**REVIEW OF SPICES AS A MEDICINE**

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**ABSTRACT**

Ayurveda is a Holistic approach to health base on balance one's Diet profoundly sustains the mind and body equilibrium. For instance spices intensity salivary flow, they cleanse the oral cavity from food adhesion and bacteria they help to check infection protect the mucous membrane. Spices not only do they help enhance digestion, but also help remove accumulated ama, so they are valuable additions to your daily diet. Spices like Turmaric cumin, coriander Fennel, Mint, Asafetida (higa), Black papper, Dried powdered ginger, Cardamom, Cinammon etc. are among the ayurvedic spices that enhance Digestion and metabolism, cleanse ama from the body and prevent digestive disorders. Here explain commonly use medicinal plant use as spices and also mention it’s scientific name, English name, common name, Part use and use. Spices are rich in phytonutrient and other active ingredient that protect against disease and promote healing. In short medicinal plant and spices are among the great gift nature has best owed upon us. In ayurveda some medicinal plant use as spices.

**KEYWORDS:** Ayurveda is Turmaric Asafetida (higa), Black papper, spices.

**INTRODUCTION**

In India is represented by about 15000 to 17000 species of which 20% flora 600 species possess medicinal properties. 200 species are used as edible plant including cereals, pulses fruits and vegetable. Large quantity of spices is used in India. Aromatic plants constitute a major source of natural organic compound widely used in medicine, species, food product and flavor and are of paramount importance in everyday life. spices from an important ingredient of Indian food system.
The people collect good number of spices from the wild habitats and also grow a few of them in them in the kitchen garden for daily consumption as well as selling in local market for cash need. Some of the spices used are location specific and extensively used in traditional medicine. Spices are used in different form whole, chopped, ground, roasted, dry seed, bark fried and topping. They blend food to extract the nutrient and bind them in a palatable form; some spices are added at the end as a flavouring colouring preserving food and are typically heated in a pan with ghee or cooking oil before being added to a dish.

Most spices are grown in the tropical region of the world. Many of the seed spices come from more temperate area such as coriander seed which is grown in northern India. Africa and wheat producing area of south Australia and western new south wales. Every Indian kitchen has a Masala dabba or two, round stainless steel container with an inner and outer lid and about six small round container inside that area the heart and soul of our kitchen. Most medicinal plant use as spices they are explain.

1. Marich (Black pepper)
   
   **Latin Name** – Piper nigrum, Linn.
   
   **Family** – Piperaceae
   
   **Part use**- fruit

   **Chemical composition**
   
   Piperene, piperethint, piperolein A & B, feruperine, Dihydroferuperine, cyptone. Beta-pinene, piperonal, pipecolic acid, ascorbic acid etc.

   **Medicinal use & Pharmacological properties**
   
   □ Black pepper has important medicinal and preservative properties, and more recently, major chemical piperine has been show to have fundamental effect on p-glycoprotein and many enzyme system, leading to bio transformative effect including chemo preventive, detoxification and enhancement of the absorption and provability of herbal and conventional drugs.
   
   □ Based on modern cell, animal and human studies, piperine has been found to have immunomodulatory anti-oxidant, anti- asthmatic, anti- carcinogenic, anti- inflammatory, anti-ulcer, and anti-amoebic properties.
   
   □ It also use increase nutrient absorption, improve digestion, stimulate appetite, facilitates weight loss, treat teeth and Gum problem.
Properties according to Ayurveda
Rasa-Katu
Vipaka- Katu
Veerya -Ushna
Rogaghnata - Shavasa, Shoolhar, Krumighana.

2. Twaka (Dalchini) Cinnamon

Latine name – Cinnamomum zeylanice, Blume.
Family- lauraceae
Part use – stem bark, oil and leaves

Chemical composition
It contain 2% volatile oil which is called as oil of cinnamon, it also contain cinneric acid, resin, tannin, sugar, cinnamaldehyde, eugenol, benaldehyde, methyl alny ketone, phellandrene, pinene, cymene, cumin aldehyde, safrole, methyl evgenol, cinnamyl alcohol. Leaf oil is dark in colour and has clove like aroma. Root oil is yellow coloured and water insoluble.

Medicinal use & Pharmacological properties
☐ It is another Heating spices. It reduce the thirst and stimulate salivation. It also stimulate Kapha, whiledecreasing vata pitta.
☐ Health effect of cinnamon such as anti- inflammatory properties, anti- microbial activity, blood glucose control, reducing csrdiovascular disease, reducing risk colonic cancer.
☐ Study has explored the anti-dibetic effect of cinnamon cassia extract in vivo and vitro.
☐ Effective against ulcer, causing pyloric bacteria. It reduce pain linked to arthritis. Effective for menstrual pain, Natural food preservative.

