

**BENEFITS OF INDIAN SPICES AND HAZARDS DUE TO  
ADULTERATION****Dr. Supriti Patnaik<sup>1\*</sup> and Dr. Surendra Kumar Biswal<sup>2</sup>**<sup>1</sup>Associate Professor, Shri Babu Singh Jay Singh Ayurvedic Medical College and Hospital.

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Babu Singh Jay Singh  
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and Hospital. Bhaupur.  
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Uttar Pradesh.**ABSTRACT**

Now a days about most of all in India are liking spicy food and commonly use different types of spices during cooking food. The spices are being selected according to the dishes such as pulses, curries, raita, veg or non veg foods. Some often use spices in even making a delicious food i.e. pullaow, Biriyani etc. Generally most of Indians commonly use some general spices like turmeric, cumin seeds, mustard seeds, coriander, fenugreek, curry leaves, chilies, hing etc. while making their food in day to day life. In-fact spices play an important role for making dishes palatable, delicious specially in a family function, marriage feasts, picnic parties and Bhandara (free religious feast) etc., where a large people are being gathered and enjoyed food. Now a days so many people are also seen enjoying the street foods like, Panipuri/ Golgappa, chowmin, manchurian, pasta, pav-bhaji, bada-pav, egg-roll etc. which have a crazy demand among young people in India. During preparation of Ayurvedic Medicines many spices are also used like black piper, dry ginger, long pepper, cardamom, cinnamon, nagkeshar, clove etc. Some times

due to scarcity of the spices by low production, transportation break, high demand and bursting population, the adulteration of the spices like food material are also seen in society.

**KEYWORDS:** Spices, Carminative, Antioxidant, Adulteration.

## INTRODUCTION

The term spice and condiment applies such natural or vegetable products or mixtures thereof in whole or ground form as are used for imparting flavor and taste.

The spices choices are also vary in different states/region in India. The people of Punjab like more spicy food. The southern people likes to use red chilies and tamarind in their food. The people of east and north east region loves spicy non-veg food. In many regions often use mustard paste during cooking fish dishes.

Spices are also used to prepare pickles, sauces, jelly, jam etc. Indian desserts are also sprinkled with some specific spices like cardamom, cloves, black piper and cinnamon, rose or kewda essence.

## HEALTH BENEFITS OF SOME SPICES

### **Ajwain (*Apium graveolens*)**

Anti-inflammatory (used in rheumatic disorders, inflammation of the urinary tract), diuretic, carminative, nervine, sedative, antiemetic, antispasmodic, antiseptic (used in bronchitis, asthma, as well as liver and spleen diseases), emmenagogue. Essential oil from seeds—tranquilizer, anticonvulsant, antifungal. Seeds are used in the treatment of chronic skin disorders including psoriasis. It is a best remedy for indigestion. It has antispasmodic, stimulant, carminative effect.<sup>[1]</sup>

*Sulahara, Anulomana, Dipana, Krimighna, Pacana, Rucya*<sup>[2]</sup>

### **Black Caraway seeds (*Carum bulbocastanum*)**

Carminative, antispasmodic, antimicrobial, expectorant, galactagogue, emmenagogue<sup>[3]</sup>

*Sothahara, Caksyusya, Dipana, Jvaraghna, Pacana, Rucya, Sangrah*<sup>[4]</sup>

### **Coriander seeds (*Coriandrum sativum*)**

Stimulant, stomachic, carminative, antispasmodic, diuretic; also hypoglycaemic and anti-inflammatory. Oil—bactericidal and larvicidal. Used in China as a remedy for measles, diabetes, aerophagy and gastroenteritis.<sup>[5]</sup>

*Chaksusya, Deepana, Grahi, Hridya., Pacana, Tridosanut, Mutrala*<sup>[6]</sup>

### **Cumin seeds (*Cuminum cyminum*)**

Carminative, antispasmodic (used in dyspepsia and diarrhoea), stimulant, diuretic, antibacterial, emmenagogue, galactagogue.<sup>[7]</sup>

