

Names:

Linum usitatissimum

- **Arabic:** الكتان
- **English:** Linseed, Bio flax, Flaxseed,
- **Family:** linaceae



Part used:

- The medicinal parts are the stem as a sterile linen thread, oil extracted from the seeds, the dry ripe seeds and the fresh flowering plant.

Morphology:

- The flowers are panicle-like loose cymes on long peduncles in the leaf axils of the upper part of the stem. They have 5 ovate, acuminate, finely ciliate sepals and 5 obovate petals, which are sky blue and longer than the sepals. There are 5 stamens fused at the base and 1 ovary.
- The fruit is an almost globular, 6 to 8 mm long capsule or slightly bent stem. The seeds are flat, brown and glossy.
- Leaves, Stem and Root: The plant is an annual and grows from 20 to 150 cm high. The root is short, fusiform and light yellow. The stem is unbranched, ascending in shon curves. The leaves are smooth edged, gray-green, sessile and almost awn-like acuminate.

Active constituents:

- Mucilages (3-10%, in the epidermis, high swelling capacity): including arabinoxylans, galactans, rhamnogalacturonans.
- Cyanogenic glycosides (0.05-0.1%): linustatin and neolinustatin (yielding under optimal conditions 30-50 mg HCN per 100 gm)
- Fatty oil (30-45%): chief fatty acids linolenic acid (40-70%), linoleic acid (10-25%), oleic acid (13-30%)
- Proteins (20-27%)
- Lignans: secoisolariciresinol-diglucoside
- Phenylpropane derivatives: including among others, linusitamarine

Pharmacological applications:

- Constipation.
- Inflammation of the skin.
- Flax is used in India as a tea for coughs, bronchial conditions, urethritis, diarrhea and gonorrhea, externally for skin infections. The seeds are also used in Indian veterinary medicine.
- Decrease high blood cholesterol.

Side effects:

No health hazards or side effects are known in conjunction with the proper administration of designated therapeutic dosages. The use of large quantities of the drug as a laxative with too little fluid intake can lead to an ileus.

Contraindications:

- Contraindicated in the following conditions: ileus, stricture of the esophagus and in the gastrointestinal area, acute inflammatory illnesses of the intestine, of the esophagus and of the stomach entrance.

Interactions:

Drug Interactions: The absorption of other drugs taken simultaneously may be delayed.

Food Interactions: The absorption of Flaxseed oil is facilitated when taken with food.

Methods of administration:

Internally, cracked or coarsely ground seed, in which only the cuticle and mucilage epidermis are damaged is used.

Externally, as linseed meal or linseed expellant.

Dosage:

Constipation: 1 dessertspoon of whole or bruised (not ground) seed with at least 150 ml of liquid 2 to 3 times daily.

Lower Cholesterol: 35 to 50 gm daily of the crushed seeds. May be incorporated into muffins or breads.

External — 30 to 50 g

Storage:

Flaxseed oil must be processed and stored properly. Flaxseed meal is less vulnerable to rancidity when exposed to light and heat than the processed oil. The seeds should be protected from light and stored in a sealed container. The oil should also be protected from light and should be refrigerated.

Examples:

1- Herba care cream: for hair care



References:

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