Properties according to Ayurveda
Rasa -Katu, Madhur
Vipaka- Madhur
Veerya- Ushna
Rogaghnata- Kantha mukha shodhan, Trishna, Jantughana

3. Lavanga (Clove)

Latine name- Syzygium aromaticum, Linn.
Family- Myrtaceae

Part use- floral bud, clove oil

Chemical composition
Gum and Volatile oil 16-20%, resin 6%, euginine or cariophyllin, tannin, gum. Clove oil contain 85-92% eugenol. Eryophyllene, methyl alcohol, methylbenzoate, vanillin, eugenitine eugenine, naphthalene, caryophellene oxide etc.

Medicinal use & Pharmacological properties
- Improve the taste and flavor of many foods.
- Increase pitta and vata and kapha. Anti bacterial properties, used in various dental cream tooth pests. Mouth wash throat sprays clean bacteria. Effective cure digestive problems. useful in relieving the symptoms of diarrhea and vomiting. anti- viral activity, anti-microbial activity, anti-oxidant activity, anti-inflammatory activity, anti- platelet activity, hepatoprotective activity.

Properties according to Ayurveda
Rasa- Tikta, Katu
Vipaka -Katu
Veerya- Sheeta
Rogaghnata - Adhmana, Trishna, Chhardi, Netrarog, Kasa, shvasa, Kshaya, Hikka.

3. Ardrak (Ginger)
Latine name- Zingiber officinale, Roscoe
Family - Zingiberaceae
Part use- Rhizome

Chemical composition
12% yellow volatile oil, gingerol, gingesin (pungent resin), carbohydrates, oil and resin is found just under the skin. Ginger does not evaporates with oil.

Medicinal use & Pharmacological properties
Nausea relief, Digestive support, heals ulcer, Boost Immunity improves dibetes, antifungal, weight loss, cold and flu prevention and treatment, stimulate the heart and circulatory system. Anti-inflammatory, anti- oxidant, anti-microbial activity and analgesic effect of ginger. anti-cancer effect and Mechanism of action.
Properties according to Ayurveda
Rasa- Katu
Vipaka - Katu
Veerya -Ushna
Rogaghnata -Amavata, Jvara, Sheetapitta, Shotha, Kasa, shvasa

4. Haridra (Turmeric)
Latine name –curcuma longa, Linn.
Family- zinzeberaceaes
Part use- Rhizome

Chemical composition
1% volatile oil, resin, curcumine is responsible for its colour. Turmeric oil has a peculiar odour and taste. Curcumene, curcumenone, curcone, curdione, epiprocurcumenol, eugenol, camphene, camphor, borneol, procucumenol, curcums, sitosterol etc.

Medicinal use & Pharmacological properties
☐ Promote to good digestion. curcumine is health beneficial active agent in termaric.
☐ Curcumin is a potent anti oxidant and anti- inflammatory and therefore can help fight a number of chronic health condition from heart disease, diabetes to demential and act as potent anti-cancer agent.
☐ Curcumin also been proven useful at relieving arthritis and improving the health of the liver and gall bladder.

Properties according to Ayurveda
Rasa -Tikta, Madhur
Vipaka -Katu
Veerya-Ushna
Rogaghnata-Vrana, Pandu, Kushtha, Kandughna, Prameha, Netrarog, Karnaroga.

5. Jiraka (Cumin)
Latine name- Cuminum cyminum, Linn.
Family- Umbelliferae
Part use- Fruit
Chemical composition
It contain 3.5 to 5.2% volatile oil called as thymine. cuminin, diacly glycerol, impera torin, isoiimper. Flavonoid atorin, isoimpinellin, oxalic, cuminaldehyde, p-cymene etc Essential oil- carvone, limonene, carveol etc.

Medicinal use & Pharmacological properties

Properties according to Ayurveda
Rasa-Tikta, Katu, Madhur
Vipaka -Katu
Veerya-Ushna
Rogaghnata -Krimighna, Jvara, Stanyajanana, Chahardi, Kandughna.

6. Rasna (Garlic)
Latine name – Allium satium, Linn.
Family –Liliaceae
Part use-Rhizome, oil

Chemical composition
Garlic contains at least 33 sulfur compounds, several enzymes and the minerals germanium, calcium, copper, iron, potassium, magnesium, selenium and zinc; vitamins A, B1 and C, fiber and water. It also contains 17 amino acids to be found in garlic: lysine, histidine, arginine, aspartic acid threonine, swine, glutamine, proline, glycine, alanine, cysteine, valine, methionine, isoleucine, leucine, tryptophan and phenylalanine. It has a higher concentration of sulfur compounds than any other Allium species which are responsible both for garlic’s pungent odor and many of its medicinal effect.

