



## Watermelon juice - natural healing nectar for the body

*Tkacheva Natalia*, phytotherapist, nutritionist

*Eliseeva Tatyana*, editor-in-chief of the EdaPlus.info project

*E-mail:* tkacheva.n@edaplus.info, eliseeva.t@edaplus.info

**Abstract.** Probably all kids and adults without exception love to feast on watermelons. This unique striped fruit, called a false berry for its thick, inedible skin, has been known to mankind since ancient times. The Egyptians and Arabs revered the watermelon for its many medicinal properties. It is no less popular with modern followers of traditional medicine. Moreover, not only the pulp of the fruit, but also its juice can be used as a healing dessert. Watermelon fresh perfectly quenches thirst and saturates the body with many healthy substances.

**Keywords:** watermelon, watermelon juice , useful properties, contraindications, composition, calorie content

### Composition and calories

Watermelon contains a minimum of fats and proteins (0.15 and 0.61 grams per 100 grams of product), but quite a lot of easily digestible carbohydrates (7.5%).<sup>[1]</sup> Mostly fructose, a fruit sugar that does not require insulin to process. Its consumption does not cause sharp jumps in blood sugar<sup>[2]</sup>, so even people with diabetes can drink delicious fresh watermelon juice (of course, in reasonable quantities).

Also, the sweet pulp of watermelon contains a large amount of useful vitamins and minerals:

- Potassium (112 mg). Helps normalize blood pressure<sup>[3]</sup> and the nervous system, improves oxygen supply to the brain and promotes mental clarity.
- [Phosphorus](#) (11 mg). An important element that contributes to the proper formation of bones and teeth<sup>[4]</sup>, the establishment of a full-fledged metabolism.

- Magnesium (10 mg). The lack of this element can cause muscle cramps and joint pain. Consumption of foods with sufficient magnesium content helps to get rid of insomnia and depression, prevents the formation of kidney stones.
- Vitamin A, RAE (28 mcg). Strengthens the retina and prevents the development of ophthalmic diseases, participates in the production of hemoglobin, recommended for people with iron deficiency anemia.
- Vitamin C (8.1 mg). Strengthens the immune system, has a preventive effect in the treatment of such unsafe, but frequent diseases of modern humanity as coronary heart disease, cataracts, oncology <sup>[5]</sup>.

Watermelon is also rich in various antioxidants, in particular:

- lycopene (4530 mcg) <sup>[6]</sup> - reduces the likelihood of developing prostate cancer and cardiovascular diseases, reduces the level of "bad" cholesterol in the blood;
- niacin (vitamin B3, or nicotinic acid) (0.178 mg) - regulates cholesterol levels in the blood, prevents the development of cardiovascular diseases <sup>[7]</sup>, reduces pain in arthritis, improves brain function.

In addition, the drink has a high water content, 91.4% (helps cleanse the body of toxins and toxins, starts the metabolic process) and a very low calorie content (30 kcal), which allows you to include exotic fresh juice in a variety of diet menus.

## **Top 7 Health Benefits of Watermelon Juice**

### **1. Helps in the treatment of diabetes**

Surprising but true! Studies show that sweet watermelon juice helps in the treatment of diabetes. <sup>[8]</sup> True, it is necessary to drink the drink in moderate doses, periodically monitoring blood sugar levels.

### **2. Prevents the development of dementia and cognitive disorders**

Watermelon contains a large amount of lycopene, a unique antioxidant that prevents aging of the body, including the oxidation of brain cells, resulting in the development of dementia, including senile dementia. <sup>[9]</sup> Daily consumption of at least a few glasses of refreshing watermelon juice significantly slows down the degenerative processes of the brain.

