and a ton of 58 - 56 qualities.

Two groups of sheep were examined: the first group was young, obtained from the Akzhaik crossbred ewes with sheep of North Caucasian meat and wool; the second group - from the sheep of the Kuibyshev breed.

The study of live weight dynamics of sheep showed that all the sheep in the suckling period grew intensively and had a body weight of 29-30 kg at the time of piling, the average daily gain of body weight was 207-216 g. The best growth rate was different in the progeny of Kuibyshev meat - wool rams (table 1).

Table 1 - Dynamics of body weight and average daily growth of sheep

Group	n	Body weight, kg			Average daily gain, g	
		at birth	4 months	8 months	from birth to 4 months	from 4 to 8 months
1	94	4,12±0,05	28,96±0,29	35,18±0,28	207,0±2,17	51,8±0,77
2	96	4,34±0,04	30,24±0,28	36,15±0,31	216,0±1,72	49,3±0,73

An analysis of the results shows that the largest body weight of sheep is observed in the group in which the younger are obtained from Kuibyshev meat and wool rams both during weaning and at the age of 8 months. At the age of 4 months, the sheep of the second group outperformed their peers from the first group by 1,28 kg or by 4,42%, while the difference was  $P > 0,99$ .

The superiority of the second group animals in terms of body weight is due to a higher energy of growth. They have an average daily increase in the period from birth to 4 months, and in the period of 4 to 8 months, the energy of growth was also higher than in the animals of the first group.

At the age of 4 months, control bulls were killed by 3 heads from each group. The results of control slaughter are given in Table 2.

Table 2 - Slaughter figures of sheep at the age of 4 months

Index	Group	
	1	2
weight, :		
pre-slaughter	29,20±0,76	30,60±0,77
paired carcass	13,20±0,56	13,90±0,69
internal fat	0,36±0,07	0,54±0,12
slaughter	13,56±0,71	14,44±0,69
slaughter output, %	46,40±0,27	47,20±0,31
yield of meat, %	78,30±1,13	78,70±1,26
bones output, %	21,70±0,28	21,30±0,29
meat ratio	3,61±0,12	3,69±0,17

After slaughter, the mass of paired carcasses of caramels amounted to 13.2-13.9 kg, slaughter weight – 13,6-14,4 kg. The slaughter yield was from 46,4 to 47,2%. Maximum weight before slaughter, after starving daily soaking it was in young animals of the second group – 30,6 kg, 1,4 kg more than the first group.

The largest weight of the carcass was in the second group – 13,9 kg, which is 5,3% more than in the first group. In this group was also the largest slaughter mass. The slaughter yield in the second group was 47,2%, which is higher than the first by 0,8%.

After deboning the carcasses, the content of pulp and bones in carcasses was established. The largest yield of pulp – 78,7% was established in the second group, respectively, in this group was the lowest bone content – 21,3%. The coarse skeins were of the second group. The content of bones in the carcass in the two groups fluctuated on average 21,3-22,7%, and their pulp content was 78,3-78,7%. Accordingly, the meat factor in the second group was 3,69. After weaning from mothers to 4 month of autumn to fatten rams pastures with good herbage grasses of different steppe to 8 months of age (table 3).

Table 3 - Slaughter figures of sheep at the age of 8 months

Index	Group	
	1	2
weight, kg:		
pre-slaughter	41,10±0,71	42,80±0,71
paired carcass	19,30±0,82	20,10±0,68
internal fat	0,74±0,04	1,06±0,03
slaughter	20,04±0,80	21,16±0,88
slaughter output, %	48,70±0,72	49,40±0,79
yield of meat, %	78,50	79,70
bones output, %	21,50±0,71	20,30±0,73
meat ratio	3,65±0,11	3,95±0,15

The body weight of the sheep in the groups was from 41,1 to 42,8 kg. The largest body weight before slaughter was in the second sheep – 42,8 kg, which is 1,7 kg or 4,13% more than in the animals of the first group.

The heaviest paired carcasses were obtained from the burrs of the second group, their weight averaged 20,1 kg, which is 4,1% more than the weight of the paired carcasses of the first group. The largest amount of internal fat is also found in young animals obtained from Kuibyshev meat and wool rams, and is 1,06 kg, which is 43,2% more than in the first group of sheep. Slaughter yield in animals of the second group – 49,4%, which is more by 1,4% than in animals of the first group. In the second group, the best yield of pulp was 79,7%, with a yield of bone of only 20,3%, which provided the greatest value of the meat factor – 3,95. It should be noted that as the age increases, the slaughter yield, the content of pulp in the carcass and the mass of internal fat increases. The slaughter yield up to 8 months of age increased by 4,9% in the first group and 4,7% in the second group. The yield of pulp increased, respectively by groups of 0,2% and 1,0%. This is due to a more intensive accumulation of muscle mass with age, accordingly, the meatiness coefficient increases with age and.

The value of meat, as a food product, is the protein content and energy nutritional content. For the purpose of determining the chemical composition of the meat of the sheep, flesh analyzes were performed (table 4).

Table 4 - Chemical composition and energy value of meat sheep

Group	Content in the meat				Energy value, MJ
	water	protein	fat	ash	
4 months					
1	64,7±0,39	17,9±0,29	16,4±0,66	1,0±0,05	2259±2,68
2	63,1±0,46	17,5±0,26	18,4±0,81	1,0±0,05	2428±2,92
8 months					
1	60,9±0,38	16,9±0,29	21,2±0,69	1,0±0,03	2655±2,72
2	59,6±0,37	17,1±0,30	22,3±0,71	1,0±0,04	2775±2,86

The dry matter content in the average group indices is 35,3-36,9%.

At biometric processing of the received results of authentic distinctions on the maintenance of a moisture, fiber, fat and mineral substances between parameters of groups it is not established. Reliable differences are established when comparing the energy value of 1 kg of meat. The animals of the second group contained in 1 kg of meat 2428 MJ of energy, which is 169 MJ more than in animals of the first group at  $P > 0,999$ . When studying the chemical composition of meat of sheep at the age of 8 months it was established that with age, the protein content decreases, and the fat content increases. This is due to the fact that at a younger age there is a more intense formation of muscle tissue, and at an older age there is a more intense deposition of fat in the body.

The difference between the energy value of meat of first and second sheep meat is 120 MJ or 4,5%, with  $P > 0,999$ . It should be noted that the meat of young animals obtained from Kuibyshev rams has a higher energy value.

**Conclusion.** Thus, when carcasses were slaughtered, carcasses were obtained from all the variants of selection in 4 months immediately after beating from mothers weighing 13,2 – 13,9 kg, and at the age of 8 months – 19,3–20,1 kg, with the advantage of having offspring from rams of Kuibyshev meat - wool breed.

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