



## To Study Methi Seeds For Hair Growth Promotion

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### Abstract:

**Biological Name-** *Trigonella foenum graceum*

Chemical constituents of fenugreek

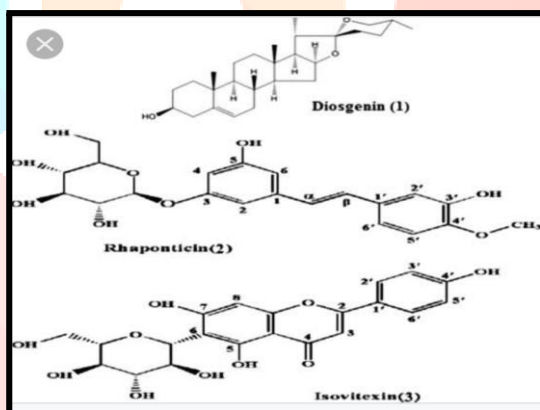
Fenugreek is a clover-like herb, its seeds, which smells and tastes like maple syrup, have been cooking in co2 used as and as medicine. Fenugreek is an ingredient in spice blends and a Flavouring agent in Foods, tobacco, beverages, and food materials.



**Keywords :** spice blends, beverages

## Introduction:

The increasing demand for healthy food from consumers has prompted the food industry to develop health-promoting food products. Food that provides significant nutrition, generates health benefits, inhibits disease and/or supports health has been more accepted in the industry and can be used as a successful marketing tool. This has resulted in the development of functional foods, which include a wide range of components such as probiotics, probiotics, vitamins, minerals, and food fibers (1). In this respect, some herbs are considered to be antioxidants, antimicrobials, health promotion, and food development. Fenugreek (*Trigonella Foenum-gracium*) is an annual plant of the family Leguminosae and is widely cultivated in Mediterranean countries and Asia (Figure 1). In India, China, Egypt, and some parts of Europe, dried seeds have traditionally been used for their beneficial health effects such as glycogen, antimicrobial, anti-inflammatory, insulinotropic, and rejuvenating effects (2). Float, bitter, and slightly sweet, in whole and ground form, fenugreek seeds are used as flavor sources for foods such as curry powder, spices mixtures, and tea. The seeds are covered with a relatively large white semitransparent endosperm layer surrounding the central hard, yellow embryo (3). The impressive functional and medicinal value of fenugreek is due to its chemical composition (20-25 % protein, 45-55 % food fiber, 20-25 % mucilaginous soluble fiber, 6-8 % fixed fatty acids and essential oils, and 2-5 % steroidal saponin). Furthermore, some of the lower components such as alkaloids (triconoline, cholin, gentianine, carpaaine, etc.), free, non-natural amino acids (hydroxyisoleucine), and individual spirostanols and furastanols such as diosgenin, gitogenin, and yamogenin have also been identified and determined as the main components of their various biological effects.



## Chemical constituents of Fenugreek seed:

**Lipids:** The lipid content in fenugreek seeds is about 5-7%. The main constituents of fatty acids present are linoleic acid, oleic acid, and palmitic acid. Saponins - Fenugreek seeds contain saponins, which are known for their anti-inflammatory and cholesterol-lowering activities

**Alkaloids:** Fenugreek seeds also contain alkaloids such as trigonelline and choline, which have been shown to have beneficial effects on blood sugar levels. Flavonoids - Fenugreek seeds contain flavonoids such as quercetin and kaempferol, which have antioxidant properties and may help protect against diseases. Overall, the chemical constituents of fenugreek seeds make them a valuable ingredient in both food as well as medicine. Their high protein content, along with other beneficial compounds such as saponins and flavonoids, make them effective against promoting hair growth. Further research is needed to fully understand the potential benefits of fenugreek seeds for this purpose.

Therapeutic uses: reduce fine lines, wrinkles, dark spots, tanning, pimples, and skin irritation.

