

FENNEL: A BRIEF REVIEW***Arzoo and Milind Parle**

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ABSTRACT

Nature is full of numerous supernatural fragrances, which have their own magic and are pleasant to our senses. Fennel is one of them, generally known as Saunf (*Foeniculum vulgare*) belonging to Apiaceae family. India is the greatest manufacturer of fennel in the world. Fennel is mainly cultivated in Gujarat, Rajasthan and Uttar Pradesh. Fennel contains volatile compounds, flavonoids, phenolic compounds, fatty acids and amino acids. It has pharmacological properties like antimicrobial, antiviral, anti-inflammatory, antimutagenic, antinociceptive, antipyretic, antispasmodic, antithrombotic, apoptotic, cardiovascular, chemomodulatory, antitumor, hepatoprotective, hypoglycemic, hypolipidemic and memory enhancing property. Fennel is being used in several Ayurvedic formulations. In daily life people used to chew Fennel seed after eating food, to refresh mouth and prevent bad odour. Taking fennel juice regularly, helps to rebalance the digestive tract, thus promotes a healthy bowel movement and used as remedy for diarrhea. Fennel helps in curing digestive, endocrine, reproductive and respiratory systems related problems. Fennel has been used to restore psychological and physical well being.

KEYWORDS: antimicrobial, antiviral, anti-inflammatory, antimutagenic, antinociceptive, antipyretic, etc.

INTRODUCTION

Nature is full of numerous supernatural fragrances, which have their own magic and are pleasant to our senses. Fennel is one of them, generally known as Saunf (*Foeniculum vulgare*) belonging to Apiaceae family.^[1] Fennel originates from Mediterranean region^[2], but it can be found around the world today. India is the greatest manufacturer of fennel in the world. Fennel is mainly cultivated in Gujarat, Rajasthan and Uttar Pradesh.^[2] Fennel is a multi-purpose garden plant. The use of Fennel goes far beyond the kitchen. It is used as a condiment and culinary spice.^[1] Fennel is also a magical remedy for problems related to digestive, endocrine, reproductive and respiratory systems.^[1] From the ancient times, it has been in use for constipation, flatulence,

diarrhoea and cough.^[2] Fennel contains volatile compounds, flavonoids, phenolic compounds, fatty acids, and amino acids.^[3] It shows several pharmacological properties like anti-microbial, anti-pyretic, anti-spasmodic, anti-thrombotic, apoptotic, anti-viral, anti-inflammatory, anti-mutagenic, anti-nociceptive, cardiovascular, chemomodulatory, anti-tumor, hepatoprotective, hypoglycemic, hypolipidemic and memory enhancing property.^[3] Fennel is being used in several Ayurvedic formulations. It also acts as a galactagogue stimulating milk production in lactating mothers.^[4] A decoction of the leaves and roots of fennel is useful for snakes' bites and to neutralize vegetable poison, such as mushrooms. Fennel has been used to restore psychological and physical well being.

Table 1: Taxonomical Classification of Fennel^[2]

Kingdom	Plantae
Subkingdom	Tracheobionta
Division	Magnoliophyta
Class	Magnoliopsida
Subclass	Rosidae
Order	Apiales
Family	Apiaceae
Genus	<i>Foeniculum</i>
Species	<i>F. vulgare</i>

Geographical Distribution^[2]

World scenario: Fennel is cultivated in Argentina, America, Germany, China, Indonesia, Russia, Japan and Pakistan.

Indian scenario: In India, the fennel cultivating states are Haryana, Punjab, Himachal Pradesh, Maharashtra and Uttar- Pradesh.

Table 2: Indian Synonyms of Fennel^[3]

Sr. No.	Name	Language	State of India
1.	Saunf	Hindi	Haryana, Jammu and Kashmir
2.	Mauri, Panmouri	Bengali	Bengal
3.	Hariyal, Variyali	Gujrati	Gujarat
4.	Perum jeerakam	Malayalam	Kerala
5.	Badishep, badisep, shoap	Marathi	Maharashtra
6.	Madhurika, shatapushpa	Sanskrit	Maharashtra
7.	Perun siragum, shombu, sohikire	Tamil	Tamilnadu
8.	Peddajilakurra, sopu	Telugu	Andhra Pradesh
9.	Badi sopu, badisepu, sabbasige, dodda sopu	Kannada	Karnataka
10.	Badesoppu	Gharwali	Uttara-Khand

