



Fiber - description, benefits, effect on the body and the best sources

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Abstract. The article discusses the main properties of fiber and its effect on the human body. A systematic review of modern specialized literature and current scientific data was carried out. The best natural sources of fiber are listed. The use of fiber in various types of medicine and the effectiveness of its use in various diseases are considered. The potential adverse effects of fiber on the human body under certain medical conditions and diseases were separately analyzed.

Key words: fiber , benefit, harm, norm, beneficial properties, sources

Fiber or plant fiber is a complex form of carbohydrates [1] that is found in the membranes of higher plants. It is also often called *cellulose* . People use it for food, as well as for the production of various industrial goods. From a chemical point of view, fiber is a complex polysaccharide responsible for the formation of the cell walls of higher plants.

Fiber- rich foods

See Appendix 1.

Daily fiber requirement

On average, a person's daily fiber requirement ranges from 25 to 35 grams per day. Some nutritionists advise that if you have a malnutrition, low in fiber, consume about 1 tbsp . wheat or rye bran - the leader in the content of such healthy dietary fiber. Also, fiber is sold at the pharmacy, but this is a last resort; it is still better to normalize your diet. It is said that ancient people consumed up to 60 grams of dietary fiber per day!

The need for fiber increases:

- With age. The body's greatest need for fiber begins at age 14 and lasts until age 50. Then the need for plant fibers decreases by 5-10 units.
- During pregnancy, the volume of food consumed increases proportionally.
- With sluggish functioning of the gastrointestinal tract. In this case, fiber normalizes intestinal function.
- When the body is slugged. Plant fibers act as a broom, cleaning the intestinal walls.
- For vitamin deficiencies and anemia. The body is cleansed, the absorption of vitamins improves.
- If you are overweight. Thanks to the normalization of the digestive system, weight loss is observed.

The need for fiber is reduced:

- With excessive gas formation (flatulence).
- During exacerbation of gastritis, pancreatitis and other inflammatory diseases of the gastrointestinal tract.
- dysbacteriosis.

Digestibility of plant fiber

Despite the fact that fiber (dietary fiber) is not digested in the human body, it is nevertheless very beneficial for our health. Fiber is important for the stomach (it creates the volume of food necessary for proper functioning), and also plays an important role in its subsequent evacuation.

Beneficial properties of fiber and its effect on the body

In addition to its beneficial effects on the gastrointestinal tract (cleansing, stimulation of gastrointestinal motility), fiber activates digestive enzymes in the intestines. It is necessary to maintain normal microflora in the intestines and eliminates dysbiosis.

According to some studies, fiber promotes the proliferation of beneficial microflora and also prevents the development of harmful microorganisms.

Medical sources indicate that dietary fiber is very beneficial for patients suffering from diabetes by reducing the rate of absorption of carbohydrates, which protects the body from a sharp increase in blood sugar levels.

Fiber removes toxins and waste from the body and reduces the concentration of harmful fats. Due to this, the liver also heals . Metabolic processes in the body begin to proceed faster, which contributes to weight loss, to the great joy of those who want to lose weight.

Interaction of fiber with essential elements

In medicine, essential elements are usually called substances that are indispensable for the functioning of the body. Fiber interacts with bile acids and water [2] and affects fat [3] and glucose metabolism in the body. Excess fiber makes it difficult to absorb iron [4], as well as some vitamins and minerals. Dietary fiber neutralizes the effects of certain medications. In particular, psychotropic substances, antidepressants.

Signs of lack and excess of fiber:

Signs of lack of fiber in the body:

- overload of the body with waste and toxins (unpleasant body odor);
- problems with blood vessels;
- sluggishness of the gastrointestinal tract;
- exacerbation of diabetes mellitus;
- excess weight.

Signs of excess fiber in the body:

- flatulence, bloating and other intestinal disturbances (diarrhea, constipation);
- nausea, vomiting;
- disturbance of intestinal microflora and gastrointestinal motility.

Fiber for beauty and health

The optimal amount of fiber in the body eliminates the feeling of hunger and stimulates metabolism. That is why fiber is one of the tools in the fight against extra pounds.

Low-carbohydrate, high-protein diets cause some gastrointestinal discomfort but are nonetheless popular for their effectiveness in weight loss. By slightly modernizing such a diet, supplementing it with foods rich in fiber, you can improve the health of your body and even speed up weight loss.

