



## **FEEDING BLACK AND WHITE BULL CALVES**

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Cattle breeding is a leading branch of animal husbandry which provides the population with dairy and meat products, light industry with leather moreover agriculture with organic fertilizer.

This sector meets the need of the world's population 97% demand for milk and 50% demand for meat. It jibes for Uzbekistan 66% and 65% in turn.

A lot of factors contribute to the fattening bull calves realizing hereditary potential of beef bulls for meat production. The main and most important of those factors is to feed them costly.

Analysing the data of the table it has been cleared that animals were fed with the products which were made by the farm itself and the type and quantity of production changed during the growth process. III group's bull calves ate the most food.

Animals belonging to this group ate 14.0 kg (0.9%) and 22.0 kg (1.4%) of green corn, 5.0 kg (1.5%) and 10.0 kg (3.0%) mangel-wurzel, 196.0 kg (22.2%) and 120.0 kg (12.5%) of haylage, 42.0 kg (4.1%) and 38.0 kg (3.7%) of corn silage and these results are more than the group of I and II animals. In order to meet the demand for animal nutrients, in order to create opportunities to increase their productivity, in the normalization of metabolism, it is important to take into consideration dietary nutrients, energy metabolism, dry matter, crude protein, digestible protein, crude fat, crude klechatka, nitrogen-free extractives (AEM), calcium and phosphorus, etc. The results of our experiments showed that the sensory value of feed consumed by group III bulls was 97.3 a 69.9 feed units, 1265.1 (2.6%) and 902.5 (1.91), respectively, from their peers in groups I and II. MDJ to alternating power; 131.56 and 93.86 kg of dry matter; 17.20 and 12.27 kg of crude protein; 21.6 and 15.2 kg of digestible protein; 4, 0.5 and 2.89 kg of crude oil; 33.4 and 2.89 kg of raw klechatka; 61.73 and 44.04 kg of nitrogen-free extractives; 1.64 and 1.16



kg of calcium; 0.65 and 0.34 kg were high in phosphorus.

It should be mentioned that one of the most important substances involved in the formation of new tissue and organs in the organism of growing bulls is protein. While animals are getting old the mass consumption of protein per living units decreases. When the amount of protein is insufficient the nutrients are not consumed completely as the result growth and development gets slow. It has been found that when the amount of protein exceeds the norm, the appetite of the animals deteriorates and they lag behind the growth. This is because most of the nitrogen is excreted in the feces and urine. In this case, the amount of protein in live weight increases, while fat decreases. In order to prevent such negative consequences, we calculated the quantity of digestible protein in the feeding animals process.

**The amount of consumed feed to the bull calves during the experiment kg  
( in average per head)**

Table 1

Nutrients and their nutritional value	Group CUL P		
	I	II	III
Rich milk	350	350	350
Green alfalfa	3655	3633	3742
Green corn	1536	1528	1550
Haylage	882	958	1078
Corn silage	1028	1032	1070
Mangel-wurzel	355	350	360
Alfalfa hay	1023	1017	1020
Natural grass hay	404	400	395
Cottonseed meal	1460	1480	1480
Mixed fodder	1201	1201	1201
Salt	16,2	16,2	16,2
<b>Nutrition</b>			
Food unit	4012,2	4039,6	4109,5
Alternating power MDJ	48138,75	48501,25	49403,75
Dry stuff	5006,43	5044,13	5137,99
Raw protein	654,69	659,62	671,89
Digestible protein	460,6	466,2	481,7
Crude oil	154,04	155,20	158,09
Crude klechotka	1270,86	1280,43	1304,26



Nitrogen -free extractives( NFE)	2349,17	2366,86	2410,90
Calcium	61,62	62,08	63,24
Phosphorus	14,82	15,13	15,47

The amount of digestible protein in the feed actually consumed by group I bull calves during the experiment was 460.6 kg, which was 116 grams of digestible protein per 11 kg of feed. This figure was 466.2 and 481.7 kg, respectively, in bull calves of groups II and III; 115 and 117 grams. In terms of digestible protein, group III bull calves outperformed their peers in groups I and II by 21.1 kg (4.6%) and 15.5 kg (3.3%), respectively. In organizing the full nutrition of animals, we also paid attention to the amount of exchanged energy, carbohydrates and minerals, as well as the relationship of individual elements to each other in the metabolic process, their absorption and excretion, accumulation in the body. Our data are distinguished by compliance with the standards recommended by AP Kalashnikov and others (1986), R. Khamrokulov, K. Karibaev (1999).

The fodder given to the experimental bull calves differed not only in its quantity but also in its sensory composition. We can see it from the data in table number 2.

**The composition of the ration of experimental bull calves  
(As a percentage of the nutrient content of the food)**

Table 2

Food	Groups		
	I	II	III
Richmilk	2,7	2,7	2,7
Green alfalfa	19,9	19,7	19,9
Green corn	4,3	4,3	4,4
Haylage	8,3	8,8	9,5
Corn silage	5,3	5,3	5,2
Mangel-wurzel	1,6	1,5	1,5
Alfalfa hay	13,7	13,6	13,4
Natural grass hay	4,4	4,3	4,2
Cottonseed meal	12,1	12,3	12,1
Mixed fodder	27,7	27,5	27,2
Total	100,0	100,0	100,0



Consumption of nutrients such as rich milk, mangel-wurzel, alfalfa hay, mixed fodder was almost the same in all groups, while differences were observed in foods such as green alfalfa, green corn, haylage, cottonseed meal. In general, during the experiment, the level of consumption of nutrients included in the diet ranged from 84 to 100%. Consumption of fodder in all groups was 2.7, respectively; 2.7; 2.6 percent dairy products 43.4; 42.3; 43.1 percent blue and succulents 30.2; 30.1; 29.8 percent were coarse foods and 27.7 percent; 27.5; The percentage consisted of concentrated feeds. It can be seen that the main part of the ration consists of green and succulent foods, as these ones are rich in carotene, essential amino acids, easily fermentable carbohydrates, vitamins, macro and micro elements and estrogen.

Concentrated feeds play an essential role in the supply of quality beef from beef cattle. Therefore, we have adjusted the amount of this type of feed in the ration, taking into account the growth period of the animals. Let's say that in terms of nutrition, the total amount of feed consumed in the initial period of growth, ie from birth to 6 months of age, was around 18.0-19.0%, while at the end of the experiment, ie during the final lactation period, it doubled to 36-37%. In general, there were no significant differences in the composition of the ration of bull calves, which indicates the feeding conditions are unique.

Thus, during our experiments, bull calves in holsteinized groups consumed significantly higher nutritional value than their counterparts black and white bull calves. This is an important factor in ensuring their rapid growth and high productivity.

## References

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