History

Fennel is one of the most popular herbs all over the world from ancient time. The word fennel is derived from the place name Marathon (meaning "place of fennel"), site of the Battle between the Athenians and the Persians. The Athenians won this battle and waived fennel stalks as a symbol of victory. They gave fennel as an award to Pheidippides, who ran from Marathon to Athens to deliver news of a military victory against the Persians. After this incident fennel is used as a symbol of victory. However, there is no record indicating that fennel was grown there. The ancient Greeks named the plant Marathron, derived from mariano, meaning "to grow thin." Now its well known that Fennel is a powerful appetite suppressant leading to weight loss. In Greek mythology, fennel is connected to Dionysus, the God of food and wine, who holds a fennel staff in his hand. According to Hesiod, a Greek poet, Zeus took all the fire that was easily accessible to people away from them, it is believed that Prometheus (A Greek God) brought this fire back for people, hidden in a fennel stalk. In 812 AD Charlemagne, the king of Franks declared that fennel was essential in every garden, because it had medicinal properties. He also grew it in his own garden. According to Greek mythology, a fennel stalk carried the coal that passed down knowledge from the Gods to men. In ancient times, it was believed that fennel seeds help in improving eye-sight. Greeks used Fennel as a slimming agent, memory booster and trusted that it gave courage and long life. Fennel was eaten by Greek athletes for improving their performance. The Romans called it, *foeniculum* meaning 'fragrant hay'. Later on this name was changed to *fanculum*, which gave birth to its alternative popular name, 'fenkel.' During this period, it was eaten to relieve hunger pangs on fast days. Roman warriors consumed fennel to make them strong. It was thought that fennel had the power to keep body weight of people under control. In Roman, Pliny said that eagles become blind after moulting. And it was believed that eagles restored their eye-sight by consuming fennel. In medieval times, fennel was used in combination with St. John's Wort and other herbs, to keep out of the way

the evil influences of witchcrafts and ghosts. People would hang it over their doors on Midsummer's Eve to avoid evil spirits. Scented soaps and perfumes were made to ward off negativity and evil spirits. In the old days, a mixture of fennel seeds, soap and salt was rubbed on the blade of a plough by British farmers to strengthen the land and to encourage harvesting. Fennel was thrown at newly-weds for fertility instead of rice. It was also eaten as a condiment with salted fish, which was commonly eaten during Lent (a season of the Christian Year where Christians focus on simple living, prayer, and fasting in order to grow closer to God). In 13th century, in England puritans used to chew fennel seeds during church meetings lasting for 3-4 hrs, therefore they named fennel as meeting seeds. In 17th century, Thomas Culpepper (a botanist, herbalist, physician and astrologer) also believed fennel to be an effective anti-dote for poisonous mushrooms and snake bites. Now, Fennel is used as an anti-dote to poisons by the Romans, Chinese and Hindus also. In 18th century, fennel was an ingredient of a patented medicinal elixir called absinthe, which became a popular drink among the Bohemian during post 1st World war era in Europe and the United States. Now fennel is the most popular herb all over the world possessing several uses in kitchen as well as in medical field. Today, the United States, France, India and Russia are amongst the foremost cultivators of fennel.

Cultivation

Fennel is a long duration crop and can thrive anywhere. It grows in temperate and sub tropical areas. Generally, fennel is cultivated as a Kharif as well as Rabi crop. Fennel requires cool-dry climate. Soaking and pre-sprouting of the seed is to be done for several days to improve germination. Fennel crop is susceptible to frost. Indian Fennel is brownish, usually smaller, straighter and not quite so rounded at the ends with a sweet anise taste. Seed start germinating after 12-18 days; they are harvested after 100 days and have life of 2 yrs. To keep the plants healthy, they should be replanted after every three to four years.

Soil

Well drained loamy soil and black cotton soils are suitable for cultivation of fennel crop.

Rain

Rain during maturity of fennel spoil the colour and reduce the quality of fennel.

Sun Exposure

Full sun exposure is required for fennel crop. 60-90°F temperature is good for germination of seed.