Clean skin and rosy cheeks are associated with the proper functioning of the gastrointestinal tract. And fiber and products containing it are just what you need! It is used as one of the main means, the use of which leads to the improvement of the entire body.

That is why fiber can be considered one of the nutritional components necessary not only to maintain health, but also external attractiveness.

Content fiber in food

Table 1

The number of grams per 100 g of product is indicated [5.6]

No.	Product	g in 100 g
1	Raw corn bran	79
2	Cinnamon powder	53.1
3	Ground savory	45.7
4	Wheat bran, thermally untreated	42.8
5	Dried rosemary	42.6
6	Oregano oregano, dried	42.5

7	Coriander seeds	41.9
8	Ground sage	40.3
9	Marjoram spice powder	40.3
10	Fennel seeds	39.8
eleven	Cumin seeds	38
12	Dry basil	37.7
13	Cocoa powder	37
14	Dried thyme	37
15	Paprika spice, powder form	34.9
16	Ground dry chili pepper	34.8
17	Chia seeds	34.4
18	Clove seasoning powder	33.9
19	Dried mint	29.8
20	Hot chili peppers dried in the sun	28.7
21	Cardamom	28
22	Flaxseed	27.3
23	Dried parsley	26.7
24	Bay leaf	26.3
25	Ground white pepper	26.2
26	Dry, ripe peas	25.5
27	Ground black pepper	25.3
28	French green beans fresh	25.2
29	Beans, raw, mature	25
thirty	Dry red beans	24.9
31	Fenugreek seeds	24.6
32	Dried carrots	23.6
33	Turmeric spice powder	22.7
34	Ground allspice	21.6
35	Dill seeds	21.1
36	Unheated rice bran	21
37	Nutmeg spice, ground	20.2
38	Poppy seeds	19.5
39	Dry Lima beans	19
40	Lupine (lupine beans) dry	18.9
41	Dry barley groats	17.3
42	Roasted sesame	16.9
43	Rye bread	16.5
44	Unsweetened coconut flakes	16.3
45	Dry mung bean	16.3
46	Peanut flour	15.8
47	Dry pearl barley	15.6
48	Dry variegated beans	15.5
49	Dry black beans	15.5

50	Unheated oat bran	15.4
51	Dry white beans	15.3
52	Onion powder	15.2
53	Popcorn without salt	15.1
54	Rye grain (rye) in dry form	15.1
55	Dry pigeon peas	15
56	Anise seeds	14.6
57	Triticale flour	14.6
58	Salted popcorn	14.5
59	Ginger extract powder	14.1
60	Fresh rosemary	14.1
61	Fresh thyme	14
62	Dried dill	13.6
63	Dried goji berries	13
64	Dry Adzuki beans	12.7
65	Dry pink beans	12.7
66	Fresh almonds	12.5
67	Dry bulgur cereal	12.5
68	Dried apples	12.4
69	Mustard seeds ground mustard	12.2
70	Dry chickpeas	12.2
71	Celery seeds	11.8
72	Unroasted sesame	11.6
73	Dried shiitake mushrooms	11.5
74	Dried openwork chervil	11.3
75	Roasted sunflower seeds (hulled)	11.1
76	Dry corn noodles	eleven
77	Fresh grape leaves	eleven
78	Roasted almonds	10.9
79	Dark chocolate (70-85% cocoa)	10.9
80	Chickpea flour	10.8
81	Dry red or pink lentils	10.8
82	Whole grain wheat flour	10.7
83	Spelled cereal in dry form	10.7
84	Dry lentils	10.7
85	Fresh pistachios	10.6
86	Fireweed, fresh leaves	10.6
87	Dry oatmeal oatmeal	10.6
88	Dry black-eyed beans	10.6
89	Fresh orange zest	10.6
90	Fresh lemon zest	10.6
91	Jeera cumin seeds	10.5
92	Boiled white beans	10.5

93	Dried coriander leaf	10.4
94	Fresh passion fruit	10.4
95	Roasted pistachios without salt	10.3
96	Buckwheat dry brown buckwheat	10.3
97	Roasted salted pistachios	10.3
98	Multigrain crispbread	10.2
99	Instant dry oat flakes	10.1
100	Dry green buckwheat	10.0

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[HTML version of the article](#)

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