



Food for PMS

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Abstract. Mood swings, increased fatigue, swelling, breast tenderness, acne, headaches or pelvic pain, as well as thirst, increased appetite, changes in taste, depression and aggression are not a complete list of symptoms of premenstrual syndrome, or PMS. According to statistics provided by American sociologists, about 40% of US women are susceptible to it. Meanwhile, Russian sociologists claim that almost 90% of women aged 13 to 50 encounter the concept of PMS in one way or another. Moreover, 10% of them have particularly severe symptoms. Simply put, 10 out of 100 representatives of the fair sex experience real physical or mental pain. Moreover, on average, for 70 days a year. This is taking into account that their duration does not exceed 5-6 days. In fact, for different women it ranges from 3 to 14 days.

But the most surprising thing is that most of them do not fight this condition in any way, mistakenly considering it natural. But doctors say that you can easily get rid of many PMS symptoms by simply adjusting your diet.

Key words: food for PMS, recommendations, benefits, harm, beneficial properties, contraindications

PMS: causes and mechanisms of development

PMS is a set of mental, emotional and hormonal disorders that occur on the eve of menstruation and subside with its onset. The reasons for their appearance have not yet been established by science. Most scientists are inclined to believe that it's all about hormones.

During this period, the level of prostaglandins in the body increases sharply, the amount of which determines the intensity of contraction of the uterine muscles and, as a consequence, the strength of pain. In addition, this condition is characterized by an increase in appetite, the appearance of headaches and dizziness, disturbances in the functioning of the gastrointestinal tract, as well as high fatigue.

In addition to prostaglandins, fluctuations in estrogen and progesterone levels can also influence, which lead to mood swings, irritability and anxiety. Along with this, during this period the level of aldosterone may increase, which leads to weight gain, swelling and tenderness in the mammary glands

and nausea. In turn, fluctuations in androgen levels are characterized by tearfulness, depression or insomnia.

According to MD A. Mandal, “during this period, the body may experience fluctuations in serotonin levels, which also lead to mood swings and may be mistaken for PMS.”

In addition to the above factors, PMS is influenced by:

- malnutrition;
- frequent stress ;
- lack of regular physical activity;
- heredity;
- and even chronic inflammatory processes that occur in the body. After all, in fact, prostaglandins are hormone-like substances that are produced by the body in response to tissue damage or inflammation. At the same time, high levels of prostaglandins can cause heavy bleeding, pain and fatigue - the same symptoms of diseases similar to the symptoms of PMS.

Nutrition and PMS

Did you know that:

Vitamin B deficiency causes PMS symptoms such as mood swings, fatigue, swelling, breast tenderness, and depression. Vitamin B is found in grains, nuts, red meat and green leafy vegetables. [1]

Magnesium deficiency causes dizziness and headaches, pain in the pelvic area, as well as acne, depression and... cravings for chocolate, sweets and starchy foods. Magnesium is found in nuts, seafood, bananas, dairy products, grains and green vegetables. [2]

Deficiency of polyunsaturated fatty acids omega-3 [3] and omega-6 causes fluctuations in prostaglandin levels. These substances are found in fish, nuts and vegetable oils.

A deficiency of carbohydrates [4], minerals and fiber [5] causes a decrease in serotonin and estrogen levels and leads to PMS symptoms such as irritability and nervousness. These substances are found in bread, pasta, rice, potatoes and legumes.

Isoflavone deficiency causes fluctuations in estrogen levels in the body and, as a result, the appearance of severe PMS symptoms. Isoflavones are found in soy products, such as tofu, soy milk [6], etc.

Zinc deficiency is the cause of PMS acne. Zinc is found in seafood, beef, nuts and seeds. [7]

Top 20 foods for PMS

1. Green leafy vegetables. For example, cabbage, spinach [8], arugula, etc. They are a source of magnesium, calcium, iron, vitamins E and B, which together help get rid of PMS symptoms.
2. Avocado. It is a source of fiber, potassium and vitamin B6. Its consumption helps balance hormonal levels, reduce blood sugar and swelling, improve digestion, and also get rid of irritability, depression and depression. [9]
3. Dark chocolate (80% cocoa or more). It is a source of magnesium and theobromine, which dilates blood vessels, improves blood circulation and, as a result, relieves headaches. And also a natural aphrodisiac, which is able to increase the level of serotonin in the body and, thereby, make a woman relaxed, calm and happy!
4. Broccoli. It contains calcium, magnesium, iron, fiber and B vitamins, which help balance hormones. [10.11]