Constituents^[2-7]

Fennel contains below mentioned phytoconstituents, which are categorized as under:

Terpenoids: carotene, β - amycene, α -phellandrene, camphor, 1-8,cineole, α -terpineol, D-limonene, dipentene, γ -terpinene, linalool, terpinen-4-ol, β -pinene, α -thujene, α -fenchene, 3-carene, sabinene, α -phellandrene, myrcene, α -terpinene, β -terpinene, cis-ocimene, trans-ocimene, p-cymene, terpinolene.

Phenylpropene's derivatives: apiole, myristicin.

Minerals: aluminium, boron, calcium, chromium, cobalt, calcium, copper, iodine, iron, magnesium, manganese, niacin, nickel, phosphorous, potassium, silicon, selenium, sodium, tin, zinc.

Amino acids: alanine, arginine, aspartic acid, choline, cystine, glutamic acid, glycine, histidine, leucine, lysine, isoleucine, methionine, phenylalanine, proline, serine, threonine, tryptophan, tyrosine, valine.

Cinnamic acid derivatives: o-coumaric acid, p-coumaric acid, cinnamic acid, cynarin, ferulic acid, p-coumaric acid, p-hydroxycinnamic acid, sinapic acid.

Coumarin: bergapten, imperatorin, isopimpinellin, Imperatorin, marmesin, psoralen, scopoletin, seselin, umbelliferone.

Table 3: Nutrient value of Fennel^[3]

NUTRIENTS	Values per 5.8 grams
Energy	31 kcal
Water	0.51098 g
Carbohydrate	7.29 g
Dietary fibre	3.1 g
Fat	0.20 g
Ash	0.47676 g
Protein	1.24 g
Moisture	90.21 g
Sugar	3.93 g

Pharmacological actions**Antifungal activity**^[6]

Fennel seeds and oil exert antifungal activity against mycelial growth of *Alternaria alternata*, *Fusarium oxysporum*, *Aspergillus niger* (AN), *Aspergillus flavus*

Vitamins: Vitamin A, Vitamin B1, Vitamin B6, Vitamin B2, Vitamin B3, Vitamin B5, Vitamin B9, Vitamin C, Vitamin E, Vitamin K, folate.

Volatile oils: fenchone, trans- anethole, methyl chavicol, cis-anethole, anisic acid, anisic-ketone, anisic aldehyde, β -pinene, α -pinene, diterpene, limonene, camphene, β -pinene, estragole.

Fixed oil: petroselinic acid, oleic acid, linoleic acid, tocopherols.

Phenolic acid: caffeic acid, chlorogenic acid, neochlorogenic acid, rosmarinic acid.

Other Acids: arachidic acid, benzoic acid, citric acid, furamic acid, gentisic acid, glycolic acid, gallic acid, malic acid, p-hydroxybenzoic acid, palmitic acid, protocatechuic acid, quinic acid, shikimic acid, syringic acid, tartaric acid, vanillic acid.

Sterols: β - sitosterol.

Enzyme: Urease.

Saponin: stigmasterol, stigmasterol-palmitate.

Flavonoids glycosides: Foeniculoside I, Isoquercitrin, Kaempferol, Kaempferol-3-arabinoside, Kaempferol-3-glucuronide, Rutin, Quercetin, Quercetin-3-l-arabinoside, Quercetin-3-arabinoside, Quercetin-3-glucuronide, hesperidin, apigenin

Other constituents: Dillapional, 5- methoxy psoralen, 8- methoxy psoralen, avicularin, ceryl-alcohol, dianethole, dillapiol, fenchyl- alcohol, osthonol, photoanethole, scoparone, xanthotoxin, vanillin.

(AF), *Aspergillus oryzae* (AO), *Aspergillus ochraceus* (AO), *Fusarium graminearum* (FG), *Fusarium moniliforme* (FM), *Penicillium citrium* (PC), *Penicillium viridicatum* (PV), *Penicillium madriti* (PM) and

Curvularia lunata (CL) and Rhizoctonia solani due to presence of anethole, fenchone and methyl chavicol.

Anti-inflammatory activity^{[8],[9]}

Methanol extract of Fennel exhibits inhibitory effects against acute and subacute inflammatory diseases. It significantly increases the level of serum transaminase, aspartate aminotransferase (AST) and alanine aminotransferase (ALT) and it seems that it acts on both the cyclooxygenase and lipoxygenase pathways and shows anti-inflammatory activity.

