

# The World of Spices

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## Spices are Defined as...

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A seed, fruit, root, bark, or other plant substance primarily used for flavouring, colouring or preserving food.

Spices are distinguished from herbs, which are the leaves, flowers, or stems of plants used for flavouring or as a garnish.





# History of Spices-

- Used for over 5000 years.
- Cinnamon, pepper, nutmeg, cloves, cumin, ginger etc. used since ancient times
- Most demanded & expensive products available in Europe in the Middle Ages.
- Ramayana mentions cloves.
- India is the largest producer of spices



# Role of Indian Spices

• Used as flavoring agents

• Possess antibacterial & antioxidant properties

• Used as preservatives

• Also used as colorants

• Many contain medicinal properties



# Medicinal properties

- Spices have been getting recognition for their health benefits
- The medicinal properties are due to the bioactive compounds present in them.
- Many spices have antioxidants, anticarcinogenic, anti-inflammatory & Heart healthy effects.



## Health Benefits

• Protects from acute and chronic diseases.

• Ample evidence that spices and herbs possess.

- > Antioxidant
- Anti-inflammatory
- > Anti- tumorigenic
- > Anti-carcinogenic
- Glucose- and cholesterol-lowering activities
- Properties that affect cognition and mood



# Recent Review (2019) by Jiang TA.

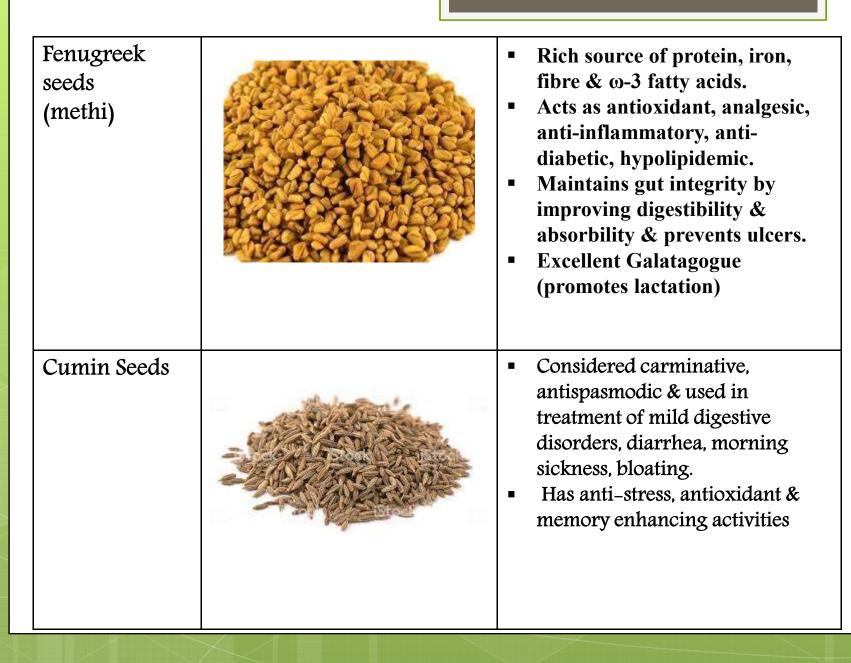
• Research over the past decade has reported on the diverse range of health properties that Spices possess via their bioactive constituents, including sulfur-containing compounds, tannins, alkaloids, phenolic diterpenes, and vitamins, especially flavonoids and polyphenols.



### Health enefits of Some commonly used Spices

Spice	Appearance	Benefits
Turmeric		<ul> <li>Helps prevent Alzheimer's disease &amp; joint inflammation.</li> <li>Helps relieve gas, dispel worms, improve digestion, regulate menstruation, dissolve gallstones, relieve arthritis</li> <li><u>Curcumin</u>- anti-inflammatory, antioxidant, antioxidant, antioxidant, anti-carcinogenic, antibacterial, antidiabetic, hypocholesterolemic</li> </ul>
Ginger		<ul> <li>Relieves common colds.</li> <li>Has quick relieving effects on heartburn, nausea, upset stomach, diarrohea, motion and morning sickness.</li> <li>Beneficial anti-inflammatory, due to its high levels of Gingerol, making it a great natural remedy for arthritis.</li> </ul>

Cloves	<ul> <li>Antiseptic and antibiotic properties of clove oil (Eugenol) are used in medicines especially in dentistry, oral and pharyngeal treatments.</li> <li>Has anti-inflammatory, antibacterial, antifungal, antiparasitic effects.</li> <li>Also reported to help diabetics in sugar assimilations.</li> <li>Clove extract has also shown significant decrease in serum cholesterol levels.</li> </ul>
Garlic	<ul> <li>Antibacterial property helps in boosting immunity.</li> <li>The sulphur compound allicin-antibiotic, antioxidant, anti-tumor, antidiabetic, antitoxic effects</li> <li>Claimed to prevent heart disease (atherosclerosis, high cholesterol, high BP.</li> <li>Allicin has shown significant hypoglycaemic activity.</li> </ul>



Asafoetida (Hing)	<ul> <li>Traditionally used to treat asthma, flatulence, abdominal pains, constipation, GI infections.</li> <li>Oleo-gum-resin in it has antifungal, anti-diabetic, anti-inflammatory, antiviral activities.</li> <li>Helps in relieving toothache, migraines, &amp; tension headaches.</li> <li>Also associated in treatment of hysteria, mood swings &amp; depression.</li> </ul>
Ajwain	<ul> <li>Believed to cure digestive issues- colic, diarrhoea, dysentery &amp; indigestion,</li> <li>Also known for curing blocked nose, common cold &amp; rheumatic pain.</li> <li>Extracts of ajwain shows significant antitussive effect.</li> <li>Has great detoxification effect.</li> </ul>

# How can Spices aid in a Better Tomorrow?

- Used traditionally in Indian families & also in western regions.
- Treats & Prevents various health issues.
- Modern diets fancy salads & light meals space for functional foods
- Helps in building strong immunity & keeping away from many chronic diseases.