*Dipana, Grahi, Krimighna, Kaphavatahara, Pacana, Rucya.*<sup>[8]</sup>

### **Saffron (*Crocus sativus*)**

Stigma and style—nervine tonic, sedative, antispasmodic expectorant (in dry cough, whooping cough, bronchitis), stomachic, diaphoretic, emmenagogue.<sup>[9]</sup>

*Vatahara, Varrya, Visaghna, Slesmahara, Rasayana, Jantuhara.*<sup>[10]</sup>

### **Turmeric (*Curcuma longa*)**

Anti-inflammatory, cholagogue, hepatoprotective, blood-purifier, antioxidant, detoxifier and regenerator of liver tissue, antiasthmatic, anti-tumour, anticutaneous, antiprotozoal, stomachic, carminative. Reduces high plasma cholesterol. Antiplatelet activity offers protection to heart and vessels. Also protects against DNA damage in lymphocytes.<sup>[11]</sup>

*Krimighna, Kuthaghna, Varnya, Visaghna, Kaphapittanut, Pramehanasaka*<sup>[12]</sup>

### **Cardamom (*Amomum aromaticum*)**

Stomachic, antiemetic, antibilious, astringent, alexipharmic; used for the treatment of indigestion, biliousness, abdominal pains, vomiting, in congestion of liver. Pericarp in headache and stomatitis.<sup>[13]</sup>

*Anulomana, Dipana, Hradya, Mutrala, Rocana*<sup>[14]</sup>

### **Fennel (*Foeniculum vulgare*)**

Carminative, stomachic, antispasmodic, emmenagogue, galactagogue, anti-inflammatory, diuretic. Relieves bloating, nausea, settles stomach and stimulates appetite. Also used in amenorrhoea and enuresis.<sup>[15]</sup>

*Anulomana, Balya, Dipana, Vatapittahara, amadosahara*<sup>[16]</sup>

### **Asafoetida (*Ferula assafoetida*)**

Olea-gum-resin—stimulates the intestinal and respiratory tracts and the nervous system bark. Used for simple digestive problems such as bloating, indigestion, constipation; for congested mucus, bronchitis, whooping cough, also for neurological affections, epilepsy, cramps and convulsions.<sup>[17]</sup>

*Anulomana, Dipana, Hradya, Krimighna, Pacana, Ruchya, Vatakaphaprasamana*<sup>[18]</sup>

### **Chillies (*Capsicum annuum*)**

Stimulant, accelerates oxygenation of cells, encourages adrenal glands to produce corticosteroids, increases gastrointestinal secretion. Carminative, antispasmodic, antiseptic.

Used externally for rheumatism, backache, lumbago, neuralgia, painful muscle spasm. increases gastric secretion, carminative, antifatulence, stimulates blood circulation, good for sore throat, prevents pancreatic and prostate cancer.<sup>[19]</sup>

#### **Cinamon bark (*Cinnamomum zeylanicum*)**

Bark—carminative, astringent, antispasmodic, expectorant, haemostatic, antiseptic. Leaf—antidiabetic. Ground cinnamon is used in diarrhoea and dysentery; for cramps of the stomach, gastric irritation; for checking nausea and vomiting; used externally in toothache, neuralgia and rheumatism. The bark is included in medicinal preparations for indigestion, flatulence, flu, mothwashes, gargles, herbal teas.<sup>[20]</sup>

#### **Tejapatra (*Cinnamomum tamala*)**

Leaf—Carminative, antidiarrhoeal, spasmolytic, antirheumatic, hypoglycaemic. Essential oil—fungicidal.<sup>[21]</sup>