Antibacterial activity

Fennel has antibacterial activity against both gram positive bacteria and gram negative bacteria^[5]. Fennel prevents bacterial invasion of Escherichia coli and Bacillus megaterium effectively.

Anti-oxidant^{[1],[6]}

Fennel contains flavonoid anti-oxidants compounds like kaempferol and quercetin which helps eliminate harmful free radicals from the body, thus protecting from infection and aging. Rutin bolsters inadequate circulation due to its ability to strengthen blood capillaries.

Respiratory disorder

Fennel is an excellent remedy for cold and used as an expectorant. Creosol and alpha-pinene helps in reducing phlegm and bronchial secretions thereby cure stubborn coughs, colds, respiratory chest congestion and bronchitis.^[3] Quercetin present in fennel has anti-inflammatory properties can help ease asthma symptoms.^[8]

Digestive Aid^[10]

Phytoconstituents such as anethole, limonene, anisic aldehyde, pinene, myrcene, fenchone, chavicol and cineole are supposed to have antioxidant, antispasmodic, digestive, carminative and anti-flatulent properties. Fennel stimulates secretion of digestive and gastric juices also, reduce inflammation of GIT and increases absorption of nutrients from the food. Fennel acts as cathartic, laxative and purgative as it contains volatile oils, which stimulate the mucus membranes in the digestive tract, increase motility and peristalsis.

Anti-Cancer Effects^[11]

Anethole, vitamin C, flavonoids and essential oils, are the most important constituents of fennel, helps in preventing the onset and spread of cancer by reducing NF-kappa B — a gene-altering and inflammation-triggering molecule — along with tumor necrosis factor (TNF) — a cancer-signaling molecule. As fennel is a good source of fibre, helps in removal of toxins from the colon and therefore may be helpful in colon cancer prevention. Fennel seed extract play a role in preventing various strains of breast and liver cancers.

Diuretics^[12]

Fennel is a good natural diuretic, helps in flushing out of excess water and toxin from body by frequent urination. Thus, it helps to reduce inflammation that causes rheumatism and swelling.

High Blood Pressure^{[12],[13]}

A natural diuretic, Fennel seeds help flush out excessive water from the body through the kidney. By reducing fluid content Fennel causes a reduction in arterial blood pressure, without altering the heart and respiratory rates. Fennel is a good source of potassium, which is a key mineral known to reduce high blood pressure. Lowering blood pressure can reduce risk of strokes and heart attacks.

Weight loss^[13]

Fennel increases the metabolism of fats and sugars in liver and pancreas. It dissolves fat deposits in bloodstream also and allows it to be used as an energy source. These aspects combined with its natural diuretic effect and a reputation as an appetite suppressant makes it an excellent remedy for weight loss.

Osteoporosis^[14]

Fennel contains several nutrients, including, iron, phosphorous, calcium, magnesium, manganese, zinc and vitamin K, which contribute to maintaining strong bones and prevent post-menopausal bone loss and osteoporosis. The fennel worked by reducing osteoclast — cells that break down weakened bone — differentiation and function. This offers a protective effect on the bones.

Hair^[15]

Fennel is a good source of iron, creating more red blood cells, consumption of fennel prevents premature graying apart from strengthening and stopping hair loss.

Eyes

Fennel herb and the root extracts are used for clearing cloudy eyes. Using fennel in food prevents inflammation of the eyes and age related, macular degeneration. Due to the antibacterial qualities of fennel, seeds are used as eyewash to reduce inflammation of the eyes. Fennel seeds have the ability to cure glaucoma also.^[10]

Anti-thrombotic activity^[16]

Anethole present in fennel showed antithrombotic activity and have antiplatelet activity, clot destabilizing effect and vasorelaxant action. Anethole, inhibit arachidonic acid, collagen-ADP and U46619 induced aggregation.

CNS activity^[17-19]

Fennel is very useful for brain as it showed significant anxiolytic, anti-stress and nootropic activity in studies. Different extracts of Fennel helps in dementia, an age related mental problem and in Alzheimer's disease.

Boosts Immune System Health

Fennel contains vitamin C, which is an outstanding source that helps to strengthen our immune system. It has ability to rid free radicals, is also important because it repairs skin tissue and protects blood vessel walls.

Fluid Retention

Fennel seeds can relieve symptoms of edema as it has the ability to flush out excess fluid from the body.

