



Nutrition for bone health - healthy and dangerous foods, recommendations

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Abstract. The main frame of our body is the skeleton, which consists of bones connected by **joints** . The skeleton performs a protective function, and together with the muscles it participates in human movement.

Bones are divided into 4 types: *tubular, short, flat and mixed* .

Examples of tubular bones are the humerus and femur, short bones are the bones of the foot, flat bones are the scapula, and mixed bones are the bones of the skull. Inside the bones is bone marrow. And the bones themselves consist of solid matter and mineral salts.

In total, there are about 200 bones in the human body, which can withstand a load of 160 kg per 1 centimeter square of their surface.

Key words: bones, description, healthy products, dangerous products, recommendations, folk remedies

General recommendations

The brain needs adequate nutrition to function actively. It is advisable to exclude harmful chemicals and preservatives from the diet.

Research involving over 1,000,000 students showed the following results. Students whose lunches did not include artificial flavors, colors and preservatives scored 14% better on IQ tests than students who ate the additives.

Compliance with work and rest schedules, proper nutrition and activity, and timely prevention of disorders will preserve brain health for many years.

The main enemy for the health of the skeletal system is osteoporosis, which has recently become significantly younger. Even children get sick from it.

What can we say about women who, during pregnancy, spend **calcium** on building the child's skeleton? They have osteoporosis most often! And all because the body does not receive sufficient nutritional replacement for normal functioning.

In order for the musculoskeletal system to function normally, water-salt metabolism in the body should be normalized. This is facilitated by providing the body with adequate nutrition and sufficient fluid with moderate consumption of table **salt** .

The human body is 60% water, so water, **juices** and liquid food should be present in sufficient quantities daily in the diet.

Most of the beneficial mineral salts that are simply necessary for skeletal strength are found in simple and natural foods (vegetables, fruits, **eggs** and herbs).

The Healthiest Foods for Bones

In order to maintain the health of the skeletal system, vitamins and microelements such as **calcium** , vitamin D3, **copper are needed** [1], **manganese** [2], **zinc** [3], **magnesium** [4] and **phosphorus** [5].

Products that contain them:

1. **Milk and dairy products** are the best sources of calcium [6]. They strengthen bones and teeth. Moreover, if you need to drink at least a liter of milk, then you should eat 120 - 150 grams of hard cheese.
2. Leafy vegetables and greens. For those for whom dairy products are not suitable for certain conditions, other sources of organic calcium may be suitable. This is **celery** [7], **spinach** [8], kale. In addition to calcium, they contain essential microelements such as potassium [9], iron [10], zinc, and magnesium. In addition, they are rich in vitamins B [11], **E** [12] and **RR** .
3. **Sardines , salmon , tuna** . In order for calcium to be absorbed normally, the presence of **vitamin D is necessary**. [13], which fish is so rich in. In order to avoid osteoporosis, it is enough to eat 50 grams of them per day. At the same time, canned food should not be consumed! It's better to cook it yourself.
4. **Liver** . Rich in copper, **vitamin A** [14], as well as vitamin D3, which helps improve the absorption of phosphorus and calcium.
5. **Flounder , capelin , pollock , squid** . A source of organic phosphorus, due to which calcium is absorbed.
6. **Pumpkin seeds , buckwheat** [15], **peanuts** . A reliable source of zinc, which, together with phosphorus, is responsible for the absorption of calcium and vitamin D.
7. **Nuts** [16], millet, **seaweed , bran , prunes** . A source of magnesium, which is responsible for the functioning of osteocytes.
8. **Apricot** . [17] Rich in potassium, which is responsible for the normal functioning of the muscles that control the skeletal system.
9. **Beet** [18], **spinach , porcini mushrooms** [19]. All of these products contain this essential **antioxidant**. [20], like manganese. It is thanks to it that normal growth and development of osteochondral tissue occurs.
10. **Pumpkin** [21], **bell pepper** [22], **persimmon** [23], **tomatoes** [24]. They contain such an important product for bones as beta-carotene, which is a precursor of provitamin A.
11. Citrus. They contain vitamin C [25], which has a beneficial effect on bone health. Vitamin C in the human body converts calcium from an inorganic state to an organic one.

Folk remedies for strengthening bones

To strengthen bones and quickly heal them after damage, the following methods are used:

- Freshly squeezed **carrot** juice [26] (100-200 grams several times a day);
- Juice from **wheat** leaves;

- **Comfrey tea (uses roots and leaves).**

Dangerous foods for bones

Foods that remove calcium from bones:

- **Coffee** and tea;
- carbonated drinks (Coca- **Cola** , for example, contains phosphoric acid, which is very harmful to bones)

Foods that block calcium absorption

- **Oatmeal** [27] – contains phytic acid.
- **Alcohol** [28] .

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