### **3. Protects against oncology and mastopathy**

Studies show that with age, the amount of lycopene in the blood, an antioxidant with powerful antitumor properties, decreases significantly, which can lead to the development of dangerous diseases. To naturally replenish its content in the blood and prevent the risk of developing oncology and mastopathy, eating foods rich in this valuable substance will help. Delicious watermelon juice is one of them! <sup>[10]</sup>

### **4. Helps Lower Blood Pressure**

Sugar sweet pulp contains beneficial amino acids responsible for arterial tone, arginine and L-citrulline <sup>[11, 12]</sup>. Therefore, watermelon juice is recommended for hypertensive patients as a preventive drink to reduce and normalize blood pressure. Agree, a great alternative to standard medications!

### **5. Improve endurance, reduce muscle pain after sports**

The pulp of watermelon contains the amino acid L-citrulline - it reduces the concentration of lactic acid in the muscles, which provokes the occurrence of unpleasant painful sensations, krepatura, and also contributes to the rapid recovery of the body after intense physical exertion. Drinking a glass of refreshing watermelon fresh after a workout, you will quickly recover, you will be full of strength and energy! <sup>[13, 14]</sup>

## **6. Helps to reduce weight**

Watermelon has excellent diuretic properties, improves metabolism, helps cleanse the body of toxins and toxins, and also helps to lose extra pounds effortlessly <sup>[15]</sup>. Therefore, a refreshing watermelon smoothie rich in useful vitamins and microelements is recommended to be included in the menu for those who follow their figure and health.

## **7. Recommended in the treatment of gout**

The substances contained in the composition of the drink contribute to the dissolution and excretion of uric acid salts from the body (they are deposited on the joints and destroy them over time). The use of watermelon juice, while observing other items of the recommended diet, helps to reduce the inflammatory process, reduce swelling and tissue tenderness <sup>[16]</sup>.

Delicious juice from "striped berries" is also successfully used in cosmetology, it is used to make useful anti-aging masks for the skin of the face and body, and even used in the production of biofuels. <sup>[17]</sup>

## **Contraindications and harms of drinking watermelon juice**

For all its usefulness, it has fresh watermelon and some contraindications, features of use. In particular, people suffering from frequent headaches should see if such a phenomenon is related to the appearance of watermelon in their menu. Studies show that some plant foods (and the fruit of the famous melon plant is in the first place in the list of products) can provoke migraine attacks. <sup>[eighteen]</sup>

You should also use watermelon juice with caution for people who already have large kidney stones. The drink has strong diuretic properties <sup>[19]</sup> - it can provoke the movement of oxalate stones, which will lead to painful renal colic.

## **How much watermelon juice can you drink per day**

Watermelon juice contains more than 90% water, so it is allowed to drink it in almost unlimited quantities (if there are no contraindications or restrictions).

For example, during the period of weight loss, it is recommended to include at least 1.5 liters of refreshing liquid in the diet menu, to prevent gout, drink a glass of juice three times a day, to cleanse the kidneys and liver - up to 2 liters daily.

Babies can start getting acquainted with watermelon juice at the age of 2-3 years with a small dose (a teaspoon). Then the portion is gradually increased, bringing to half a glass. Older children, 3-6 years old, can drink about 200 grams of delicious refreshing fresh juice per day.

## **Features of the production and storage of watermelon juice**

To prepare watermelon juice, they usually take the ripe pulp of the fruit, peeled from the skin and seeds. True, studies show that a drink that additionally contains peel is more original and fresh in taste [20]. Try it, you might like this smoothie too!

**Remember!** Melons grown with nitrogen fertilizers (for their faster and earlier ripening) are hazardous to health. Therefore, for eating and preparing healthy watermelon nectar, it is recommended to choose only environmentally friendly seasonal berries.

Making watermelon juice is easy. To do this, use a blender (it turns out a thicker and healthier smoothie), a juicer or a regular sieve for squeezing the pulp. Freshly squeezed, untreated fresh juice can be consumed without health risks within 4 hours after its production. [21] Then pathogenic bacteria begin to multiply in the liquid. Watermelon juice can be heated up to 120 degrees Celsius. After the pasteurization process, the useful substances from the drink do not evaporate, it can be safely stored in a cool, dark place for 1 year. [22]

## Expert comment

**Tatyana Eliseeva, nutritionist, nutritionist**

Watermelon juice is a tasty and healthy drink, with which you can cleanse the body of toxins and toxins, saturate it with essential trace elements and even protect against many diseases. That is why I recommend not to miss the gourd season, but to supplement the menu daily during this period with a valuable refreshing drink that will certainly appeal to all members of the family!

