

## Study of Milk Yield and Composition of Camels

**Eshmuratova S. T.**

Associate Professor of the Karakalpak Institute of Agriculture and Agrotechnology

**Allebekov B. K.**

Assistant at the Karakalpak Institute of Agriculture and Agrotechnology

### Abstract:

This article provides information on the organization of proper feeding of camels, increasing their milk yield and composition.

**Key words:** high-milk fertility, breed, climate, growth, baby camel, milk yield.

**Introduction:** Independent Uzbekistan is gradually developing along the chosen path of peace and sustainable development, the rule of law. He carries out radical reforms in all spheres of the economy aimed at the transition to a market economy, and attaches great importance to the reform of economic production. Camels play a unique role as a means of transportation around the world, especially in desert and semi-desert regions. It is also important that camel milk and shubat from it are medicinal. Even today, shubat is made from camel milk. This finished food product is recognized worldwide as a national treasure. Shubat is useful in the prevention and treatment of diseases of the pancreas and gastrointestinal tract, and even cancer and diabetes.

Thanks to the focus on sustainable development of agriculture, in recent years, it has been possible to preserve the potential for the production of material goods.

To reform agricultural relations in the country, it is necessary to reorganize the structure of agricultural enterprises, to introduce effective technological processes in creating conditions for the further growth of agricultural production. It should be noted that the legal basis of agro-economic relations in the village is being formed, new foundations of the agricultural mechanism are being formed, the principles and system of management of the industry are being studied. In order to provide our people with food, we need to prioritize the development of the agricultural sector in implementing a policy of de-escalation of the economy as a whole, which will eventually fill the counters and fill our tables.

Scientific research in many countries of the world, Central Asia, China, India, Arabia and many other countries have recognized its healing properties in the treatment of people and the study of these works as a scientific and practical analysis emphasizes the importance of the topic.

**Main part:** Foals are weighed 10 days after birth and body weight is determined. The average live weight of a one-humped Turkmen camel is 34 kg, 6.5% of the mother's live weight, the live weight of a Kazakh two-humped camel is 37 kg, 6.4% of the mother's live weight, the live weight of foals obtained from hybrids of normal camels is 6, 3% of the mother's live weight. Because of its important role in improving human health in general, camel milk determines the relevance of scientific work.

According to S. Yusupov, U. Fazilov, A. Gadiev, H. Narzullaev, animal husbandry is also practiced on the desert and steppe pastures of the republic, which occupy 17.5 million hectares. Under these

conditions, two breeds of camels are bred. The one-humped camel is the "Arvana" breed and the Bactrian two-humped camel. In desert continents, camel staple foods (meat, milk, fat) and additional blood, skin and intestinal foods are used for a variety of purposes.

По словам Д.Холмирзаева, П.С.Собирова, Ж.Исаева, условия Кызылкумов и Аральского моря имеют быстро меняющиеся климатические и экологические условия, потомство верблюдов, одногорбых (dromedary) породы "Арвана", двугорбых (бактрийских) казахских пород а также гибридных (нормальных) верблюдов в этих районах и их производительность немного снизилась в последнее время. With this in mind, to improve the quality and productivity of single-humped and double-humped camels bred in these regions, develop processing technology, increase the number of heads, improve feeding and care methods in accordance with zootechnical rules, research is needed to ensure that breeding and selection work carried out properly and on a regular basis. Studies of milk yield of one-humped breeds "Arvana" (Turkmen), two-humped Kazakh and hybrid (normal) camels under the conditions of Kyzylkum show that one-humped camels have a much higher milk yield than camels of other breeds, in general, it is recommended to breed one-humped camels to increase their milk yield. If we estimate the milk yield of the one-humped dromedary of the Turkmen breed "Arvana", the two-humped Bactrian Kazakh breed and normal camels at the age of 11 months, then the milk yield of the one-humped camel is 1002 liters. This means that one-humped camels produced 1402 liters more milk than two-humped camels.