*Kaphavatahara, Rucya, Visaghna, Kanthasuddhikara*<sup>[22]</sup>

#### **Clove (*Syzygium aromaticum*)**

Carminative, antiinflammatory, antibacterial. Flower buds—antiemetic, stimulant, carminative. Used in dyspepsia, gastric irritation. Oil—employed as a local analgesic for hypersensitive dentlines and carious cavities; internally as a carminative and antispasmodic.<sup>[23]</sup>

*Sulahara, Dipana, Kasahara, Kaphapittasamaka, Pacana, Rucya*<sup>[24]</sup>

#### **Fenugreek seeds (*Trigonella foenum-graecum*)**

Leaves—rich in phosphorus. Fruits—bitter, astringent and styptic. Applied to swellings and bruises. Seeds—used in loss of appetite, flatulence, dyspepsia, colic; diarrhoea, dysentery; enlargement of liver and spleen; and as a lactagogue and puerperal tonic<sup>[25]</sup>

*Dipana, Kaphahara, Rucya, Vatahara*<sup>[26]</sup>

#### **Ginger (*Zingiber officinale*)**

Rhizome—antiemetic, antifatulent, hypocholesterolaemic, anti-inflammatory, antispasmodic, expectorant, circulatory stimulant, diaphoretic, increases bioavailability of prescription drugs. Used for irritable bowel and diarrhoea, colds and influenza. Showed encouraging results in migraine and cluster headache<sup>[27]</sup>

**Nutmeg (*Myristica fragrans*)**

Nutmeg—carminative, spasmolytic, antiemetic, orexigenic; topically anti-inflammatory.<sup>[28]</sup>

Mace—stimulant carminative. Narcotic in high doses.

Nutmeg is used in flatulency, diarrhoea, nausea and vomiting. Mace is used in rheumatism, chronic bowel complaints and asthma. When roasted, both nutmeg and mace are used for diarrhoea, colic, flatulence and dyspepsia.

*Dipana, Grahi, Vrsya, Mukhakledanasaka, Mukhadaurgandhyanasaka, Kaphavatapana*<sup>[29]</sup>

**Peeper (*Piper nigrum*)**

Stimulant, carminative, diuretic, anticholinergic, sialagogue, bechic, antiasthmatic. Used in fevers, dyspepsia, flatulence, indigestion, and as mucous membrane and gastro-intestinal stimulant. Externally—rubefacient and stimulant to the skin. Used as a gargle for sore throat. Used with ginger and *Piper longum* for viral hepatitis.<sup>[30]</sup>

*Slesmahara, Dipana, Medohara, Pittakara, Rucya, Kaphavatajit, Vatahara, Chedana, Jantunasana, Chedi, Hrdroga, Vataroga*.<sup>[31]</sup>

**Food Adulteration**

It consists of large number of practices such as mixing, substitution, removal, concealing the quality, selling decomposed products, misbranding, (giving false labels),<sup>[32]</sup> (Page no 200. –

**Some adulterations in Spices**

- Resin, soap stone and other earthy matters in asafoetida
- Papaya seeds in black pepper
- Synthetic colours in chilly powder
- Cassia bark in cinnamon
- Grass seeds in cumin seeds
- Lead chromate and artificial colour in turmeric
- Sawdust and powdered brans in powdered spices
- Volatile oils extracted from cloves
- Rajgira sold as poppy seeds

These adulterations have health hazards to people as well as unnecessary financial losses.

## CONCLUSION

The proper mixture of spices is good for health, where as improper mixture of spices may harm to body. We can found so many types of spices powder in different brands. A proper mixture of spices with and date of mfg. and expiry date should be noted before buying.

The all spices have the main properties are to add flavor and color to food and make the food palatable, stimulates salivation, acid secretion, and digestive enzymes, reduce flatulence. Some spices have Anti-inflammatory, antibacterial and antioxidant properties. Some spices help in improving impaired blood glucose levels in the body and help in diabetes, Some spices reduce cholesterol and useful in preventing heart disease. Some spices are anti-mutagenous or anti-carcinogenous.

So use of proper and pure spices is most beneficial for maintaining healthy life.

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