Anemia

Iron, chief constituent of haemoglobin and an amino acid Histidine that stimulates production of haemoglobin, present in fennel seeds helps treatment of anemia.

Protects Against Aging

Fennel is a natural aid for skin care. Fennel seeds, stalks, bulbs, and leaves are all packed with nutrition and are an excellent source of vitamins. These vitamins, including vitamin C, are essential for maintaining good skin health and even promote collagen synthesis to keep the skin firm and tight.

Table 4: Medicinal Uses of Fennel

Sr.	Medical condition	Part Uses	References
1.	Antifungal	Fruit	[6]
2.	Antioxidant	Fruit	[6]
3.	Antimicrobial	Fruit	[5]
4.	Antiviral	Fruit	[20]
5.	Anti- allergic	Fruit	[21]
6.	Anti- inflammatory	Fruit	[8]
7.	Anxiolytic	Fruit	[18]
8.	Anti-stress	Fruit	[17]
9.	Hepatoprotective	Seed	[22]
10.	Memory enhancing	Fruit	[19]
11.	Nootropic	Fruit	[19]
12.	Anti-hirutism	Seed	[23]
13.	Anticolitic	Seed	[24]
14.	Antinociceptive	Fruit	[25]
15.	Diuretics	Root	[12]
16.	Oculohypotension	Seed	[26]
17.	Antithrombotic	Fruit	[16]
18.	Antimutagenic	Fruit	[27]
19.	Chemo- modulator	Seed	[28]
20.	Cytoprotective	Fruit	[16]
21.	Anti-tumor	Stem, shoots, leaves	[11]
22.	Anti-pyretic	Fruit	[29]
23.	Hypolipidemic	Fruit	[30]
24.	Hypoglycaemic	Fruit	[31]
25.	Spasmolytic	Fruit	[10]
26.	Apoptotic	Fruit	[32]
27.	Bronchodilator	Fruit	[33]
28.	Anti-aging	Fruit	[34]
29.	Anti-obesity	Fruit	[13]
30.	Cardio protective	Fruit	[13]
31.	Osteoporosis	Root	[14]
32.	Ostreogenic	Fruit	[20]
33.	Anti-psychotic	Seed	[35]

Table 5: International Synonyms of Fennel

Sr. No.	Name	Language	Country
1.	Hinojo, Inuju	Spanish , Aymara	Bolivia
2.	Bisbas, razianaj	Arabic	Arab
3.	Arapsaci, rezene, malatura, hullebe	Turkish	Turkey
4.	Mieloi	Basque	Basque
5.	Komorac	Bosnian	Bosnia

6.	Endro, erva-doce, funcho	Portuguese	Brazil
7.	Fenoll, fonoll	Catalan	Andorra
8.	Morac	Albanian, Croatian, Hungarian	Central Serbia
9.	Hui xiang, xiao hui xiang	Chinese	China
10.	Fenykl	Czech	Czech
11.	Komorac, koromac, kumurac, morac, moroc, moraca	Dalmatian, Polish	Dalmatia (southern Croatia), Poland
12.	Almindelig fennikel, fennikel	Danish	Sweden, Denmark
13.	Venkel	Dutch	West German
14.	Fennel	English	South Europe, South Africa
15.	Fenouil	French	France
16.	Fenchel, fenchle, bitterfenchel	German	Germany
17.	Finocchio	Italian	Italy
18.	Fenneru, uikyuu, uikyuu, Shouikyua	Japanese	Japan
19.	Adas	Indonesian	Indonesia
20.	Sohoehyang	Korean	Korea
21.	Phaksi	Laos	Lao
22.	Foeniculum, maratrum	Latin	America
23.	Fonoll	Catalan	Majorcan
24.	Madesi sauf	Nepalese	Nepal
25.	Badian	Persian	North Iran
26.	Fenikkel	Norwegian	Norway
27.	Hinojo, hinojo amargo, fenoll, fiollo, millua	Spanish	Spain
28.	Phak chi, phak chi duen ha, phak chi lom, thian klaep, yira	Thai	Thailand

Traditional Uses^[3]