Odorous compound	Aroma quality
1-Octen-3-one	Mushroom like
Z)-1,5-Octadiene-3-one	Metallic
3-Isopropyl-2-methoxy pyrazine	Roasty earthy
Acetic acid	Acidic, pungent
3-Isobuty-2-methoxy pyrazine	Roasty, paprika- like
Linalol	Flowery
Butanoic acid	Sweaty, rancid
Isovaleric acid	Sweaty, rancid
Caproic acid	Musty

### 1. **Benefits for Skin[13]:**

Methi seed and leaves apply internal as well as external beauty with various healthy constituents methi leaves stay healthy by providing nourishment to our body and then it reflects by the body which means skin. It is an herbal cure for skin inflammation. It can treat boils, abscesses, eczema, muscle pain, burns, and gout among other problems. It can cure local inflammatory pain as well as swelling when used as a poultice. It can be useful against blackheads and wrinkles as well and it draws out toxins accumulated beneath the epidermis and tones the outer layers of the skin. Thus, both ingestion and external application of this is useful for you to get that desired glow on skin. Fenugreek is a natural anti-aging remedy too. It combats free radicals in the body; it repairs damaged skin and other skin issues too. It smoothly exfoliates the facial skin to reveal the beautiful skin beneath. This scrub helps exfoliate the skin and removes dead skin cells, making skin healthy and shiny. Fenugreek can also be used to lighten your skin. It's improves complexion and minimizes the appearance of fine lines. Consumption of fenugreek is said to work great in protecting skin against harmful UV radiation of the sun and damage caused by sun exposure.

### 2. **Fenugreek Seeds for Hair[14]:**

Methi seeds are effective against hair fall, and dandruff and help to new growth of hairs that's why it decreases the chances of baldness and hair thinning. Fenugreek seeds or methi contain proteins and nicotinic acid which are a main source for hair growth. It contains high amounts of lecithin which makes our hair healthy and strong and it hydrates the hair as a result of hydration It helps to reduce the dryness of the hair, decreases dandruff, conditions the hair, keeps the scalp cool and treats various types of scalp issues. It is highly effective against

hair fall and provides strength from the roots. The lecithin in methi is used for strengthening dry and damaged hair. The natural tonic helps moisturize the hair and brings back the shine and bounce. Dandruff is a common problem, especially during the winter months. There are various treatments and procedures to treat dandruff and one of the most effective cure is using methi seeds. It is also effective against dry scalp and dermatitis. Fenugreek seeds contain lecithin, an emulsifying constituent. When soaked in water, the seeds produce a slippery substance that provides a shine to the hair. This quality makes methi seeds for hair conditioning an optimal choice. The mucilage of fenugreek shows that slippery effect. One of the most popular uses of fenugreek for hair is to reduce hair fall and decrease the issues of baldness. Fenugreek contains hormone antecedents that increase hair growth and help in strengthening and rebuilding hair follicle.

Therapeutic uses: increase hair growth, decrease hair fall, reverse baldness provide natural shine to hair, condition the hair, decrease split ends, nourish scalp **Effectiveness of Fenugreek seeds:**

There are many causes of hair loss, such as estrogen deficiency. External estrogen injections can change the hormonal cycle and increase the risk of cancer. One of the natural alternative therapies for estrogens can be found in various plants that contain natural products, among them compounds with low estrogenic activity, called phytoestrogen. Phytoestrogen competes with estrogen by filling or binding the estrogen receptor and producing the estrogen effect. Phytoestrogen in fenugreek seeds (*Trigonella foenum-graecum* L.) is believed to increase the process of hair growth, but so far there has been no scientific study to prove it. Therefore, the objection of this study is to prove the effect of hair tonics containing fenugreek seeds extract in different concentrations on the hair growth activity of the New Zealand rabbit strain; and to obtain the optimal concentration of fenugreek extract and safety data. The activity of hair growth is determined by hair length, hair diameter, and weight measurement, and the toxicity test is determined by the Draize skin test and the Draize eye test. The activity test results showed a significant difference ( $p < 0,05$ ) in the 10 percent fenugreek extract hair tonic compared to placebo, similar to the results of minoxidil 2 percent hair tonic. The results of the sensory test showed a mild effect of irritation.

### **Conclusion:**

Various scientific reports showed that Fenugreek, is used as a hypoglycemic, anti-inflammatory, antiseptic, antispasmodic, appetizer, cardiovascular, carminative, digestive, diuretic, antioxidant, and immunomodulatory activity, and may be a promising protective medicinal herb for therapy in cancer patients under chemotherapeutic interventions. Therefore, further research is required to determine the optimal dosage, bioavailability, and bio-efficacy of diosgenin-based drugs. All research said that hair growth can be enhanced by methi ( Fenugreek) seeds and the constituent responsible in methi seeds for hair growth promotion is diosgenin.

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