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Abstract: *Studies have shown that consuming flaxseed improves digestion, stimulates the gastrointestinal tract and promotes regulation.*

Key words: *fatty oil, enzyme, sterols, carbohydrate, vitamin A.*

Annual Herbaceous plant of the flax family – Linaceae S. F. Gray, with a straight stem, branched from the base, 30–120 cm high. Leaves are linear-lanceolate with 3 veins. Flowers are blue, blue, less often white or pink, Blooms in June-August. Fruits ripen in July-September, Fruit is a spherical capsule with 10 oblong, shiny seeds of yellow-brown color. There are over 300 species of flax, common on almost all continents, and in the USSR – over 40. Flax has been known for over 9 thousand centuries. It was known in India, China. In Central Asia, judging by archaeological finds, flax was grown many centuries before our era. Flax was brought to the territory of Russia by the Scythians from Asia. However, industrial flax growing in Russia began in the 13th century. Currently, it is widely cultivated in various regions of the USSR as an oilseed and spinning plant.

In addition to flax, long-leaved flax and curly flax are grown. The second form is highly oily, but of little use for fiber.

Chemical composition. Flax seeds contain 30–40% fatty oil, including 35–45% glycerides of linolenic acid, 25–35% linoleic, 15–20% oleic acid, and an insignificant amount (8–9%) of glycerides of palmitic and stearic acids (V.P. Popov et al., 1984). The seeds contain up to 12% mucous substances, 10–33% proteins, 12–26% carbohydrates, 0.15% essential oil, 2% resinous



substances, organic acids, enzymes, vitamin A, sterols, and sugars. The plant contains the glycoside linamarin, which is broken down by the enzyme lipase into hydrocyanic acid, acetone, and glucose. Its greatest amount (up to 1.5%) is found in flax sprouts. Linbcaffeine and linocinamarin (N. N. Brezgin, 1984), high-molecular compounds that yield linocaffeine, methyl ester of β hydroxy β methylglutaric acid, and linocinamarin upon hydrolysis, were found in the seed coats. All parts of flax contain the glycoside linamarin, which is similar in action to pilocarpine and carbachol. Therefore, flax seeds stimulate the activity of the digestive tract. Flax stems contain 20-28% flax fiber.

Economic value. Flax has great economic and medicinal value. Flaxseed oil is considered a valuable nutritional product. The above-ground part of the plant is used to produce linen used for tablecloths, bed linen, as well as cambric, teak, canvas, technical fabrics and paper. Flaxseed oil is used to produce drying oil, varnishes, paints, linoleum, artificial leather, green soap and soap alcohol, and flaxseed cake is considered good feed for livestock.

In folk medicine, flax seeds and oil extracted from them are used as medicines. Flax seeds are prescribed as an expectorant and antitussive for pneumonia, acute and chronic bronchitis. They are widely used as a laxative for constipation, especially for chronic colitis. For this purpose, 2 teaspoons of seeds are crushed and diluted with 1 glass of boiling water. Drink 100-150 ml 2-3 times a day. A decoction of seeds is used for cystitis, bladder stones. Flaxseed oil in uzbek folk medicine is used to treat tuberculosis, chronic cholecystitis, chronic colitis and hemorrhoids.

Flaxseed gruel and flaxseed oil are used to treat wounds, burns, bruises, cracks in exposed skin. Heated dry flax seeds in bags or wrapped in soft cloth in the form of compresses are applied at night to a sore joint for polyarthritis or arthritis, to the lower back for radiculitis, or to muscles for myositis.

In ancient Eastern medicine, flax seeds were used as a medicine with dissolving, cleansing and softening properties. Flax seeds were widely used in the past due to their hot and dry nature. Linen clothing was recommended for people with a hot nature, as well as for dry and hot summer weather.

According to Avicenna, roasted flaxseed helps with mucous cough, bladder and kidney ulcers. Fumigation with flaxseed helps with a runny nose. A decoction of flaxseed, if used in an enema with rose oil, is very



beneficial for ulcers in the intestines. According to Ibn Sina, the use of flaxseed with natural soda and figs is a good medicinal bandage for freckles and "milk acne". Flaxseed, if mixed with an equal amount of garden cress and kneaded with honey, prevents nails from wrinkling, cracking and peeling. Flaxseed, applied externally or taken internally, softens hot swellings, and when mixed with ash water, softens swellings behind the ears and hard swellings. If the seed is mixed with wax and honey, it helps against spasms and especially against wrinkling of the nails.

According to the descriptions of Muhammad Hussein Sherazi, three dirhams (8.9 g) of flaxseed taken internally cleanse the chest well, promote the maturation of matter and the resorption of tumors in the liver and other organs. Roasted flaxseed fixes and stops hemoptysis, is useful for a painful cough. Taking half a miskal of flaxseed daily for a long time is useful for pain in the intestines, acts as a diuretic and diaphoretic, increases milk secretion in nursing mothers, softens the body well, helps with ulcers in the kidneys and bladder. Lotions of flaxseed are made for hard tumors, ulcers on the head. If you sprinkle powder from burnt flaxseeds on a wound, it dries and soothes pain and itching. Flaxseed mucus is used to drip into the eyes, and also to lubricate them in case of inflammation, i.e. conjunctivitis. Ancient doctors recommended a single dose of flaxseeds from 3 (8.8 g) to 4 (11.8 g) dirhams. Clothes made of linen fabric were considered useful for scabies and excessive sweating.

In modern medicine, such healing agents as flax seed mucilage, flaxseed oil and the drug linetol are obtained from flax seeds.. The seed mucus is prepared immediately before use as follows: 1 part of whole flax seed is poured with 2 parts of hot boiled water, shaken for 15 minutes, and filtered. After cooling, take 2-3 tablespoons orally 3-4 times a day 20-30 minutes before meals. To improve the taste, you can add 0.5-1.0 table, spoon of fruit juice or syrup. Flax seed mucus spoils quickly, so it should be prepared daily. The mucus is used internally as an enveloping and softening, anti-inflammatory and protective agent for peptic ulcer of the gastrointestinal tract. For chronic colitis and constipation - as a laxative, 0.5 cups 2 times a day are prescribed. In cases of poisoning, mucus is prescribed after gastric lavage. In addition, flax seed mucus is often added to solutions and mixtures in medicine that have an unpleasant taste or have a local irritating effect. The enveloping properties of mucus reduce the cauterizing effects of drugs and eliminate the unpleasant taste (sharp, bitter) and smell of drugs. Flaxseed oil is widely used as a dietary and



therapeutic agent for the prevention and treatment of diseases associated with impaired lipid metabolism, especially atherosclerosis. It is rich in unsaturated fatty acids, which have hypocholesterolemic properties. Unsaturated fatty acids - linolenic, linoleic, and arachidonic, which is found only in animal tissues, are currently conventionally combined under the name "vitamin F". In addition, flaxseed oil is prescribed internally as a mild laxative (1-2 tablespoons at night) for chronic constipation. Externally, it is used to treat burns and cracks in the skin.

The drug linetol, obtained from linseed oil, is a mixture of ethyl esters of unsaturated fatty acids - linoleic (15%), oleic (15%) linolenic (57%) and saturated fatty acids (13%). Linetol actively interferes with lipid metabolism, helps reduce cholesterol in the blood, so it is widely used to treat and prevent atherosclerosis. Take 1.0-1.5 tablespoons once a day before meals. The course of treatment is 30-50 days. Externally, linetol is used to treat burns and radiation skin lesions.

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