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## **STUDYING THE COMPOSITION, HEALING PROPERTIES AND DIVERSITY OF COW, GOAT, AND CAMEL MILK**

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### **ABSTRACT**

This article talks about the chemical composition of cow, goat, and camel milk and their diversity. Milk and milk products are very important products for human health. The use of the milk of such animals in the preparation of secondary products made from milk, i.e. ice cream, increases the usefulness, caloric value, and healing properties of our product.

### **KEYWORDS**

Vitamins, minerals, amino acids, salts, immunity, calories, eczema, itching, asthma, cardiovascular diseases.

### **INTRODUCTION**

Milk and milk products are distinguished from all other food products by their healing properties. Cow's milk is the most popular type among other mammals. In some countries, milk from camels, sheep and llamas is also used for consumption. Cow's milk is very rich in A, E, K, C, D, V, RR, group vitamins, minerals and amino acids. Milk fat is the most complete of all animal fats, and milk

sugar aids in digestion. Salts, calcium and phosphorus strengthen bones [1-8]. Milk is especially useful for children - it supports the full growth and development of children. Daily consumption of milk strengthens the cardiovascular system and reduces the risk of heart attack and stroke by 37%. Cow's milk is explained by the high amount of potassium necessary to support the

elasticity of blood vessels. Milk also helps to lower arterial blood pressure, so it is a necessary product for people suffering from hypertension [9-27].

Benefits of cow's milk.

1. Helps increase muscle mass.

The product is rich in casein (a protein that is quickly and easily absorbed compared to other animal fats). A glass of milk consumed after physical exercise replenishes the supply of nutrients necessary for increasing muscle mass, and at the same time gives a feeling of satiety.

2. Increases immunity and protects against infections.

Milk stimulates the production of immunoglobulins, so it is recommended to drink milk in cases of frequent colds and viral diseases. Steamed milk also contains a natural antimicrobial agent - laotianin.

3. It helps with stomach diseases.

The substances contained in cow's milk participate in the regeneration processes of the stomach and intestinal mucosa, at the same time, this product has a protective effect. Milk also relieves heartburn, because it contains metals that easily react with hydrochloric acid and quickly extinguish it [28-39].

4. Beneficial for the brain and nervous system

Milk has a calming effect on the nervous system, and helps fight insomnia. It is not for nothing that warm milk with honey is considered the most popular folk remedy against insomnia.

5. Strengthens bones.

The drink has a lot of calcium ions, but less vitamin D, which helps to absorb it. To solve this problem, some

manufacturers sell milk specially enriched with vitamin D.

The energy value of 100 g (100 ml = 103 g) of cow's milk is 60 kcal or 250 kJ. In terms of calories, 1 litre of milk is about 370 g of beef or 700 g of potatoes.

In an average of 100 g of cow's milk drink:

- proteins - 3.2 g;

- fat- 3.25 g;

- carbohydrates - 5.2 g;

- water - 88 g;

- dry matter - 12.5%.

Composition and useful properties of goat's milk.

Goat's milk is closer to the mother's milk in terms of its chemical composition. It is rich in elements necessary for life, such as calcium, magnesium, iron, manganese, and potassium. It is especially rich in fat and proteins, which are quickly and easily digested by the body. The fat grains are twice as small as those of cow's milk, and the proteins are fine. Therefore, goat's milk can be given to babies. Goat's milk is used in the treatment of rickets, liver, pulmonary tuberculosis, and allergic diseases, and it gives good results. Because goat's milk is alkaline, it is a good remedy for people with excess stomach acid. People suffering from eczema, itching, and asthma are also recommended to drink goat's milk. It is also used to relieve pain in the joints and to remove gallstones. Goat's milk should be consumed only after cooking. It can be used to make delicious yoghurt, soup, kurut and ice creams. Also, it is widely used at home to prevent jaundice and beautify the complexion when taken with suga [40-48]r.

On average, 100 grams of goat's milk is equal to 67.7 kcal. And the amount of fat in it can vary from 4 to 9 grams per 100 grams. However, since the fats in it are, if I may say so, finely dispersed, it is better absorbed and converted into energy without being stored in fat. Therefore, many people use goat's milk to lose weight.

Nutritional value of goat milk per 100 g

- fats - 4.2 g;

- proteins - 3 g;

- carbohydrates - 4.5 g

The healing properties of camel milk.

Camel milk also contains amino acids that activate the formation of red blood cells, so it is recommended to drink camel milk for patients with anaemia. Under the influence of phosphorus and calcium, regeneration is activated and bone tissues are strengthened. Camel milk contains a large amount of ascorbic acid, which strengthens the immune system and increases the protective functions of the body. Due to the presence of vitamin D, this product reduces the risk of osteoporosis and rickets in children. Also, camel milk contains B vitamins that normalize the activity of the nervous system and help to get rid of stress, insomnia and fatigue. Due to its high sodium content, camel milk quenches thirst very well, which is especially important when crossing deserts. This product also contains cobalt, which is part of the body's cellular enzymes. Potassium improves the functioning of the cardiovascular system. It has been scientifically proven that camel milk can help in the treatment of cancer and leukaemia. Perhaps this is due to the presence of substances that remove compounds from the body that cause the development of cancer. In addition, such milk is used during the treatment of tuberculosis, stomach ulcers and some other problems related to

the gastrointestinal tract. It is recommended to use this product for problems related to the pancreas, liver and intestines [49-58].

It is possible to prepare masks based on camel milk that helps the skin to withstand the negative effects of sunlight. In addition, this milk helps to overcome many skin diseases. This product has moisturizing, nourishing and anti-ageing properties.

Many beauticians use camel milk for their faces. It helps to prevent the appearance of wrinkles and restore skin tension.

Camel milk is widely used in various baking recipes. This product is very popular in Eastern countries. Kazakhs make kimiz from this milk. Camel milk is also used in European countries, for example, in Switzerland, camel milk is part of chocolate. Cocoa and ice cream are also made based on this product. Shubat, a Kazakh dish based on camel milk, is also very popular.

For an average of 100 gr of camel milk.

Calories: 82 kcal.

Proteins: 4 g.

Fat: 5.1 g.

Carbohydrates: 4.9 g.

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