

# Nutrition for insomnia

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**Abstract.** A healthy person should sleep on average 7-8 hours at night, and should be awake during the day. Insomnia is a condition characterized by insufficient quantity or poor quality of sleep. <sup>[1]</sup> Single cases of insomnia do not have a negative effect on the body, but if it occurs over a long period of time, it significantly worsens the quality of life.

According to WHO, up to 30% of the male population of the planet and about 40% of the female population suffer from insomnia.

*Key words:* insomnia, description , causes occurrence , types and symptoms , complications , prevention , treatment, useful products , folk dangerous means \_ products

## Types of insomnia

Depending on the causes, insomnia is classified into:

- **idiopathic** – develops without objective reasons;
- **medicinal** – occurs while taking certain medications;
- **psychophysiological** – occurs in people who are afraid of insomnia, while anxiety increases in the evening, before going to bed;
- against the background **of mental pathologies** ; <sup>[2]</sup>
- **behavioral** – typical for young children, for example, the habit of falling asleep only with a pacifier or a bottle, or only when rocked;
- **Pseudoinomnia** is a condition in which the patient complains of poor sleep and lack of sleep, but at the same time sleeps well and gets enough sleep normally. <sup>[3]</sup>

Depending on the course of insomnia, the following forms of the disease are distinguished:

1. **chronic form** - is a consequence of some pathologies or severe fatigue and bothers the patient for a long time, at least a month;
2. **transient** - short-term insomnia, lasts 5-7 days, as a rule, is a reaction to severe nervous shock; <sup>[4]</sup>
3. **acute** – from 10 to 30 days, provokes severe stress or constant psychological tension.

## Symptoms of insomnia

A distinctive sign of pathology is the absence or deficiency of the restorative stage of sleep. Insomnia manifests itself with the following symptoms:

- repeated awakenings at night and the inability to fall asleep again for a long time;
- problems falling asleep in the evening;
- drowsiness during the day, as well as fatigue, lethargy or irritability;
- waking up earlier than expected, while the total duration of night sleep does not exceed 6 hours;
- impaired concentration;

- frequent headaches;
- appetite disorders;
- unmotivated feeling of anxiety;
- decreased productivity at work;
- decreased immunity.

## **Causes**

The most common causes of sleep disturbances are:

1. increased stress and psychological load, constant emotional tension;
2. breathing problems at night associated with sinus polyps or a deviated nasal septum;
3. time zone changes associated with travel and frequent business trips, as well as night shift work
4. poor sleep hygiene – uncomfortable mattress or pillow, bright lighting, extraneous noise;
5. pregnancy period - discomfort and inability to take a comfortable position while sleeping;
6. somatic pathologies: gastrointestinal problems, joint pain, hyperthyroidism, diseases of the cardiovascular system;
7. frequent use of psychoactive substances: several cups of strong coffee during the day, energy drinks, nootropics and antidepressants, as well as abuse of nicotine and alcoholic beverages;
8. poor nutrition - a heavy dinner before bed or, conversely, a too strict diet;
9. using gadgets before bed;
10. restless legs syndrome;
11. severe physical or mental fatigue;
12. genetic predisposition;
13. hormonal imbalances, menopause and menstruation;
14. Parkinson's disease.

## **Complications**

If the patient does not seek help from a neurologist or somnologist in time , then chronic lack of sleep can provoke the development of side pathologies:

- weight gain - lack of sleep provokes a loss of strength, which the patient tries to compensate for by eating high-calorie foods; also, with insomnia, the hormone responsible for satiety is produced in smaller quantities;
- malfunction of the immune system - during sleep, a person produces cytokines that stimulate the immune system; accordingly, with insomnia, a deficiency of cytokines develops, which provokes frequent colds;
- increased blood glucose levels;
- decreased libido, up to impotence in men and anorgasmia in women;
- exhaustion of the nervous system;
- development of chronic fatigue, decreased concentration;
- depression and deterioration in quality of life in general.

## **Forecast**

Insomnia negatively affects the patient's quality of life. The inability to wake up on time in the morning is usually regarded not as a health problem, but as a symptom of laziness and lack of self-organization and discipline, especially when this leads to being late for school and work. Lack of sleep provokes lethargy and poor productivity, especially in the morning.

A timely visit to a somnologist, implementation of his recommendations and preventive measures aimed at stabilizing the nervous system and improving the quality of sleep will help make night sleep more effective.

## **Prevention**

Prevention of insomnia involves a number of measures aimed at regulating sleep hygiene and facilitating the process of falling asleep in the evening:

1. eliminate or, if possible, minimize the consumption of alcoholic beverages, quit smoking;
2. before going to bed, it is recommended to do a relaxing massage of the neck-collar area, head, feet in order to get rid of the tension accumulated during the day;
3. create a comfortable environment in the bedroom, the room should be cool and dark;
4. 3 hours before going to bed, do not drink strong tea and coffee;
5. minimize or completely avoid sleep during the day; <sup>[5]</sup>
6. eliminate difficult-to-digest foods in the evenings;
7. Before going to bed, you should ventilate the bedroom well;
8. moderate physical activity is indicated. It is advisable to give preference to yoga, stretching , breathing exercises;
9. 1-2 hours before bedtime, walking in the fresh air is beneficial;
10. maintain a sleep-wake schedule, go to bed and wake up at the same time, considered optimal from 10 p.m. to 11 p.m.; <sup>[6]</sup>
11. stop using gadgets in the evening, don't watch TV before bed;
12. To improve tone, it is recommended to do exercises in the morning.