Medicinal use & Pharmacological properties
- Treat cardiovascular disease Reduces high blood pressure/hypertension Prevents diabetes, Atherosclerosis and hyperlipidaemia, Anticancer, antiviral, anti-bacterial, antifungal.
Properties according to Ayurveda
Rasa-Katu
Vipaka-Katu
Veerya- Ushna
Rogaghnata - Shotha, Jvara, Shavasa, kasa., Hridya, Varnya, Grudhrasi, Balya ojakara.

7. Ela (Cardamom)
   Latine name- Elettaria cardamomum, Maton.
   Family- Zinzgiberaceae
   Part use-Seed

Chemical composition
The main compound are 1,8-cineole (representing 50% or more), with smaller amounts of limonene, α-terpenyl acetate, α-terpineol, borneol, camphor and α-pinene. Indian cardamom is low in fat and high in protein, iron and vitamins B and C. Seeds of Cardamom are with their sweet and spicy aroma, used in aromatherapy to stimulate energy

Medicinal use and Pharmacological properties
- Digestive problems and urinary complaints, asthma, bronchitis, and several other human ailments.
- The plant also stomachic, Cardamom oil is effective as an antioxidant, uterine complaints and liver disease, Externally, it is also applied to tumours of the uterus. Cough use as general tonic, anti bacterial, Haematological and Lipid Peroxidation activities, Insecticidal Activity, Anti-inflammatory, Analgesic & Antispasmodic Activity.

Properties according to Ayurveda
Rasa -Katu, Madhur
Vipaka- Katu
Veerya -Sheet
Rogaghnata - Pittashamaka, Shavasa, kasa., Balya, Kandughna, Shirorog.

8. Yavani (Ajowan)
   Latine name- Carum copticum, Benth. & Hook.
   Family- Umbelliferae
   Part use- Fruit
Chemical composition
Main essential oil called as thymol which contain 35-60% of essential oil (2.5-5% in the dried fruits), alpha-pinene, p-cymene, limonene & alpha-terpinene found in the seed. It also contain protein, minerals, fiber, carbohydrates, calcium, phosphate, iron, riboflavin, carotene and niacin.

Medicinal use and Pharmacological properties
- Disease such as germicide and antiseptic, cough syrup, throat lozenges, asthma, indigestion and gas relief, such as ulcer, ringworm, itching, stomach worm, bile and post natal disorder, kidney stone, stimulate appetite, Laxative, in treatment of abdominal tumor, enlargement of spleen, vommitig, Anti-platelet activity, anti-oxidant activity, anti-tissue activity.

Properties according to Ayurveda
Rasa -Katu
Vipaka-Katu
Veerya-Ushna
Rogaghanata -Udarshula, Shavasa, kasa, Hikka, Kaphaja Chhardi, Krimighna.

9. Dhanyaka (Coriander)

Latine name- Coriandrum sativum, Linn.
Family- Umbelliferae
Part use- seed, leaf, Stem.

Chemical composition
The composition of extracts from the different parts of the coriander plant depends on themethods of extraction.

The major constituent of the essential oil from coriander seeds is linalool (60%Y80%) followed by other alcohols, ketones and esters such as >-pinene (0.2%Y8%), F-terpinene (1%Y8%), geranyl acetate (0.1%Y4.7%) and camphor.

Medicinal use and Pharmacological properties
- Prevent oxidative damage, Inhibit microbial growth, Diabetes management, Mood enhancement, Cognitive improvement, Alleviate anxiety, Neurological disease benefits, pain reduction.
Hypolipidemic effect, Anti-bacterial activity, anti-hyperglycemic activity, diuretic activity, metal detoxification, anti-fungal activity.

Properties according to Ayurveda:
Rasa-Kashaya, Tikta, Madhur
Vipaka- Madhur
Veerya – Ushna
Rogaghnata - Pittaja Trishna, Shirishool, Tamakashvas, Jvara, mutravikar, Netraabhishyanda and Shukla.
CONCLUSION

India with its wide climatic conditions and topographical features naturally possesses wide variety of spices which are being used in the diet. The above discussed spices namely garlic,
pepper, coriander, ginger, turmeric, cinnamon are commonly used spices in Indian delicacies. From a dietary perspective, the functionality of herbs and spices will be exposed through consideration of their properties as foods. The properties of all this spices are explained in almost all Samhitas, Nighantus. They are grouped together to form various mishrak gana as trikatu, panchakola etc. Many of them have katu tikta, rasa. Katu vipak and ushna veerya .they mainly possess Deepana, pachan properties and are useful in the disease of Digestive system and Respiratory system. Lots of researchis underway on the use of spices for treating various condition. A great example of this is eugenol, contained in clove., which is being researched as a possible treatment for colon cancer.

REFERENCE

