

Fennel (*Foeniculum vulgare* Mill.): A Seed Spice as a Medicine

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INTRODUCTION

The secrets of health of our ancestors can be found in the humblest ingredients in the kitchen. Saunf seeds is one such wonderful ingredient imbued with dense nutrients that we need to reveal them. Saunf or fennel, the aromatic spice needs no special mention as it is one of the prominent spices used extensively for its indispensable medicinal and culinary practices in India.

India is known as the “Land of Spices” and largest producer, consumer and exporter of seed spices and their products in the world. Fennel (*Foeniculum vulgare* Mill), 2n=22 an important open cross-pollinated crop, belong to family *Apiaceae* and is mainly grown in temperate and subtropical regions for seeds. It has originated from Mediterranean region, where its high degree of genetic variability persists. Fennel seeds are popularly clad across different parts of the country as Saunf in Hindi, sompu in Telugu, peruncirakam in Tamil, perunjirakam in Malayalam and mauri in Bengali.

In Ayurveda, fennel seeds are considered very auspicious. They were extensively used in various recipes in ancient India. The age-old secrets of health can be found in the simplest ingredients in our kitchens. We just need to unveil them.

In India, fennel seeds are quite popular among people as the seeds can miraculously treat an endless list of digestive ailments that include colic in infants, intestinal gas, heartburn, and more. You can even use the seeds as a mouth freshener after you have a hearty meal. Hence, we can see that fennel seeds offer a wide range of benefits that makes it very popular among people. So, the next time you're thinking of incorporating a food item into your diet with multiple health benefits, you should consider fennel seeds as they would fit in perfectly with your long term or short-term health goals.

Nutritional Facts:

Dried fennel or saunf is a storehouse of vital nutrients, low on calories and abundant in vitamin C fennel seeds bolsters the immune system, stimulates the collagen production and works as a potent antioxidant that scavenges the free radicals. Rich in manganese fennel seeds activate the enzymes, triggers metabolism, regulates blood sugar and strengthens the bones. Besides these, a notable

amount of iron, calcium, magnesium, potassium and selenium promotes skin health, controls blood pressure and treats anemia.

Fennel seeds also comprise more than 87 volatile compounds including polyphenol antioxidants such as anethol, rosmarinic acid, chlorogenic acid, quercetin, apigenin *etc.*, Several studies have disclosed that a diet rich in antioxidants lowers the risk of chronic diseases

Nutritional value per 100g (Source: USDA National Nutrient data base)

Principle	Nutrient value	Percentage of RDA
Energy	345 Kcal	17 %
Carbohydrates	52.29 g	40 %
Proteins	15.80 g	28 %
Total fat	14.87 g	48 %
Cholesterol	0 mg	0 %
Dietary fiber	39.8 g	104 %
Vitamins		
Niacin	6.050 mg	37 %
Pyridoxine	0.470 mg	36 %
Riboflavin	0.353 mg	28 %
Thiamin	0.408 mg	34 %
Vitamin A	135 IU	4.5 %
Vitamin C	21 mg	35 %
Electrolytes		
Sodium	88 mg	6 %
Potassium	1649 mg	36 %
Minerals		
Calcium	1196 mg	120 %
Copper	1.067 mg	118 %
Iron	18.54 mg	232 %
Magnesium	385 mg	96 %
Manganese	6.533 mg	284 %
Phosphorus	487 mg	70 %
Zinc	3.70 mg	33.5 %

Health Benefits of Fennel (*Foeniculum vulgare*)

Some of the health benefits of fennel are as follows:

1. Chewing raw seeds combats bad breath

Fennel seeds contain a specific aromatic essential oil that possesses antibacterial properties that help to freshen your breath. The sweet fennel seeds increase the secretion of saliva, which helps to kill the harmful bacteria. It is a simple and effective home remedy to combat bad breath. Munching on 5 to 10 fennel seeds could freshen your breath.

2. Improves digestive health

The goodness of fennel seed essential oils stimulates the secretion of digestive juices and enzymes that improves your digestion. Fennel seeds contain anethole, fenchone and estragole that act as antispasmodic and anti-inflammatory. They work wonderfully for constipation, indigestion and bloating. For better results, consume fennel tea to keep your digestive tract healthy and happy. Fennel seeds also contain fibre and while they may be small in size their fibre content is high. This can further improve your digestive health. By improving the fibre levels in your diet, fennel seeds contribute to better heart health as numerous studies have linked higher fibre diets with a lower risk of cardiac diseases.

3. Helps to regulate blood pressure

Fennel seeds are rich in potassium that regulates the fluid amount in the bloodstream. It helps to control your heart rate and blood pressure. As per the published study, fennel seeds increase the level of nitrite in the saliva. Nitrite is a natural element that keeps a check on blood pressure levels.

4. Reduces asthma and other respiratory ailments

The high number of phytonutrients present in fennel seeds helps to clear sinuses. These tiny seeds offer bronchial relaxation that helps to reduce symptoms of asthma, bronchitis and congestion.

5. Promotes lactation

Anethole present in fennel seeds stimulates the galactagogues (substances that promote lactation) to increase milk secretion. Many studies suggest that anethole mimics the action of the estrogen hormone and promotes lactation.

6. Improves skin appearance

Fennel extract works miraculously for the skin by protecting it from free radical damage and improving skin cell longevity. They are abundant in minerals such as potassium, selenium and zinc. These minerals are crucial for balancing hormones while maintaining the oxygen balance in your bloodstream. They are widely used to treat different skin ailments like acne, rashes and dryness.

7. Purifies blood

The essential oils and fibers in fennel seeds help to purify your blood and flush out the toxic compounds out of your body.

8. Keeps cancer at bay

Many studies suggest that fennel seeds have anti-cancerous properties. They have powerful antioxidant properties that neutralize free radicals and beat oxidative stress. It may be the reason that prevents the development of cancer.

9. Helps to improve eyesight

A handful of fennel seeds can do wonders for your eyes. It contains vitamin A that is an essential vitamin for the eyes. Earlier, fennel seed extract was useful to treat glaucoma.

10. Promotes weight loss

Fennel seeds are a rich source of fiber which helps you feel full for longer, thus preventing you from overeating. This results in consumption of lesser calories and ultimately aids weight loss. Consumption of fennel seeds may also help reduce fat storage by improving the nutrient-absorption in the body. Additionally, with the presence of antioxidants like zeaxanthin, lutein, beta-carotene, chlorine, manganese, zinc, selenium, phosphorus, and more that are known for protecting the body against oxidative stress and improving the metabolic rate of a human body. And also help

in improving the body's absorption power for vitamins and minerals. Another advantage of the antioxidants is that they help in breaking down the fats and carbs in the body, helping you in avoid gaining extra pounds. This spice also has diuretic properties. Hence, consuming it in its liquid form (fennel tea) can help increase the flow of urine and remove toxins from the body, resulting in effective weight

11. Reduces Gas

Due to its excellent digestive properties, as well as the fact that it is antimicrobial, fennel seeds are thought to aid in reducing gas. By improving digestive movement, this seed allows easy passage of bowels without excessive gas build-up. And with its

antimicrobial effect (mainly from the anethole, an organic compound in the seed) it prevents bacteria from growing and releasing gases in the first place.

CONCLUSION

In India, fennel seeds are quite popular among people as the seeds can miraculously treat an endless list of digestive ailments. It is storehouse of antioxidants and volatile oils which has the potential to improve heart health, lessen inflammation, stimulate digestion and promote weight loss. To reap the wellness incentives of this amazing herb, incorporate dried fennel seeds in your daily regimen.