

# SWEET FENNEL

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Sweet fennel (*Foeniculum vulgare* Mill.), is an aromatic herb belonging to the parsley family. It is widely used as a spice, but also boasts many well-documented medicinal benefits. The herb is believed to have originated in Europe and Mediterranean regions, and although it grows wild in a wide variety of locations throughout the world, it is cultivated extensively in the U.S., France, India, and Russia. Reminiscent of anise and licorice, sweet fennel is an extremely versatile herb that remains unfamiliar to many North Americans. One reason for this versatility is that every part of the herb can be used: the bulb root, the tender, wispy leaves, and the seeds.



Sweet fennel contains a number of vitamins and minerals, such as vitamin C, pantothenic acid, pyridoxine, niacin, riboflavin, thiamin as well as manganese, calcium, iron, magnesium, phosphorus, and copper. The seeds and bulbs are also resplendent with flavonoid antioxidants such as rutin, quercetin, and kaempferol, as well as numerous essential oil compounds such as anethole, limonene, anisic, pinene and cineole which all have potent digestive, carminative, and anti-flatulent properties. Finally, sweet fennel contains a considerable amount of dietary fiber which can help prevent cholesterol build-up and eliminate carcinogens from the colon.

From a medicinal perspective, sweet fennel is probably best recognized as a powerful digestive aid, to help relieve symptoms like abdominal cramps, gas, bloating, and nausea. In India, dried fennel seeds have long been popular as a digestive aid and have been used in this application for thousands of years. Thus, a handful of sweet fennel seeds are routinely chewed after meals, both to freshen the breath and stimulate the digestive process.

Science has shown that the rich volatile oils in sweet fennel are primarily responsible for the many digestive benefits it offers, as well as for its ability to soothe intestinal gas. Indeed, the aromatic compounds anethole, fenchone and estragole present in sweet fennel possess potent anti-spasmodic and anti-inflammatory properties, and as such, help to relax contracted intestinal muscles, thus allowing trapped gas to dissipate. The volatile oils in fennel seeds are also believed to stimulate bile production, thus preventing digestive issues, most notably flatulence, from occurring in the first place. Fennel is also reputed to be beneficial for people with acid reflux. In fact, adding sweet fennel to one's diet



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can help balance the body's pH level within, especially within the digestive tract, and in turn, reduce reflux after meals. So beneficial is sweet fennel in fact, that both the ESCOP and the German Commission E recognize its use in the treatment of digestive disorders.

Another interesting use for sweet fennel is in the treatment of infant colic. Researchers have found that fennel seed oil reduces pain and increases motility in the small intestine, making it an excellent natural remedy for colic, and certainly a far safer option than the conventionally prescribed drug dicyclomine hydrochloride, which can cause some serious side effects and may not be consistently effective. Indeed, a 2003 study compared fennel seed oil with a placebo in 125 infants. The fennel seed oil group was reported to have suffered 65% less colic, measured by crying episodes, than those in the control group, and this, with no side effects.

## PATHOLOGIES

**CANCER:** Antioxidants and other compounds in fennel seeds have shown to offer protective benefits against certain forms of cancer, according to a tissue-culture study published in the September 2011 "Journal of Medicinal Food." Indeed, fennel seeds have shown to inhibit liver cancer cells and increase the activity of important antioxidant en-

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## MEDICINAL PROPERTIES

- ANTIMICROBIAL
- ANTICARCINOGENIC
- ANTISPASMODIC
- APPETIZING
- ANTISEPTIC
- CARMINATIVE
- DEPURATIVE
- DIGESTIVE
- DIURETIC
- EMENAGOGUE
- EXPECTORANT
- GALACTAGOGUE
- LAXATIVE
- SPASMOLYTIC
- STIMULANT
- STOMACHIC
- SPLENIC
- TONIC
- VERMIFUGE

zymes in the liver. Further, fennel seeds have also shown to protect against radiation-induced damage to lipid molecules and prevent antioxidant depletion. These preliminary results indicate that fennel seeds may be of considerable value in preventing and treating certain forms of cancer.

**DIGESTION:** While lots of vegetables can cause abdominal cramping, gas and bloating, especially when consumed raw, fennel and fennel essential oil have been shown to do quite the opposite. Indeed, fennel can help clear the bowels, relieve constipation, and soothe gas and bloating, providing much-needed relief from intestinal discomfort. In addition, fennel can also help prevent the formation of additional gas and thus prevent flatulence before it even occurs. Sweet fennel also offers purifying and detoxifying properties, as well as is a natural laxative. Indeed, quite interestingly, one of fennel's most valuable recent applications is in the treatment of alcoholic poisoning, and the rehabilitation of alcoholics.

**HORMONE BALANCING:** Sweet fennel is extremely effective in treating female reproductive system issues. In fact, sweet fennel oil contains the plant phytoestrogens, and thus helps to regulate the menstrual cycle, especially when periods are scant and painful, with cramping pains. It is also of considerable value to help address menopausal complaints such as bloating, cramping, mood swings and hot flashes brought on by fluctuating hormone levels. As a boon, sweet fennel oil is thought to help women maintain muscle tone, skin and connective tissue elasticity, healthy circulation and strong bones, and may postpone some of the degenerative effects of aging, such as wrinkles.

## CONCOMITANT PRODUCTS

**CONCOMITANT PRODUCTS:** Digestive disorders come in various shapes and sizes and, quite unfortunately, are a very common occurrence. That said, digestive problems can be helped enormously via the herbal route. There are plants that stimulate digestion, others that help expel gas, and yet others that can soothe inflammation and pain. Sweet fennel is wonderfully supportive of the digestive system as a whole. It can be used as a standalone or may be combined with many other like-minded herbs such as senna leaf, cascara sagrada, aloe vera, chia seeds, marshmallow, slippery elm, barberry root, dandelion, artichoke, cardamom, caraway, cumin and lemon balm.



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