Spanish Journal of Innovation and INTEGRITY
ISSN: 2792-8268
Volume: 40, Mar-2025
http://sjii.indexedresearch.org

# Payment for Feed with Milk from Simmental Cows

***Narbaeva Mavlida Kosimovna, Kurbanova Shakhnoza Ergashevna, Gapparov Shovxidin Tajievich***
*Samarkand state university of veterinary medicine, animal husbandry and biotechnology*

***Annotation:*** *This article examines the biological characteristics, conditions of maintenance, care and feeding of cows brought from abroad in the private farm "Bobur Murodalievich". In the experimental group, the cows consumed feed with a nutritional value of 4652.2 feed units, which is 339 kg or 5.6% more than in group II. The indicators of metabolic energy, dry matter, crude protein, without nitrogenous extractive substances (NES) in the composition of the feed were also observed.*

*The cows of the 1st group spent 94.7 kg or 2.0% less feed per unit of dairy products during the lactation period, and 102.8 kg or 2.3% less for 4% milk than the cows (daughter) of the 2nd group. The feed consumption per 1 kg of natural fat milk in both groups was 0.98 feed units. The amount of feed used per 1 kg of 4% milk was 1.03 and 1.0 feed units for both groups of cows. Thus, the cows of the second group showed the best results for most indicators.*

***Keywords:*** *milk, dairy and meat, meat, Simmental breed, paratypic factors, feeding, storage, size, cow productivity, milk yield coefficient.*

**Introduction.** Today, humanity is interested in solving many problems. The most important of these problems, the solution of which must be positive, is ensuring food security. It is known that today in many countries of the world people suffer from food shortages. That is why the UN makes many official decisions on this issue of solving the food problem. Livestock farming also plays an important role in solving this problem. Because milk, meat, eggs, honey and other raw materials consumed by people all over the world depend on the development of livestock farming. In the Republic of Uzbekistan, all types of livestock farming are steadily developing in farms of different categories of the population: beekeeping, fish farming, rabbit farming, sheep and goat farming, poultry farming, cattle farming, pig farming, fur industry, horse breeding and camel breeding. It should be noted that the government of the republic pays special attention to the development of cattle farming in the field of livestock farming. If cow's milk makes up more than 83% of the total amount of milk produced in the countries of the world, for comparison, in the Russian Federation this figure is 85%, and in Uzbekistan - 90%.

Among the important planned breeds in our republic, among the black-and-white Holstein breeds, are Simmental breeds from double productivity breeds that are bred in all farms.

The Simmental breed of cattle of the dairy and beef direction is widespread in Europe, Russia and other countries. The color of the Simmental breed is fawn, fawn-motley with white spots, with a white head and tip of the tail, large, strong body structure. Cows weigh 500-600 kg, bulls 850-1000 kg. Young animals quickly gain weight when fed, reaching 400-420 kg at 12 months, 500-600 kg at 18 months.

**Research and methods:** The experimental part of the scientific research was carried out in the conditions of the private farm "Bobur Murodalievich" of the Kamashinsky district of the Kashkadarya region.

For the experiment, 15 first-calf cows of the pure Simmental breed and 15 of their offspring (daughters) were selected based on similarity, live weight, age of calving in cows and genetic origin. In the experiment, the parameters of the Simmental offspring are compared with the parameters of their mothers, acclimatization and productivity indicators are studied.

**Results and discussion.** It should be noted that genetic and paratypic factors affect the full development of the genetic potential of cattle in productivity. If the genetic factor depends on the species, breed, breed of the animal, then paratypic factors are associated with feeding and storage conditions, the effectiveness of breeding and selection work, technological factors. Among paratypic factors, feeding cattle is considered the main one and affects productivity at one level or another by 59%, the influence of breeding and selection work is 22%, the influence of technological factors is 19%. Apparently, the main factor is considered to be the feed factor. [6]

The organization of animal feeding on the basis of complete rations, first of all, has a positive effect on the rate of their growth and development, as well as on the indicators of herd replenishment, determining their future level of productivity. When feeding cattle, not only the quantity of feed is of great importance, but also its quality, which depends on the amount of nutrients in the feed.

Taking this into account, we tried to feed the cows of the experimental groups on the basis of a high-quality and standardized diet. Table -1 below shows the amount of food consumed during the lactation period.

