### EFFECTS OF ICE CREAM CONCENTRATION WITH COCOA ON HUMAN HEALTH

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#### **Abstract**

In this article we will talk about positive and negative effects of enriching the composition of ice cream with cocoa on human health.

**Keywords**: composition of kakao, calories, complex of vitamin, minerals, caffeine, to enrich, chemical composition, proteins.

#### Introduction

Today, providing the population with quality food is one of the most important tasks facing the world. The composition of food is enriched with various minerals, vitamins, enzymes, various extracts for appetite.

One of the products made from milk processing is ice cream. The presence of proteins, vitamins, enzymes, organic acids, carbohydrates, micro and macronutrients in milk, as well as organic substances necessary for a number of people, further enhances the beneficial properties of ice cream. There are several types of ice cream, mainly milk, cream and ice cream. Milk ice cream is made with or without the addition of flavorings to milk and sugar. Milk, milk-vanilla, milk-nut, milk-coffee, milk-berry ice cream are on sale.

#### **Materials and Methods**

Advantages of enriching ice cream with cocoa The presence of vitamins PP, B1, B2, B6, Ca, K, Mg, Na, Fe, Zn, proteins, fats, carbohydrates, organic acids, starch in cocoa increases the usefulness of ice cream. The use of eggs, saturated sugar, butter, vanilla plate, sea salt, as well as additional cocoa in the production of ice cream increases the energy value, useful properties and positive effects of ice cream on human health.

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The quality of ice cream is assessed by its taste, aroma, consistency, color, taste, appearance and packaging. The taste of ice cream should be normal and the oil should be tasteless and odorless. The structure and consistency should be homogeneous, smooth, free of sand particles and ice crystals.

Ice cream is not only a sweet and savory food, but if prepared properly, it is a very useful dairy product, ice cream has the ability to bring calcium into the body, which in turn strengthens bones and promotes their growth. activates. That's why ice cream is good for people of all ages.

Cocoa is commonly used in the manufacture of ice cream blocks, rojoks, as well as chocolate-coated briquettes. To do this, it is mixed with cocoa butter - for example, cocoa butter - to cover with chocolate to improve elasticity and consistency.

Cocoa is native to South America and Africa. The ancient Mayan tribes equated cocoa products with gold and also served as money. The main cocoa beans for the production of cocoa powder are supplied by African countries. Ice cream is a favorite food of people of all ages. The benefits of fortifying ice cream with cocoa are very high. Scientists have proven that cocoa is very beneficial for the elderly. It not only regulates blood pressure, but also has a positive effect on blood circulation in the brain, which in turn helps to develop consciousness and strengthen memory. The reason cocoa lowers blood pressure is the polyphenols it contains. In addition, the endorphins in the product help to improve mood and improve performance. The serotonin in the powder helps fight stress, and polyphenols improve the activity of not only the brain but also the cardiovascular system and the elasticity of blood vessels, reducing harmful cholesterol. Cocoa also has the ability to actively restore muscle after various sports and physical activity, prevent the development of stroke and heart attack, diabetes, ulcers and even cancer. In medicine, cocoa is also a key tool in accelerating the healing process of various wounds, increasing the rejuvenation of the skin and the use of masks that are useful for facial skin.

#### **Results and Discussion**

Scientists have found that there is a direct correlation between the number of Nobel laureates in the Scandinavian countries and the amount of cocoa they consume. As a result of a group of people over the age of 60 consuming cocoa regularly for four weeks, the presence of flavonoids in cocoa had a positive effect on the functioning of the circulatory system and increased the rate of brain

activity. The main purpose of adding cocoa to ice cream is to have a more positive effect on human health. Ice cream is a favorite dessert for people of all ages. But it also has its age-related consumption characteristics. The following table shows the amount of substances in ice cream, their energy values, as well as the daily requirement of the human body for vitamins in ice cream.

Table 1. The energy values of ice cream

Vitamins	Chemical name	Content per 100 grams	Daily need %
Vitamin A	Retinol equivalents	62 mg	6 %
Vitamin B <sub>1</sub>	Tiamin	0.03 mg	2 %
Vitamin B <sub>2</sub>	Riboflavin	0.2mg	11 %
Vitamin C	Ascorbic acid	0.6 mg	1 %
Vitamin D	Calciferol	0.02 mg	0 %
Vitamin E	Tocopherol	0.3 mg	3 %
Vitamin PP	Niacin	0.7 mg	4 %
Vitamin B <sub>4</sub>	Choline	9.1 mg	2 %
Vitamin B <sub>5</sub>	Pentatonic acid	0.35 mg	7 %

Ice cream is a cool dessert that is especially popular in the hot summer months. But in addition to the benefits of cocoa in ice cream, there are also disadvantages. It is also important not to overdose on cocoa. Consumption of cocoa is especially recommended for children under three years of age, pregnant women, lactating women, people with diabetes, people with diseases such as rheumatism, arthritis, osteoporosis. This is because the presence of caffeine, theobromine, and phenyl ethylamine in cocoa can have a negative impact on the health of such patients as a result of over-consumption. But that doesn't mean such people should give up cocoa products. Instead, they should follow the norm when consuming this product.

When we enrich the ice cream with cocoa, along with its beneficial properties, its energy value also increases. The energy value of ice cream enriched with 100 g of cocoa is 300 kcal. The following substances play an important role in the formation of this energy.

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Table 2. The energy value of ice cream

Proteins	24,3 gram	
Fats	15 gram	
Carbohydrates	10 gram	
Alimentary fiber	35.5 gram	
Organic acids	4.0 gram	
Water	5 gram	
Monosaccharides	2 gram	
Starch	8.2 gram	

Ice cream is one of the by-products of dairy products in the daily diet. In addition to calcium, ice cream contains potassium, iron, phosphorus and magnesium, as well as a number of vitamins B, A, PP, E. And ice cream is a high-calorie product that quickly replenishes lost energy. Production and application of cocoa ice cream will help to improve the health of the population.

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