Fennel is an herb blessed with several precious qualities. From the ancient times, fennel seeds were chewed for curing mouth ulcer, gingival wound gum disorder and as a mouth freshener to get rid of bad breath. Fennel seeds are recommended in constipation as they stimulate the clearance of bowels and help relieve gas. The digestive functions are streamlined by taking fennel regularly and it also act as a remedy for gastralgia, stomachache, swollen stomach and diarrhea. Fennel serve as good natural anti-ulcer agent, anti-emetics appetite suppressant and metabolism booster. It is believed that taking Fennel on daily bases prevents obesity. Drinking fennel tea regularly may help with losing weight. It increases the frequency of urination and act as tonic for kidney and normal down the high blood pressure. Fennel uses for purification and detoxification of blood. It keeps colon and liver healthy. Fennel is also good for eye, skin and hair. Fennel is used for eyewash to cure eye blurry, conjunctivitis and itching. Fennel aromas have its own magic, which relax the mind, helps in insomnia remove stress and act as hypnotic. It Cure woman problems of repeated abortion, Leucorrhoea, menstrual pain, milk stimulant and also pass through breast milk. Fennel is a famous traditional remedy for colic in child. It's a very cheap and easy remedy to cure cough, fever and cold. Fennel have antiseptic property as well as anti-inflammatory property, when used externally and rubbed on affected parts helps in ease up stiff, painful joints, arthritis and rheumatism. A plaster of fennel roots was a traditional treatment for the bites of mad dogs and also has mosquitocidal action. A decoction of the leaves and

root is good for serpent bites and to neutralize vegetable poison, such as mushrooms.

Miscellaneous uses

Fennel is used in various natural toothpastes as a freshening ingredient. Fennel is disliked by fleas, so, powdered Fennel has the effect of driving away fleas from kennels and stables. Yellow and brown dyes are obtained from Fennel flowers and leaves. Fennel oil is used in condiments, soaps, creams, perfumes and liquors for increasing aroma. Fennel juice is also used in making cough syrups. Absinthe is famous beverage made of fennel, wormwood and anise. It was initially developed for medical purposes, but it soon became popular as alcoholic drink. Europeans used it to manufacture drink called "sack", that was popular during the Shakespeare time.

Cuisine uses

Fennel has a very fabulous savoury aroma due to which it is used for the preparation of cookies, bread, cakes and pastries. Leaves are used for salads, soups and dishes made of meat, fish and vegetables. Bulb can be consumed raw, or it can be cooked, boiled, micro waved and fried. Fennel seeds are particularly good with pork recipes, fish and meat. Italian cookery utilizes the fennel flavor in many classic recipes. The seeds are also used in desserts, other baked goods and drinks. It should be added late in the cooking process, or even just before serving. Fennel is also used in making tea, which is very beneficial to health.

Strange facts

- ❖ India is the greatest manufacturer of fennel in the world.
- ❖ The distinction between male and female fennel is a scientific fact, it is only depends from its shape. The male is round and female is long.
- ❖ Finocchio, fennel (Italian,) is a derogatory term for homosexuals.
- ❖ Fennel is allergic to flies. Powdered fennel is sometimes used to keep flies away specially from horses.
- ❖ From ancient times, fennel is being used for improving eye-sight.
- ❖ It is believed that fennel aroma keeps the influence of devil or witchcrafts away.

CONCLUSION

Fennel is an all rounder spice, which has culinary as well as medicinal uses. In this review article, we have made humble attempt to summarize the nutritional value, health benefits, phytochemical composition, pharmacological actions and medicinal properties of Fennel. We shouldn't underestimate Fennel just because of its size. Although, small in size, but it acts as magical weapon for our health. On one hand Fennel act as a smart spice in kitchen, on other hand it provide protections against various diseases. In meanwhile we can forget about its aroma, which pleased our senses and refresh our mind by touching our soul. Fennel has been using in various Ayurvedic formulations just because of its goodness. It has pharmacological properties like antimicrobial, antiviral, anti-inflammatory, antimutagenic, antinociceptive, antipyretic, antispasmodic, antithrombotic, apoptotic, cardiovascular, chemomodulatory, antitumor, hepatoprotective, hypoglycemic, hypolipidemic and memory enhancing property. In daily life people used to chew Fennel seed after eating food, to refresh mouth and prevent bad odour. Taking fennel juice regularly, helps to rebalance the digestive tract, thus promotes a healthy bowel movement and used as remedy for diarrhea. Fennel helps in curing digestive, endocrine, reproductive, and respiratory systems related problems. Like its size, its price is also small that is in reach of a common man. We can conclude that it is a cheap remedy to all maladies.

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