



## Food for relief pain

*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.** The article discusses various types of pain and their mechanism of action on the human body. A systematic review of modern specialized literature and relevant scientific data was carried out. The food products that will help reduce the level of pain are indicated, the scientific foundations of pain relief nutrition are considered.

**Key words:** pain, diagnostics, healthy foods, dangerous foods

Chronic pain is a big problem that the medical community is not coping with. But in your kitchen there is an alternative to painkillers: some fruits, vegetables, spices block pain signals, fight inflammation and improve the quality of life. Unlike drugs, well-chosen natural products have no side effects, and still contain vitamins, minerals and antioxidants. The latter prevent many diseases at the developmental stage, which you may not even be aware of.

## What kind of pain can food help with?

The most common types of pain are muscular, headache, in the back and neck, joints, uterus, stomach and intestines. Painful sensations may never completely disappear, because it all depends on the underlying causes. But with the right diet, you can reduce symptoms, improve the daily functioning of organs and systems. <sup>[one]</sup>

Soreness after a hard workout, the onset of a cold, feeling unwell due to sleeping on the wrong side of the bed - the right food helps to cope with these and other problems faster. But there is also food that has the opposite effect.

## Foods to Avoid for Any Kind of Pain

It is necessary to exclude from the diet all provocateurs of inflammation. It's worth starting with sugar – if you consume more of it than the body can process, this will lead to the release of pro-inflammatory cytokines and an increase in the inflammatory biomarker C-reactive protein. Nutritionists advise using honey in dishes as a natural substitute.

Refined grains - pasta, white rice and white bread - cause inflammation in the intestines, joints and many organs. Another ban is related to trans fats, the culprits of many cardiovascular diseases and premature death. It is equally important to minimize salt intake.

Eggs, chocolate, wheat, red meat and corn are also associated with some inflammatory processes. It is not always necessary to refuse them, but limited consumption benefits everyone. The main food plate should have fresh vegetables, berries and nutrient-rich fibrous carbohydrates.

## **Top 15 Natural Pain Relief Products**

### **1. Turmeric**

The active substance curcumin has a powerful anti-inflammatory, antioxidant effect and is similar in effectiveness to some drugs. Supplements with it are prescribed for recovery from coronavirus, with rheumatoid arthritis and osteoarthritis. In order for the substance to be better absorbed from the spice, you need to combine it with black pepper or fats (add to milk, cereals with butter).<sup>[2]</sup>

### **2. Cherry**

The berries contain antioxidants anthocyanins, which reduce pain. They are also rich in polyphenols and vitamin C. Substances help with gout, reduce muscle pain, which has been tested by athletes after marathons.<sup>[3, 4]</sup>

### **3. Mint**

Peppermint oil relieves painful spasms in irritable bowel syndrome. Mint leaf tea is also good for soothing occasional indigestion and bloating. Studies show that Brazilian mint tea from the *Hyptis* plant *crenata* is just as effective as a prescription pain reliever.<sup>[5]</sup>

### **4. Hot pepper**

Jalapeno, habanero, cayenne, serrano, cherry, chili are types of hot peppers with capsaicin. The substance is well known for its pain-relieving properties, so it is used in creams and patches. The fruits are also rich in antioxidants, vitamins B6 and C, potassium and beta-carotene.<sup>[6]</sup>

### **5. Garlic**

The bulb plant reduces inflammation, joint pain, and endometriosis with its anti-inflammatory sulfur compounds. When extracted, the component has a wide range of applications - from the destruction of microbes to the fight against cancer.<sup>[7]</sup>

### **6. Bone broth**

Slow-cooked, strong bone broth contains a sufficient dose of collagen, proline, glycine and glutamine - assistants in wound healing. It is also high in minerals and anti-inflammatory compounds that are helpful in autoimmune diseases.<sup>[eight]</sup>

## **7. Cruciferous vegetables**

It is advisable to eat half a glass of cruciferous vegetables daily - broccoli, cauliflower and Brussels sprouts. They are excellent sources of antioxidants, vitamins, and fiber. The antioxidant compound sulforaphane blocks an enzyme that causes pain and inflammation in the joints. In addition to patients with arthritis, it is useful for athletes during periods of high stress. <sup>[9]</sup>

## **8. Salmon**

Enriched with omega-3 fatty acids, salmon is included in almost all lists of healthy foods. Omega-3 interacts with immune cells, leukocytes and enzymes, cytokines - the main participants in inflammation. Fatty fish are recommended to be eaten twice a week for heart health, joints, and arthritis pain relief (especially in the neck and back). <sup>[ten]</sup>

## **9. Extra virgin olive oil**

The oily solution causes a slight tingling in the throat due to oleocanthal, a similar action to ibuprofen. Lubricin, which is part of the composition, also provides smooth sliding of the joints, protects cartilaginous tissues from destruction. In order not to lose the benefits of olive oil when cooking, it is necessary to maintain temperatures up to 180°C. <sup>[eleven]</sup>

## **10. Green tea**

One of the most affordable natural beverages is self-healing. Its polyphenolic compounds have proven anti-inflammatory properties and are considered a good addition to dietary therapy. But only organic green teas are beneficial - their leaves are not treated with carcinogenic pesticides. <sup>[12]</sup>

## **11. Ginger**

Ginger root is best known for its soothing properties for nausea, but it can also combat joint pain and menstrual cramps. Research confirms that ginger capsules work like ibuprofen. <sup>[13, 14]</sup>

## **12. Blueberries**

Small, juicy berries contain a lot of phytonutrients needed to fight inflammation and pain. Antioxidants neutralize free radicals and protect healthy cells from them. In the off-season, you can eat frozen blueberries - it retains all the healthy ingredients. <sup>[fifteen]</sup>

## **13. Pumpkin seeds**

Pumpkin seeds are an excellent source of magnesium. The body needs the mineral for many reasons, including to prevent migraines and osteoporosis. Want to get more magnesium? Add almonds, cashews, dark green leafy vegetables, beans, and lentils to your diet.

## **14. Coffee**

Caffeine can reduce discomfort from muscle injuries, physical exertion. A study found that supplementing with 100–130 mg of caffeine (the same amount of caffeine in one cup of drink) enhanced the effects of ibuprofen. <sup>[16, 17]</sup>

## **15. Cranberry juice**

Cranberry juice blocks *H. pylori* from sticking to the mucosa, a spiral-shaped bacterium that attacks the protective lining of the stomach and small intestine, causing ulcers and pain. To get the result, you need to drink less than a glass of sugar-free juice daily for three weeks. An acidic drink is allowed to be diluted with water, sweetened with honey, stevia .<sup>[eighteen]</sup>

### **Other ways to deal with pain**

Physiotherapy, individually selected sets of exercises relieve chronic pain, as they reduce swelling, improve blood circulation and the functionality of the affected body part. Physiotherapeutic procedures include hot and cold applications, myofascial relaxation, massage. For many patients, yoga and acupuncture become salvation.<sup>[19]</sup>

You can take nutritional supplements in capsules - curcumin , omega-3, collagen to restore connective tissue.

### **Expert comment**

#### **Tatyana Eliseeva, nutritionist, nutritionist**

Sometimes, to reduce pain, it is enough to change the way of life. It is difficult to immediately give up bad habits acquired over the years, so it is easier to start with nutrition correction. This does not mean that you need to use all the products from the recommended list - they should be chosen taking into account pathologies. If after changing the diet, the condition remains the same, consult a nutritionist - a specialist will identify food sensitivities and help you return to a full life faster.

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