



Soy milk: who can and should drink a lactose-free drink

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Abstract. The article discusses the main properties of soy milk and its effect on the human body. A systematic review of modern specialized literature and relevant scientific data was carried out. The chemical composition and nutritional value of the product are indicated, the use of soy milk in various types of medicine and the effectiveness of its use in various diseases are considered. The potentially adverse effects of soy milk on the human body under certain medical conditions and diseases are analyzed separately.

Key words: soy milk , beneficial properties, contraindications, composition, calorie content

It is a healthy vegan product that was created as a waste product in the manufacture of tofu. It is made from soybeans, rich in isoflavones, so it does not contain lactose. The drink is not harmful to men, women, children and protects against many diseases. Comparing all types of plant milk, we can say that it is most similar to cow's milk in composition, but contains little fat.

The calorie content of soy milk on average ranges from 38–41 kcal. The exact nutritional value depends on the method of production (adding sugar, etc.). The natural drink is low in sugar and contains all nine essential amino acids. One cup provides an average of 2.7 micrograms of vitamin B12, which is more than the recommended 2.4 micrograms per day. Also, the drink is an excellent source of vitamin A, potassium, folate, choline. Many manufacturers enrich the product with [vitamin D](#), calcium, iodine. ^[12]

Top 5 benefits of soy milk and reasons to add it to your diet

1. Promotes brain function

Unfortified soy milk contains polyunsaturated and monounsaturated fatty acids. Useful components reduce the risk of developing dementia, Alzheimer's disease. The effect of the product on these diseases is still being studied, but soy is still considered one of the best plant sources of omega-3. [3]

2. Supports heart health

The non-dairy drink has a cardioprotective effect thanks to the right fats. The product helps to lower blood pressure, normalizes the pulse due to isoflavones, saponins, lecithin and potassium. Its use is associated with lower blood cholesterol levels. [4, 5, 6]

3. Reduces the symptoms of menopause, prevents menopausal syndrome

During menopause, estrogen production decreases, which increases the risk of cardiovascular disease, diabetes, and obesity. Women during this period are more prone to insomnia, depression, mood swings and other psychological disorders. Regular consumption of soy milk can help relieve postmenopausal symptoms as soy contains isoflavones known as phytoestrogens, which are estrogen substitutes. They reduce hot flashes and other unpleasant conditions. [7, 8, 9]

4. Protects Against Cancer

Several studies have confirmed the link between soy food consumption and cancer prevention. For example, a low incidence of cancer is observed in Asian countries, where soy is part of the regular diet. Scientists attributed this effect to the presence of the phenolic compound genistein. It acts as a chemotherapeutic component against various forms of cancer, blocks metastasis. Genistein is well combined with anticancer drugs and improves the effect of traditional therapy. [10, 11, 12]

5. Supports Bone Health

Osteoporosis is a disease associated with age and hormones. However, older women in Asia are less likely to suffer hip fractures than women in Europe. Researchers have found that consumption of soy-based products reduces the risk of fractures. The phytoestrogen contained in beans accelerates the absorption of calcium by the body, prevents bone loss, and has an antioxidant effect. Even more beneficial to the musculoskeletal system is soy milk, fortified with calcium and vitamin D. [13]

Is it safe to drink soy milk: contraindications and harm

Soy has gotten a bad rap, but the information that it increases the risk of cancer is not true. Rumors appeared after animal experiments: the consumption of high doses of isoflavones by rodents increased the likelihood of developing a breast tumor. However, representatives of the American Cancer Society explained and proved that rodents process soy differently than humans. In addition, they confirmed that eating soy at an early age reduces the risk of getting cancer. [fourteen]

Soy milk is dangerous in some cases:

- with an allergy to soy;
- with problems with the thyroid gland - it can interfere with the work of the organ.

In practice, the effect of soy isoflavones on the thyroid gland is minimal and in the presence of diseases, it is enough to minimize the consumption of soy in any form. Also, as long as you consume enough iodine, soy milk does not affect thyroid function. [fifteen]

Soy products contain oxalates, so people with oxalate kidney stones should avoid excessive consumption of soy products. However, studies show that they contain small amounts of oxalates, phytates and may be beneficial for such patients.

It is worth considering that phytates and trypsin inhibitors interfere with the absorption of nutrients from beans. Pre-soaking before cooking helps to get rid of them. If you still have concerns about a drink, talk to your doctor, registered dietitian, or nutritionist about them.

How much soy milk per day is safe to drink?

The American Institute for Cancer Research recommends a relatively moderate soy intake of up to three servings per day. For example, a day is enough to eat a dish of tofu and drink a cup of soy milk.

How to Make Soy Milk at Home: Easy Recipe and Nutrition Tips

A lactose-free drink can be found in grocery stores, restaurants. Not sure how to choose healthy soy milk? It is better to choose organic unsweetened versions fortified with vitamins and minerals. Unsweetened vanilla is ideal for adding flavor and aroma.

You can make your own soy milk at home:

- soak 1/2 cup beans in 2-3 cups of water overnight
- in the morning, drain the water and rinse thoroughly, removing the skin;
- combine soybeans and 4 cups of clean water in a blender bowl;
- beat the mixture with a blender and strain;
- boil the milk in a heavy-bottomed saucepan, keeping it simmering for 20 minutes and stirring frequently (an important step since soy should not be eaten raw);
- refrigerate liquid and store up to 4 days.

Soy milk can be used in any recipe other than regular cow milk: smoothies, milkshake, coffee, cereal, baked goods, béchamel sauce, etc. There is a slight difference in taste, but people get used to it quickly. It keeps for a long time at room temperature and eliminates waste caused by food spoilage.

Expert comment

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If you suffer from lactose intolerance, are concerned about the environment, or don't like the taste of regular lactose products, you can use soy milk as an alternative. It has many benefits - nutritional profile, antioxidant and anti-inflammatory properties. The drink is suitable for those who suffer from frequent candidiasis, skin rashes and want to get rid of obesity while maintaining muscle mass. It will be a worthy addition to any diet and will protect your heart.

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