As can be seen from the data in this table, the cows of the experimental group were given 9 different feeds. It should be noted that the bulk of the food consumed was grown on the farm itself. It purchases cotton husk, cotton flour and part of the compound feed from Kamashi DKK LLC.

**Table 1. Feed consumption by cows in experimental groups (average per head) n=15**

| ood and their nutritional value | Groups | | | |
|---|---|---|---|---|
| | I | | II | |
| | kg | Feed unit | kg | Feed unit |
| Alfalfa hay | 1250 | 550 | 1250 | 550 |
| Wheat straw | 1020 | 204 | 1020 | 204 |
| cotton husk | 1164 | 325,92 | 1164 | 325,92 |
| Haylage | 1311 | 458,85 | 1311 | 458,85 |
| Corn silage | 6061 | 1212,2 | 6400 | 1280 |
| Semi-sugar beetroot | 1085 | 184,45 | 1085 | 184,45 |
| Corn peeling | 700 | 931 | 700 | 931 |
| Wheat bran | 428 | 543,56 | 428 | 543,56 |
| Cottonseed meal | 196 | 174,44 | 196 | 174,44 |
| **Total feed unit** | | **4584,4** | | **4652,2** |
| Exchange energy, MJ | 50562,1 | | 51341,8 | |
| Dry matter, g | 6303 | | 6387,8 | |
| Crude protein, g | 799,8 | | 808,2 | |
| Digestible protein, g | 516,4 | | 521,1 | |
| Crude fat, g | 187,6 | | 190,9 | |
| Raw fiber, g | 1887,4 | | 1912,9 | |
| rogen-free extractive substances (NFES), g | 2976,5 | | 3016,8 | |
| Calcium, g | 50,7 | | 51,2 | |
| Phosphorus, g | 16,22 | | 16,36 | |

The nutritional value of the feed consumed by the cows of the experimental group was 4584.4 units of feed for the cows of the 1st group, and for the cows of the 2nd group this figure was 4652.2 units of feed compared to the cows of the 1st experimental group, 67.8 kg or 1.48% consumed more. Metabolic energy, dry mass, crude protein, non-nitrogenous extractive substances (NNE) in feed are also controlled.

Studying the ability of cows to compensate for the feed consumed during lactation by dairy products, the results obtained are presented in the following table.

**Table 2. Features of the coverage of feed consumed by cows of the experimental group with milk. (n = 15)**

| Indicators | Groups | |
|---|---|---|
| | I | II |
| mber of feed units consumed during lactation period, kg | 4584,4 | 4652,2 |
| Amount of milk obtained, kg | 4647,0 | 4741,7 |
| Amount of milk with 4% fat content, kg | 4461,1 | 4563,9 |
| umber of feed units spent per 1 kg of milk produced with natural fat content, kg | 0,98 | 0,98 |
| Number of feed units spent per kg of 4% milk, kg | 1,03 | 1,0 |
| Production per 100 kg of feed units: | | |
| Milk with natural fat content, kg | 101,3 | 101,9 |
| 4% milk, kg | 96,8 | 99,0 |
| Milk fat, kg | 3,74 | 3,88 |
| Milk protein, kg | 3,44 | 3,56 |

The analysis of the table shows that the cows of the 1st experimental group consumed 67.8 kg or 1.4% less feed compared to the cows of the second group. Similarly, the amount of milk produced was 94.7 kg or 2.0% less, and the amount of 4% milk was 102.8 kg or 2.3% less. The amount of feed consumed per 1 kg of milk with natural fat content in the experimental groups was 0.98. The amount of feed consumed per 1 kg of 4% milk was 1.03 and 1.0 feed units for the cows of both groups, respectively. The amount of milk produced per 100 kg of feed units in the groups was 101.3 and 101.9 kg, respectively. The amount of 4% milk, milk fat and milk protein produced per 100 kg of feed units in the experimental groups was, respectively: 96.8 and 99.0; 3.74 and 3.88: 3.44 and 3.56 kg.

**Conclusion.** Thus, the ability to cover the feed consumed by the cows of the experimental group with milk was at the required level. At the same time, the cows of the II group achieved positive indicators compared to the I group. The ability of the cows of the experimental group to compensate for feed with milk was at a satisfactory level. At the same time, the cows of the second group showed higher positive indicators compared to the first group.

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