5. Goat milk and goat kefir. It is a source of protein, calcium [12], potassium, as well as tryptophan, which promotes the production of serotonin and improves mood. Goat's milk differs from cow's milk in that it contains more useful substances, which improve the general condition of the body and digestion. Interestingly, according to recent research, "women who regularly drink goat's or cow's milk suffer from PMS symptoms less often than women who drink it occasionally."
6. Brown rice It contains B vitamins, magnesium, selenium [13] and manganese, which, when combined with calcium, suppresses PMS symptoms. And also a huge amount of tryptophan, which helps improve digestion.
7. Salmon. Source of protein, B vitamins and vitamin D [14], as well as selenium, magnesium and omega-3 fatty acids. It normalizes blood sugar levels and has anti-inflammatory properties.
8. Raw pumpkin seeds. They contain magnesium, calcium, iron, manganese, zinc and omega-3 fatty acids [15]. You can replace them with sunflower seeds. These products help get rid of breast tenderness, as well as irritability and depression.
9. Bananas. They are indispensable for PMS, as they are a source of carbohydrates, vitamin B6, manganese, potassium and tryptophan. This product is especially valuable because it reduces swelling and bloating during PMS. [16]
10. Asparagus. It contains folic acid, vitamin E and vitamin C, which have anti-inflammatory properties. In addition, it is a natural diuretic that gently removes remaining fluid from the body. [17]
11. Wheat germ. It is a source of B vitamins, zinc and magnesium, which helps prevent mood swings and bloating. They can be added to porridge, muesli, baked goods, soups or salads.
12. Pearl barley. It contains vitamins A, E, B, PP, D, as well as potassium, calcium, zinc, manganese, iodine [18], phosphorus, copper, iron and other useful microelements. It differs from other cereals in its low glycemic index, which contributes to its faster absorption by the body and, as a result, faster relief from PMS symptoms. Barley porridge helps, first of all, to cope with mood swings, drowsiness and high fatigue. You can replace pearl barley with oatmeal.
13. Sesame seeds. The product is extremely rich in vitamin B, calcium, magnesium and zinc. You can eat it on its own or as part of other dishes.
14. Blueberries or blackberries. In addition to a huge amount of vitamins and minerals, they also contain antioxidants that alleviate PMS symptoms.
15. Turmeric. It has anti-inflammatory and analgesic properties. [19]
16. Ginger. It fights inflammation and helps normalize blood sugar levels. [20]
17. Garlic. A natural antibiotic that has anti-inflammatory properties and also helps normalize blood sugar levels. [21]
18. Green tea, particularly chamomile tea. [22] It has antioxidant and sedative properties. It also allows you to get rid of irritability and anxiety and relieve muscle spasms.
19. Yogurt. A study conducted at the University of Massachusetts found that women whose diets contain adequate amounts of calcium (obtained from at least 3 cups of yogurt) are much less likely to suffer from PMS symptoms than others. [23]
20. A pineapple. Among other things, it contains manganese and calcium, which can help get rid of PMS symptoms such as irritability, mood swings, fatigue and depression. [24]

How else can you relieve PMS symptoms and even get rid of them?

Lead a correct lifestyle. Obesity, bad habits such as smoking and drinking alcohol, a sedentary lifestyle and lack of regular exercise are the main factors that trigger the appearance of PMS symptoms. By the

way, it is alcohol that increases the sensitivity of the mammary glands and is often the cause of mood swings.

Limit consumption of excessively salty and fatty foods during the period of PMS symptoms. This is explained by the fact that it provokes the appearance of edema and bloating, thereby only aggravating the situation.

Avoid drinks containing caffeine. Since caffeine causes increased sensitivity of the mammary glands and irritability.

Limit your consumption of sweets. Glucose, which is contained in sweets and cakes, leads to an increase in blood sugar levels and becomes the cause of a woman's irritability during this period.

And finally, sincerely enjoy life. Scientists have proven that irritability, dissatisfaction with oneself and stress also lead to PMS.

Facts that are interesting to know about PMS

- Our ancestors did not suffer from PMS, as they were constantly in a state of pregnancy or breastfeeding. The term PMS was first described in 1931.
- Identical twins tend to experience PMS symptoms at the same time.
- Scientists know about 150 symptoms of PMS.
- The risk of PMS increases with age.
- A constant feeling of hunger during PMS is considered normal. To prevent it from causing excess weight gain, you can drink plenty of fluids. This will create a feeling of satiety and fullness in the stomach.
- Residents of megacities, as a rule, suffer from PMS much more often than residents of rural areas.
- PMS most often occurs in women whose activities involve mental work.
- Women make the most thoughtless purchases during PMS.
- Scientists have identified several forms of PMS. One of the most unusual is considered atypical. It is manifested by an increase in body temperature to 38 degrees, the appearance of stomatitis, gingivitis, attacks of bronchial asthma, vomiting and even the so-called menstrual migraine (migraine that occurs during menstruation).
- According to statistics, thin, irritable women who are overly concerned about their health are more likely to suffer from PMS than others.
- A woman becomes more active sexually during PMS.