## Literature

1. Watermelon, raw <https://fdc.nal.usda.gov/fdc-app.html#/food-details/167765/nutrients>
2. Huttunen, JK (1971). Fructose in medicine: A review with particular reference to diabetes mellitus. *Postgraduate Medical Journal*, 47(552), 654-659. DOI: 10.1136/pgmj.47.552.654
3. Filippini, T., Naska, A., Kasdagli, MI, Torres, D., Lopes, C., Carvalho, C., ... & Vinceti, M. (2020). Potassium intake and blood pressure: a dose-response meta-analysis of randomized controlled trials. *Journal of the American Heart Association*, 9(12), e015719. DOI: 10.1161/JAHA.119.015719
4. Taketani, Y., Imi, Y., & Abuduli, M. (2015). Bone and nutrition. A novel function of phosphorus. *Clinical Calcium*, 25(7), 1015-1021. PMID: 26119314
5. Weber, P., Bendich, A., & Schalch, W. (1996). Vitamin C and human health--a review of recent data relevant to human requirements. *International journal for vitamin and nutrition research. Internationale Zeitschrift für Vitamin-und Ernährungsforschung. Journal international de vitaminologie et de nutrition*, 66(1), 19-30. PMID: 8698541
6. Naz, A., Butt, MS, Sultan, MT, Qayyum, MMN, & Niaz, RS (2014). Watermelon lycopene and allied health claims. *EXCLI journal*, 13, 650. PMID: 26417290
7. Meyers, CD (2004). Kamanna VS, Kashyap ML. Niacin therapy in atherosclerosis. *Curr Opin Lipidol*, 15, 659-665. DOI: 10.1097/00041433-200412000-00006
8. Ajiboye, BO, Shonibare, MT, & Oyinloye, BE (2020). Antidiabetic activity of watermelon (*Citrullus lanatus*) juice in alloxan-induced diabetic rats. *Journal of Diabetes & Metabolic Disorders*, 19(1), 343-352. DOI: 10.1007/s40200-020-00515-2
9. Crowe-White, KM, Nagabooshanam, VA, Dudenbostel, T., Locher, JL, Chavers, TP, & Ellis, AC (2021). 100% Watermelon Juice as a Food-First Intervention to Improve Cognitive Function: Ancillary Findings from a Randomized Controlled Trial. *Journal of Nutrition in Gerontology and Geriatrics*, 40(4), 304-312. DOI: 10.1080/21551197.2021.1988028

