



## Nutrition for bone marrow - useful and dangerous foods, recommendations

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**Abstract.** Bone marrow is the most important organ of the human hematopoietic system. It is located inside tubular, flat and short bones. Responsible for the process of creating new blood cells to replace dead ones. He is also responsible for immunity.

Bone marrow is the only organ that contains a large number of stem cells. When a particular organ is damaged, stem cells are sent to the site of the lesion and differentiate into cells of that organ.

Unfortunately, scientists have not yet been able to unravel all the secrets of stem cells. But someday, perhaps, this will happen, which will increase the life expectancy of people, and maybe even lead to their immortality.

**Key words:** bone marrow, description, healthy products, dangerous products, recommendations, folk remedies

### This is interesting:

- Bone marrow, located in the bones of an adult, has an approximate mass of 2600 grams.
- Over the course of 70 years, the bone marrow produces 650 kilograms of red blood cells and 1 ton of white blood cells.

### Healthy foods for bone marrow

1. **Fatty fish varieties** . Due to the content of essential fatty acids, fish is one of the most necessary foods for the normal functioning of the bone marrow. This is due to the fact that these acids are responsible for the production of stem cells.
2. **Walnuts** . [1] Due to the fact that nuts contain substances such as iodine [2], iron, cobalt [3], copper [4], manganese [5] and zinc [6], they are a very important product for bone health. brain In addition, the polyunsaturated fatty acids they contain are responsible for the function of blood formation.
3. **Chicken eggs** . [7] Eggs are a source of lutein, essential for bone marrow, which is responsible for the regeneration of brain cells. In addition, lutein prevents blood clots.

4. **Chicken meat** . Rich in proteins [8], it is a source of selenium [9] and B vitamins [10]. Due to its characteristics, it is a necessary product for the structuring of brain cells.
5. **Black chocolate** . Stimulates bone marrow activity. Activates cells, dilates blood vessels, and is responsible for providing the bone marrow with oxygen.
6. **Carrot** . [11] Thanks to the carotene it contains, carrots protect brain cells from destruction and also slow down the aging process of the entire body.
7. **Sea kale** . Contains a large amount of iodine, which is an active participant in the production of stem cells and their further differentiation.
8. **Spinach** . [12] Thanks to the vitamins, microelements and antioxidants contained in spinach [13], it is an active protector of bone marrow cells from degeneration.
9. **Avocado** . [14] It has an anticholesterol effect on blood vessels and supplies the bone marrow with nutrients and oxygen.
10. **Peanut** . Contains arachidonic acid, which is involved in the formation of new brain cells to replace dead ones.

### General recommendations

For the active functioning of the bone marrow, adequate nutrition is necessary. It is advisable to exclude all harmful substances and preservatives from the diet.

In addition, you should lead an active lifestyle, which will provide your brain cells with enough oxygen.

Avoid hypothermia, which may weaken the immune system and disrupt the functioning of stem cells.

### Folk remedies for restoring bone marrow functions

In order to normalize bone marrow function, you should consume the following mixture once a week:

- Walnuts – 3 pcs.
- Avocado is a medium-sized fruit.
- Carrots – 20g.
- Peanuts – 5 grains.
- Spinach greens – 20g.
- Fatty fish meat (boiled) – 120g.

Grind all ingredients and mix in a blender. Use during the day.

### Harmful foods for bone marrow

- **Alcohol** [15] . By causing vasospasm, they lead to disruption of the nutrition of bone marrow cells. And the result of this can be irreversible processes in all organs, due to problems with regeneration by stem cells.
- **Salt** . Causes fluid retention in the body. As a result of this, there is an increase in blood pressure, which can cause hemorrhage and compression of brain structures.
- **Fat meat** . Increases cholesterol levels [16], which can have a negative effect on the blood vessels that feed the bone marrow.
- **Sausages, crackers, drinks, shelf-stable products** . Contain substances harmful to the normal functioning of the bone marrow.

## Literature

1. Eliseeva, T., & Yampolsky, A. (2019). Walnut (lat. Jùglans régia). *Journal of Healthy Eating and Dietetics* , 4 (10), 2-14. DOI: 10.59316/.vi10.53
2. Tkacheva, N., & Eliseeva, T. (2021). Iodine (I) – value for the body and health + 30 best sources. *Journal of Healthy Eating and Dietetics* , 4 (18), 75-84. DOI: 10.59316/.vi18.149
3. Shelestun, A., & Eliseeva, T. (2022). Cobalt (Co) – value for the body and health where it is contained. *Journal of Healthy Eating and Dietetics* , 2 (20), 83-90. DOI: 10.59316/.vi20.183
4. Shelestun, A., & Eliseeva, T. (2022). Copper (Cu) – value for the body and health + 30 best sources. *Journal of Healthy Eating and Dietetics* , 1 (19), 68-76. DOI: 10.59316/.vi19.162
5. Eliseeva, T. (2022). Manganese (Mn) – value for the body and health + 25 best sources. *Journal of Healthy Eating and Dietetics* , 1 (19), 92-101. DOI: 10.59316/.vi19.166
6. Tkacheva, N., & Eliseeva, T. (2022). Zinc (Zn) – value for the body and health + 30 best sources. *Journal of Healthy Eating and Dietetics* , 1 (19), 5-15. DOI: 10.59316/.vi19.152
7. Tarantul, A., & Eliseeva, T. (2020). Chicken egg. *Journal of Healthy Eating and Dietetics* , (11), 51-66. DOI: 10.59316/.vi11.65
8. Eliseeva, T., & Shelestun, A. (2018). Protein - description, benefits, effect on the body and the best sources. *Journal of Healthy Eating and Dietetics* , 1(7). DOI: 10.59316/j.edpl.2018.7.6
9. Eliseeva, T. (2022). Selenium (Se) – value for the body and health + 30 best sources. *Journal of Healthy Eating and Dietetics* , 1 (19), 55-64. DOI: 10.59316/.vi19.160
10. Eliseeva, T., & Mironenko, A. (2019). B vitamins – description, benefits, effects on the body and the best sources. *Journal of Healthy Eating and Dietetics* , 2 (8), 74-87. DOI: 10.59316/. vi 8.45
11. Eliseeva, T., & Tarantul, A. (2018). Carrot (lat. Daucus carota subsp. sativus). *Journal of Healthy Eating and Dietetics* , 4 (6), 43-55. DOI: 10.59316/.vi6.31
12. Tarantul, A., & Eliseeva, T. (2020). Spinach (lat. Spinacia oleracea). *Journal of Healthy Eating and Dietetics* , (12), 48-59. DOI: 10.59316/.vi12.74
13. Eliseeva, T., & Tkacheva, N. (2019). Antioxidants - description, benefits, effects on the body and the best sources. *Journal of Healthy Eating and Dietetics* , (7), DOI: 10.59316/j.edpl.2018.7.12
14. Eliseeva, T., & Yampolsky, A. (2019). Avocado (lat. Persēa americana). *Journal of Healthy Eating and Dietetics* , 4 (10), 63-75. DOI: 10.59316/.vi10.58
15. Eliseeva, T., & Shelestun, A. (2019). Catalog of drinks (60+) – description, useful and dangerous properties of each. *Journal of Healthy Eating and Dietetics* , (8). DOI: 10.59316/j.edpl.2018.8.8
16. Tkacheva, N., & Eliseeva, T. (2020). Foods to lower cholesterol. *Journal of Healthy Eating and Dietetics* , (11). DOI: 10.59316/j.edpl.2020.11.15

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