#### **Description of one-humped camels (dromedars) of the Turkmen Arvana breed**

**One humped dromedar** Turkmen camels of the "Arvany" breed have been created for many years by the efforts of local residents. Basically, it is bred for milk production and its processing, preparation of shubat and meeting the needs of people. Meat and wool products are also produced. Unique carrying a specific load. Like the one-humped camel that walks with steps, the Arvana breed is well adapted to dry hot climates. It also has a high milk yield and rapid maturation. This breed was created with minimal human intervention and, according to many scientific studies, is a gift of nature from one-humped camels. During lamination, an average of 1500 to 2000 liters of milk was obtained, and 700 liters of milk were obtained from two-humped Kazakh breeds of camels. Thus, it was found that one-humped camels produce 2.5 times more milk than two-humped camels. This breed is characterized by a high milk yield. This breed is found only in Turkmenistan, Uzbekistan, CIS countries and far abroad, including Iran, Arabia and other countries. This breed serves as a caravan. One-humped camels are heat-resistant and frost-resistant. It is important to consider the important conditions for breeding this breed. They do not withstand severe frosts in Kazakhstan and Siberia. Therefore, it is not advisable to meet them in these places. Adapted to the hot climate of Central Asia and Africa. Bones of one humped lungs. The skin is much thinner than that of the bactrian. The coat is short and sparse. The Arvana breed matures faster than the two-humped camel, but the gestation period is 20 days shorter than that of the two-humped camel. The structure of the exterior of the one-humped camel is partially different from the structure of the two-humped camel. The head is oblong, the forehead is narrow, the cheekbones are long, oblong. The lips are thin and mobile. Has an upper lip. The nose is long and mobile. Its muscles are well developed and strong. The body is relatively small, with a deep, thick chest. The thighs of good fat camels are round. Height 30-40 cm. The Arvana breed is an animal that tolerates drought and food shortages. The growth of Arvana camels found in Uzbekistan is 179.1 centimeters in males, 171.4 centimeters in females, oblique body length 154.3 centimeters in males, 149 centimeters in females, chest girth 198 centimeters, 188 centimeters in females, cadotic circumference 21 centimeters in males, 18.9 centimeters in females, when breeding one-humped camels, care must be taken to preserve them. They need to be preserved during dry and hot times, during cold and rainy days. For a camel, it is necessary to allocate 5-6 square meters, and for two foals - 2.5-3 square meters. The Arvana breed is

distinguished by a high milk yield, the average daily milk yield is from 10-13 liters to 1800 liters. Milk yield 4300 liters. The fat content of milk is 4.5%. Large camels give 4-4.5 kg of wool from males and 2 kg from females. The average live weight of males is 550 kg. The best - up to 850 kg. Females weigh 450 kg. The best - up to 850 kg. Females weigh 450 kg, and the best ones weigh up to 750 kg.

According to E. Turumbetov and others, according to the composition of camel milk in terms of dryness, substance and fat content in Kazakhstan, the Bactrian Kazakh breed includes Keznar F5d and Keznar F4d, and the least in the Turkic breed of camels "Arvana". From May to November, it was found that the milk retained its regularity in the composition.

(According to Z. Musaev and others)

Table 1

Indicators	In pasture conditions			Indoors		
	in the spring	In the summer	in the fall	in the spring	in the summer	in the fall
Dry matter in%	12,7±0.1	12.2±0.09	13.5±0.1	12.1±0.1	11.5±0.09	12
Acidity, T	228±0.4	20.9±0.4	21.8±0.4	20.7±0.4	20.7±0.04	21
Density, A	1.031	1.032	1.031	1.032	1.033	22

According to A. Alibaev, D. Baimukanov and others, the cytogenetic structure of two-humped (Bactrian) Kyrgyz camel breeds depends on their species, origin and breed. The chemical composition of milk of one-humped camels (dromedaries) was analyzed and a comparison was made of the chemical composition of milk of camels of the third generation, the results are presented in table 2. (According to D. Kholmiraev and others).

The chemical composition of camel milk

Table 2

Content in percentage	Camel type and hybrid
	One humped
Water	86,45
Dry matter	13,55
Fat	4,4
Protein	3,6
Sugar	4,8
Ash	0,75
Density	1,028
Acidity	18
Nutrition kcal	556,8

The study of udder development is also an important factor in assessing camel milk yield. Knowledge of the influence of age, milking period, milking regimen and storage conditions on the anatomical and morphological characteristics of the camel's udder, as well as a deeper scientific study of camel milking technology to meet modern requirements allows the effective use of products obtained from them.

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