## **Treatment of insomnia in official medicine**

When treating insomnia, the factors that cause sleep disturbance are first identified and eliminated, and only after that medications are selected whose effectiveness is aimed at managing sleep. Therapy must be systematic. In the first stages of the fight against insomnia, preference should be given to products based on melatonin or herbal origin.

It is not recommended to independently prescribe and take tranquilizers and drugs for insomnia, as there is a possibility of addiction or intoxication, and the problem will not be eliminated.

In addition to medications, the following methods are used to treat insomnia :

- hypnosis – recommended for patients over 5 years of age;
- phytoestrogens - prescribed to women with insomnia caused by hormonal disorders during menopause;
- a massage course to improve cerebral circulation;
- electrosleep and reflexology to stabilize the nervous system;
- psychotherapy;
- spa therapy;
- encephalophonia – music therapy, which is converted using a computer from the patient's encephalogram .

## **Healthy foods for insomnia**

In the fight against insomnia, drug treatment can support a properly formulated diet, which should include the following foods:

1. peanuts, which contain tryptophan, which promotes the production of melatonin;
2. bananas [9], nuts, buckwheat [10], seaweed, flax, poppy, pumpkin, sunflower seeds, rich in magnesium [11];
3. lentils [12], bran, whole grain cereals, liver, peas, fish as sources of B vitamins [13];
4. fresh berries, apples [14], raisins, sesame seeds, dates [15], dried apricots containing potassium [16];
5. fresh carrots [17], pumpkin [18], flaxseed oil, fish oil, rich in vitamin A [19];
6. green tea relieves anxiety and is rich in theanine ;
7. white meat turkey and chicken, which contain tryptophan;
8. cottage cheese [20], cheese, chicken [21] and quail eggs, rich in protein [22], which has a positive effect on sleep;
9. all varieties of cabbage, which contain calcium [23], the deficiency of which leads to sleep problems;
10. Cherries and grapes are powerful sources of melatonin [24,25].

### **Folk remedies for the treatment of insomnia**

There are many available folk remedies that help in the fight against insomnia :

- Add 50 g of dry dill seeds to ½ liter of red wine, heat over low heat, cool, infuse and filter. Take 50 g half an hour before bedtime;
- A tincture of onion seeds in white wine will help get rid of nightmares; you should drink a tablespoon of it before breakfast; [7]
- Peel a medium-sized head of garlic [26], crush to a pulp and place in a container, add the juice of 10 limes and 6 lemons [27], leave for 20 days, shaking occasionally, drink 1 tsp. . before bedtime;
- 100 g of horseradish root pour 1 liter of white semi-sweet wine, leave for 10 days, take 1 tbsp three times a day. spoon, in order to prevent stomach irritation, it is recommended to wash it down with milk;
- drink a decoction of chamomile flowers [28] throughout the day as tea;
- before going to bed, drink a glass of warm goat milk with a spoonful of honey [29];
- Take warm baths with sea salt or herbal decoctions before bed. You can add essential oils of mint [30], bergamot, juniper, lemon balm [31] or lavender to your bath;
- Pillows filled with medicinal herbs - mint, hops, fern - will help in the fight against poor sleep; [8]
- aromatic oils can be used against insomnia and in an aroma lamp - rose oil helps fight nightmares, wormwood [32] and anise - eliminate irritability, fennel and mint - eliminate feelings of loneliness, bergamot - relieves depression, sage - relieves signs of fatigue;
- hirudotherapy – leeches saturate the body with oxygen;
- drink mint decoction with honey before bed;
- meditation and breathing practices;
- listening to nature sounds before bed;
- A glass of pumpkin juice with honey in the evening will make your sleep deeper.

### **Dangerous and harmful products for insomnia**

There are a number of products that have a negative impact on the process of falling asleep and the quality of sleep in general:

- containing caffeine: coffee, strong tea, chocolate, cocoa;
- high in fat: fried fatty meat and fish, fried potatoes;
- hot seasonings, sauces and spices;

- foods that increase blood glucose levels: white bread, baked goods, jam, sweets and other sweets;
- products with a diuretic effect: watermelon, cranberry, grapefruit [33];
- alcoholic drinks.

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**Abstract** . A healthy person should sleep an average of 7-8 hours per night and be awake during the day. Insomnia is a condition characterized by an insufficient amount or poor quality of sleep. [1] Single cases of insomnia do not have a negative impact on the body, but if it occurs over a long period of time, it significantly worsens the quality of life. According to the WHO, insomnia affects up to 30% of the world's male population and about 40% of the female population.