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# MORPHOLOGICAL COMPOSITION OF BULL MEAT

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**ABSTRACT:** - Like all sectors of the national economy of our country, effective reforms are being carried out in agriculture and animal husbandry, which is considered its main sector. As a result, the industry is developing and contributing to improving the well-being of the population. This article examines the meat productivity of crossbreeds of Black-Ola and Holstein cattle, which are being bred on a large scale in our country.

**KEYWORDS:** Breed, bone, lahm, fat, productivity, genetic, breed, muscle, uncle, sinew, tissue.

#### INTRODUCTION

The researches were conducted in the conditions of "Tashpolatov Bahadir Zhoraniyozovich" farm specializing in cattle breeding, Sherabad district of Surkhandarya region, and crossbred bulls of different genotypes obtained from crossbreeding purebred Black-Ola cows with Holstein bulls.

In the first stage of the scientific production experiment, 3 groups of 10 heads each, newly

born male calves were selected, taking into account the signs of similarity in origin, age, live weight, sex.

The morphological composition of meat is the main indicator that determines its quality. Meat parts are divided into edible parts (muscle and fat parts) and non-edible parts (bones, tendons, tendons and connective tissues). As the age increases, the muscle, fat and bone tissue of the meat changes. Due to

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the slow growth of adipose tissue in young animals, the amount of internal fat is low, but the ratio of bone and muscle tissue is much higher. For this reason, as the bulls grow, the ratio of the tissues in the meat nimts changes.

Depending on the fatness and thinness of the animals, it was determined that the ratio of water, protein, fat and nutritional content of the animal also changed. But when the amount of fatty tissue in the meat exceeds the norm, its digestibility is disturbed, and consequently the taste of the meat decreases (U.N. Nosirov 1974, 2001).

# The results of our research are presented in Table 1 below.

The analysis of the data in the table shows that by dividing the carcass into muscles, bones, fat, tendons and connective tissues, there was a significant difference in the weight of the meat, including the first grade, the first grade, the second grade, and the weight of the bones, by age and between groups. This is an indicator that should be taken into account for making sausage products from them. For example, the amount of lean meat at birth was 5.1 kg in group I animals. According to this indicator, they were 0.3 kg (r<0.05) or 5.9% behind their peers in the II-group and 0.6 kg (r<0.01) or 11.8% behind the III-group. At 6 months of growth, the amount of lean meat in all groups was 4.29, respectively, compared to the indicator at birth; 4.35 and 35.9 times increased. At this age, pure-bred black-ola bulls weighed 1.6 kg (r>0.05) or 7.3% and 3.2 kg (r<0.05) or 14.6% less than their counterparts. At the slaughter of 18 months old, high-quality full meat was obtained from all groups, by this age, muscle tissue has grown rapidly. The amount of lean meat from birth to 18 months in groups is 14.49; 15.00 and 14.81 times increased. This indicator is 3.37 from 6 months to 18 months, respectively; 3.46 and 3.36 respectively. Crossbred animals left behind their purebred equals proportionately by 7.1 kg (r<0.05) or 9.6% and 10.54 kg (r<0.01) or 14.2%.

At the end of the experiment, i.e. at 21 months of age, the analysis of the control slaughter showed that the amount of lean meat was 16.71, respectively, in the groups compared to the birth; increased by 17.41 and 17.33 times. From 18 months to 21 months, the growth of muscle tissue was 1.15 in the groups, respectively; It was equal to 1.16 and 1.17 times. Even at this age, the speed of muscle tissue was decided in favor of crossbred animals of group II and III, and they exceeded their purebred equals (group I) by 8.8 kg (r<0.05) or 10.3% and 13.6 kg. (r<0.01) or

#### Table 1

Morphological composition of bull meat (p=3), (X±Sx)

