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THE DEPENDENCE OF MILK PRODUCTIVITY OF HOLSTEIN COWS ON LIVE WEIGHT IN EXPERIMENTAL

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Abstract: This article provides information on the feeding conditions of red-and-white Holstein cows at the "Abdumalik Ota Vorislar" breeding farm in the Bakhmal district of the Jizzakh region. A group of Holstein cows with different live weights was monitored throughout a lactation period, with systematic recording of milk output and body condition. Statistical analysis revealed a moderate to strong positive correlation between higher live body weight and increased milk yield, though with diminishing returns beyond a certain threshold. The findings suggest that optimal weight management plays a crucial role in maximizing the dairy performance of Holstein cattle. These results can serve as practical guidance for breeders and farm managers seeking to improve herd productivity through targeted feeding strategies and selection protocols.

Key words: cattle farm, red-and-white Holstein, breed, feeding conditions

Introduction

In recent years, many state laws, presidential decrees and resolutions of the Cabinet of Ministers have been adopted in the country regarding animal husbandry. During this period, all branches of animal husbandry have developed steadily, and this process has especially accelerated in recent years. Cattle breeding occupies a leading place in animal husbandry in our republic. Because the main part of the milk produced and consumed by the population is cow's milk.

Research location, materials and methods. The experimental part of the scientific research work was conducted on young red-and-white Holstein cows of the “Abdumalik ota vorislar” breeding farm in the Bakhmal district of the Jizzakh region.

Research results and their analysis: Feeding cows with high-quality and nutritious feed has a positive effect on the quantity and quality of milk. The diet of cows must be balanced in terms of all necessary nutrients and be full-value. Dairy cows should consume a large amount of high-quality roughage and juicy feed in their diet. Because these feeds allow the digestive system to function normally and produce high-quality milk. When switching to high-quality nutritious feeding, the amount of milk increases and its quality improves.

The level of milk coverage of cows is of particular practical importance in increasing milk production efficiency and indicates the effectiveness of using cows in dairy herds. The farm has a uniform feeding throughout the year, and some juicy, concentrated and roughage feeds are grown on the farm itself.

Table 1

Weight of feeds used in one type of feeding of cows, %

№	Food	Groups		
		I	II	III
1	Alfalfa hay	12	11,82	11,7
2	Wheat straw	4,45	4,38	4,33
3	Cotton stalks	7,1	7	6,93
4	Hay	10	9,86	9,75
5	Corn silage	26,48	27,56	28,33
6	Sugar beet	4,02	3,96	3,92
7	Maize groats	20,3	20	19,8
8	Wheat groats	11,85	11,68	11,54
9	Cottonseed meal	3,8	3,74	3,7
	Total	**100**	**100**	**100**

The cows in the experimental groups were fed the same type of feed. When the nutritional value and weight of the cows in the experimental groups were studied during lactation, the cows in the I experimental group consumed 23.6 percent roughage, 40.5 percent juicy feed, 35.9 percent concentrate feed, the cows in the II experimental group consumed 23.2 percent roughage, 41.4 percent juicy feed, 35.4 percent concentrate feed, and the cows in the III experimental group consumed 23.0 percent roughage, 42 percent juicy feed, 35.0 percent concentrate feed. It was noted that there were no significant differences between the groups in the nutritional value and weight of these feeds.

In other words, by further improving the feeding and housing conditions, it is possible to obtain more products from Holstein cows. Research on the study of milk productivity has been conducted for many decades. As a result of the selection work carried out, the milk productivity of cows has increased several times. It is clear that the economic benefits of the imported Holstein breed, especially their live weight and milk productivity, have been greatly improved.

Conclusion

Thus, the results of the research showed that Holstein cows consumed one type of feed with high appetite during lactation, which in turn made it possible to achieve a high level of milk productivity.

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