Literature

1. 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/.vi8.45
2. Mironenko, A., & Eliseeva, T. (2020). Magnesium (Mg, Magnesium) - description, effect on the body, best sources. *Journal of Healthy Eating and Dietetics*, (14), 60-71. DOI: 10.59316/.vi14.91
3. Shelestun, A., & Eliseeva, T. (2019). Omega-3 - description, benefits, effect on the body and the best sources. *Journal of Healthy Eating and Dietetics*, (7), 88-93. DOI: 10.59316/j.edpl.2018.7.10

4. Eliseeva, T., & Shelestun, A. (2019). Carbohydrates - description, benefits, effect on the body and the best sources. *Journal of Healthy Eating and Dietetics*, 1(7), DOI: 10.59316/j.edpl.2018.7.8
5. Shelestun, A., & Eliseeva, T. (2019). Fiber - description, benefits, effect on the body and the best sources. *Journal of Healthy Eating and Dietetics*, (7). DOI: 10.59316/j.edpl.2018.7.11
6. Shelestun, A., & Eliseeva, T. (2022). Soy milk: who can and should drink a lactose-free drink. *Journal of Healthy Eating and Dietetics*, 2 (20), 68-72. DOI: 10.59316/.vi20.180
7. 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
8. Tarantul, A., & Eliseeva, T. (2020). Spinach (lat. Spinacia oleracea). *Journal of Healthy Eating and Dietetics*, (12), 48-59. DOI: 10.59316/.vi12.74
9. Eliseeva, T., & Yampolsky, A. (2019). Avocado (lat. Persēa americana). *Journal of Healthy Eating and Dietetics*, 4 (10), 63-75. DOI: 10.59316/.vi10.58
10. Eliseeva, T., & Yampolsky, A. (2020). Broccoli (Brassica oleracea Broccoli Group). *Journal of Healthy Eating and Dietetics*, 1 (11), 12-25. DOI: 10.59316/.vi11.62
11. Eliseeva, T. (2022). Benefits of broccoli: Top 10 proven beneficial properties. *Journal of Healthy Eating and Dietetics*, 2 (20), 24-28. DOI: 10.59316/.vi20.172
12. Mironenko, A., & Eliseeva, T. (2020). Calcium (Ca, calcium) - description, effect on the body, best sources. *Journal of Healthy Eating and Dietetics*, (12), 83-92. DOI: 10.59316/.vi12.77
13. 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
14. Eliseeva, T., & Mironenko, A. (2018). Vitamin D – description, benefits and where it is found. *Journal of Healthy Eating and Dietetics*, 3 (5), 52-67. DOI: 10.59316/.vi5.26
15. Shelestun, A., & Eliseeva, T. (2019). Omega-3 - description, benefits, effect on the body and the best sources. *Journal of Healthy Eating and Dietetics*, (7), 88-93. DOI: 10.59316/j.edpl.2018.7.10
16. Eliseeva, T., & Tarantul, A. (2018). Banana (Musa). *Journal of Healthy Eating and Dietetics*, 3 (5), 31-43. DOI: 10.59316/.vi5.24
17. Tarantul, A., & Eliseeva, T. (2020). Asparagus (lat. Asparagus). *Journal of Healthy Eating and Dietetics*, (14), 15-26. DOI: 10.59316/.vi14.87
18. 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
19. Tarantul, A., & Eliseeva, T. (2021). Turmeric (lat. Curcuma). *Journal of Healthy Eating and Dietetics*, (16), 12-24. DOI: 10.59316/.vi16.101
20. Eliseeva, T., & Tarantul, A. (2019). Ginger (lat. Zingiber). *Journal of Healthy Eating and Dietetics*, 1 (7), 22-34. DOI: 10.59316/.vi7.36
21. Eliseeva, T., & Yampolsky, A. (2019). Garlic (Latin: Allium sativum). *Journal of Healthy Eating and Dietetics*, 1 (7), 11-22. DOI: 10.59316/.vi7.35
22. Tkacheva, N., & Eliseeva, T. (2022). Yogurt: health effects and benefits proven by scientists. *Journal of Healthy Eating and Dietetics*, 1 (19), 28-33. DOI : 10.59316/.vi19.155
23. Eliseeva, T., & Tarantul, A. (2018). Pineapple (lat. Ananas comosus). *Journal of Healthy Eating and Dietetics*, 4 (6), 55-66. DOI : 10.59316/.vi6.32

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