Grou	Age in months	Chilled and frozen meat, kg		Coefficie nt of					
ps			Minced meat		Oil raw material		Bones and tendons		carnivor ousness
		8	kg	%	kg	%	kg	%	
	At birth 6	7,8±0,2	5,1±	65,4	0,1±0	1,0	2,6±	33,6	2,9
I	18 21	30,9±0,	0,1	70,8	,01	4,0	0,1	25,2	3,9
		6	21,9	71,3	1,2±0	8,0	7,8±	20,7	4,8
		103,6±	±0,2	69,6	,⊥	9,4	0,1	21,0	4,8
		2,9	73,1,		8,3±0		21,4		
		122,4±	6		,9		±0,3		
		3,4	85,2		11,5±		25,7		
			±2,7		1,1		±0,3		
II	At birth 6	8,3±0,2	5,4±	65,6	0,1±0	1,1	2,8±	33,3	2,9
	18 21	33,1±0,	0,1	70,9	,01	4,3	0,1	24,8	4,0
		4	23,5	71,7	1,4±0	7,9	8,2±	20,4	4,9
		112,9±	±0,3	69,0	,01	10,	0,2	20,8	4,8
		4,1	81,0		8,9±0	2	23,0		
		136,2±	±1,2		,7		±0,4		
		3,4	94,0		13,9±		28,3		
			±1,4		0,9		±1,0		
111	At birth	8,6±0,2	5,7±	66,2	0,1±0	1,2	2,8±	32,6	3,1
	10	0	0,1	71,8	,01	4,6	0,1	23,6	4,2
	18	35,0±0,	25,1	71,9	1,6±0	8,1	8,3±	20,0	5,0
	21	3	±0,3		,01		0,4		

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1,9 ±2,1 ,5 4 ±0,7	117,4± 8	84,4 6	69 <i>,</i> 6	9,5±0	10,	23,5	20,0	5,1	
	1,9 ±	±2,1		,5	4	±0,7			
	142,0± 9	98,8	1	14,8±		28,4			
3,1 ±3,4 0,6 ±0,8	3,1	±3,4		0,6		±0,8			

16.0b % left behind. It should be noted that differences in the growth of muscle tissues were also found between crossbred animals. In this case, bulls of group III, whose blood percentage is close to Holstein, when compared to their counterparts of group II, at the age of 6, 18 and 21 months, respectively, 0.3 kg (r>0.05) or 5.6%, 1.6 kg (r <0.05) 6.8%, 3.4 kg (r>0.05) or 4.1 % and 4.8 kg (r>0.05) or 4.2% have achieved an increase.

Thus, the muscle tissue increased significantly from birth to 21 months in absolute terms. But the relative rate at birth was around 65-66% in all groups. In the next 6 and 18 months, this indicator increased to 70-72%. And finally, at the end of the experiment, the intensity of muscle tissue decreased slightly, that's why

by this period, the relative growth in the groups was 69.6%, 69.0 % and 69.6 %, respectively. Because at this age, the rate of growth of fat tissue has increased.

For example, if the fat content of Group I bulls was 0.1 kg at birth, this indicator reached 11.5 kg by 21 months, in other words, they increased their initial indicator by 115.0 times. The dynamics of this indicator were as follows: 12.00 from birth to 6 months; from birth to 18 months 83.00; 6.90 times from 6 months to 18 months and 1.38 times from 18 months to 21 months. The dynamics of growth of internal fat index of animals of II and III groups is 14.00, respectively; 89.00; 139.0; 6.36; 1.56 and 16.00; 95.00; It was equal to 518.00; 5.94; 1.56 times. It can be seen from these data that purebred Black-Ola bulls by the weight of raw fat are equal at birth to peers of the II and III groups in the studied age periods, respectively, and in the next youth 0.2 kg (r>0.01) or 16.7 (r<0.05) and 0.4 kg (r<0.01) or 33.3%; 0.6 kg (r<0.05) or 7.2% and 1.2 kg (r<0.05) or 214.4%; 2.4 kg (r<0.05) or 20.1%; 3.3 kg or 28.7% achieved a low indicator.

As can be seen from the data in the table, the absolute index of bones, tendons, ligaments and connective tissues increased with age (2.6-25.7; 2.8-28.3 and 2.8-28.4 kg), the relative index on the contrary, it decreased with increasing age and 33.6-21.0 in groups, respectively; 33.3-20.8 and 32.6-20.0%. The amount of meat per 1 kg of bone increased in all age groups and was 2.9-4.8, respectively; It was equal to 2.9-4.8 and 3.1-5.1 kg. At the end of the experiment, i.e. at 21 months, 1 kg of bone corresponded to 4.8 kg of meat in groups I and II. This indicator is equal to 5.1 kg in group III. The difference was 0.3 kg (r<0.05) or 7.3 %.

Differences between groups were determined in terms of the amount of muscle tissue, i.e. lean meat, and their location in the body bones of the experimental bulls. It can be seen from the data of this table that the rate of growth of muscle tissue in all months of slaughter increased according to age and reached 5.2 kg in group I. In groups II and III, this indicator was 5.4-94.0 and 5.7-98.8 kg, respectively.

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