10. Ellis, AC, Dudenbostel, T., & Crowe-White, K. (2019). Watermelon juice: a novel functional food to increase circulating lycopene in older adult women. *Plant Foods for Human Nutrition*, 74(2), 200-203. DOI: 10.1007/s11130-019-00719-9
11. Blohm, K., Beidler, J., Rosen, P., Kressler, J., & Hong, MY (2020). Effect of acute watermelon juice supplementation on post-submaximal exercise heart rate recovery, blood lactate, blood pressure, blood glucose and muscle soreness in healthy non-athletic men and women. *International Journal of Food Sciences and Nutrition*, 71(4), 482-489. DOI: 10.1080/09637486.2019.1675604
12. Massa, NML, Silva, AS, Toscano, LT, & Silva, JD gomes R., Persuhn, DC, & Gonçalves, MDCR (2016). Watermelon extract reduces blood pressure but does not change sympathovagal balance in prehypertensive and hypertensive subjects. *Blood Pressure*, 25(4), 244-248. DOI: 10.3109/08037051.2016.1150561
13. Ridwan, R., Razak, HRA, Adenan, MI, & Saad, WMM (2019). Supplementation of 100% flesh watermelon [*Citrullus lanatus* (Thunb.) matsum. and nakai] juice improves swimming performance in rats. *Preventive nutrition and food science*, 24(1), 41. DOI: 10.3746/pnf.2019.24.1.41
14. Tarazona-Díaz, MP, Alacid, F., Carrasco, M., Martínez, I., & Aguayo, E. (2013). Watermelon juice: potential functional drink for sore muscle relief in athletes. *Journal of agricultural and food chemistry*, 61(31), 7522-7528. DOI: 10.1021/jf400964r
15. WU GY, CJ, & PERKINS-VEAZIE, P. (2007). Dietary supplementation with watermelon pomace juice enhances arginine availability and ameliorates the metabolic syndrome in Zucker diabetic fatty rats. *The Journal of Nutrition*, 137(12), 2680-2685. DOI: 10.1093/jn/137.12.2680
16. Cruz, RCR, Neto, FR, Furtado, RA, Souza, LM, de Sousa, FD, Ozelin, SD, ... & de Oliveira, PF (2022). Watermelon Reduces the Toxicity of Cisplatin Treatment in C57BL/6 Mice with Induced Melanoma. *Nutrition and Cancer*, 74(3), 1097-1105. DOI: 10.1080/01635581.2021.1918731
17. Fish, W.W., Bruton, B.D., & Russo, V.M. (2009). Watermelon juice: a promising feedstock supplement, diluent, and nitrogen supplement for ethanol biofuel production. *Biotechnology for Biofuels*, 2(1), 1-9. DOI: 10.1186/1754-6834-2-18
18. Silva-Néto, RP, de Almeida Soares, A., Augusto Carvalho de Vasconcelos, C., & da Silva Lopes, L. (2021). Watermelon and other plant foods that trigger headache in migraine patients. *Postgraduate Medicine*, 133(7), 760-764. DOI: 10.1080/00325481.2021.1922211
19. Siddiqui, W.A., Shahzad, M., Shabbir, A., & Ahmad, A. (2018). Evaluation of anti-urolithiatic and diuretic activities of watermelon (*Citrullus lanatus*) using in vivo and in vitro experiments. *Biomedicine & Pharmacotherapy*, 97, 1212-1221. DOI: 10.1016/j.biopha.2017.10.162
20. Ramirez, JL, Juma, S., & Du, X. (2021). Consumer acceptance of watermelon flesh-rind blends and the effect of rind on refreshing perception. *Journal of Food Science*, 86(4), 1384-1392. DOI: 10.1111/1750-3841.15648
21. Ma, T., Wang, J., Wang, H., Lan, T., Liu, R., Gao, T., ... & Sun, X. (2020). Is overnight fresh juice drinkable? The shelf life prediction of non-industrial fresh watermelon juice based on the nutritional quality, microbial safety quality, and sensory quality. *Food & Nutrition Research*, 64. DOI: 10.29219/fnr.v 64.4327
22. Wang, Y., Guo, X., Ma, Y., Zhao, X., & Zhang, C. (2018). Effect of ultrahigh temperature treatment on qualities of watermelon juice. *Food Science & Nutrition*, 6(3), 594-601. DOI: 10.1002/fsn3.593

[An extended HTML version of this article](#) is available on the edaplust.info website

*Received 23. 09.2022*

## **Watermelon juice - natural healing nectar for the body**

*Tkacheva Natalia*, phytotherapist, nutritionist

*Eliseeva Tatyana*, editor-in-chief of the project EdaPlus.info

*E-mail:* tkacheva.n@edaplus.info, eliseeva.t@edaplus.info

**Abstract.** The article discusses the main properties of watermelon juice 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 drink are indicated, the use of watermelon juice in various types of medicine and the effectiveness of its use in various diseases are considered. The potentially adverse effects of watermelon juice on the human body under certain medical conditions and diseases are analyzed separately.