

# DEPARTMENT OF NUTRITION AND DIETETICS

FOOD CHEMISTRY  
IB.SC NUTRITION AND DIETETICS  
SUBJECT INCHARGE: V.ANITHA



# Properties of spices and condiments

# Spices

A **spice** is a seed, fruit, root, bark, or other plant substance primarily used for flavoring, coloring or preserving food. Spices are distinguished from herbs, which are the leaves, flowers, or stems of plants used for flavoring or as a garnish. Many spices have antimicrobial properties which may explain why spices are more prominent in cuisines originating in warmer climates, where food spoilage is more likely, and why the use of spices is more common with meat, which is particularly susceptible to spoiling. Spices are sometimes used in medicine, religious rituals, cosmetics or perfume production.

# Condiment

A **condiment** is a spice, sauce, or preparation that is added to food, typically after cooking, to impart a specific flavor, to enhance the flavor, or to complement the dish. A **table condiment** or **table sauce** is more specifically a condiment that is served separately from the food and is added to taste by the diner.

Salt and sugar are **the most** directly used **condiments** and are **the** basic ingredients for **most condiments** in **theworld**, since they enhance flavor, food safety, and storage quality. **Condiments** originated in different cultures **of the** world and can be found in liquid, semisolid, and solid forms.

*Spices*



Cardamom

## Cardamom

There are two kinds of cardamom used in Indian cooking: green and black. Green is the more common variety, used for everything from spice mixes to lassis to Indian desserts. The flavor is light and sweet, with a mild eucalyptus note. Green cardamom can be blended whole when making spice mixes, like [garam masala](#), however when using them in sweets or desserts, you would pop the pod open and lightly crush the fragrant black seeds before using.



Cloves



## **Clove**

Clove is a common spice in Indian cooking and its anise notes are easily recognizable in many Indian preparations. The strong, almost medicinal flavor of clove comes from the concentration of essential oils. Cloves are technically flowers, and a lot of their oils are pressed out before they are dried and used in cooking. Cloves can be used whole or blended into spice mixes. They do need to be used with caution, however, as they can tend to overpower more delicate spices.



# Cinnamon

**Cinnamon** is one of the most important tree **spice of India**. It consists of layer of dried pieces of inner bark of branches and young shoots. The quality of cinnamon depends on the region where it is grown. In India it is grown on the west coast. **Cinnamon** is a very useful tree, every part of the tree finds some use. The bark has a delicate fragrance and warm agreeable taste. It is aromatic, astringent, stimulant. Cinnamon is used for flavouring confectionary, **liqueur**, **soaps** etc. powdered **cinnamon** is used in **chocolate** in **Spain**. Flavouring the **Sikandri Raan**. A constituent of (**Garam Masala**)



**Black pepper**

**They are the dried small round berry of a tropical vine with small white flower.**

**White**

**pepper is mature berry with the black coat removed. Pepper corns are used whole or**

**crushed. Ground pepper is used for seasoning many dishes and is also used as a condiment at the table. Pepper corns are generally used whole in pickling meats and**

**stews. It is used ground for general seasoning of meat fish, poultry, vegetables and**

**salads. White pepper is used in dishes that require a less pungent flavour. It is used as**

**substitute for chilli powder. It is also used in marinating the non vegetarian foods.**

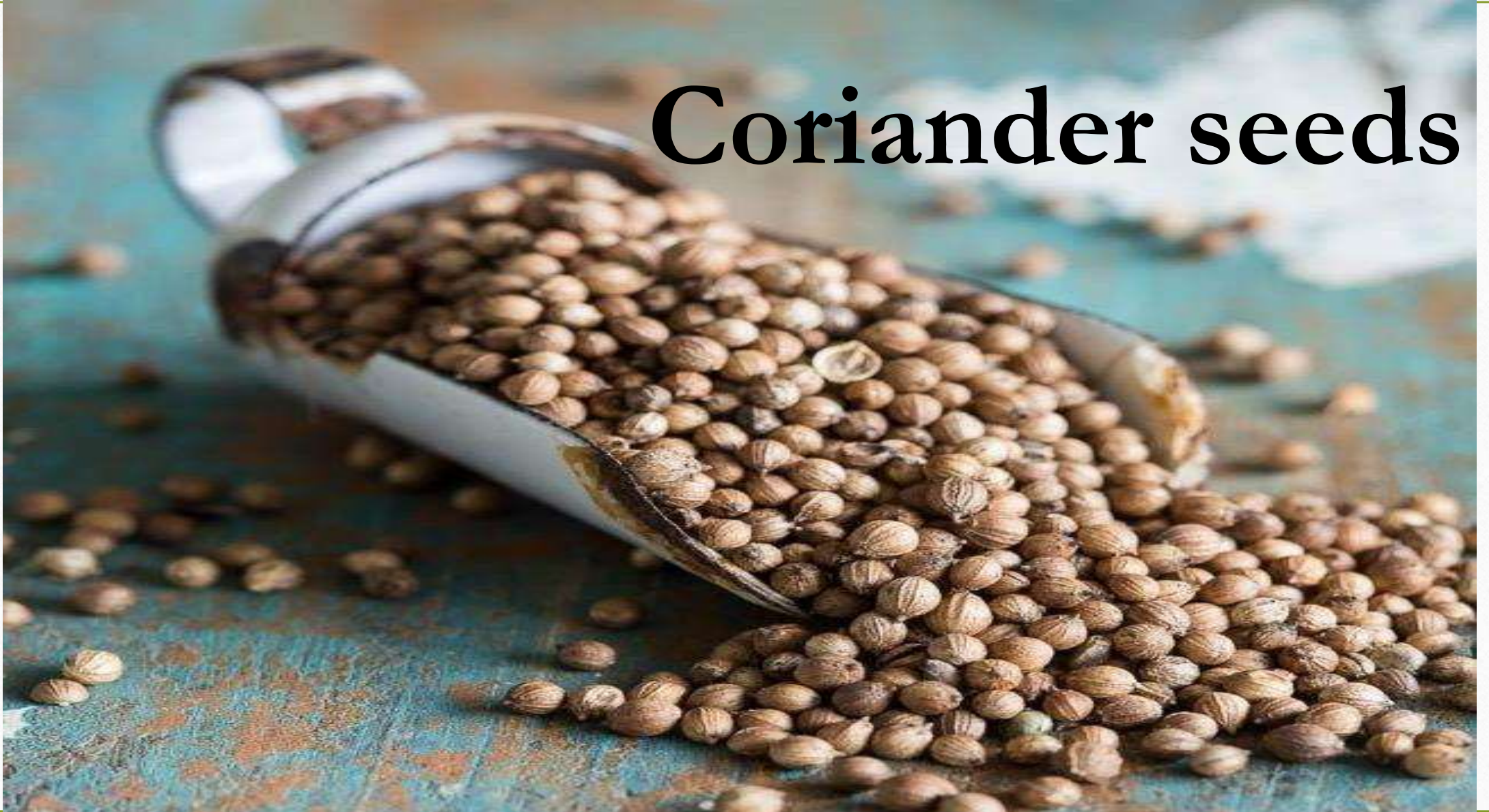
**Flavour can be improved by the addition of pepper powder to omelets, sandwich, salads, papads, soups and chips.**



Cumin seeds

- Cumin is used frequently whole and in spice mixes to add a characteristic smoky note to Indian dishes. It can be identified by its distinct ridged brown seeds and intense fragrance
- Cumin is best used freshly ground for the most intense flavor. One thing to keep in mind while dry-roasting this spice is that it burns really easily, and burnt cumin tastes very bitter and will be very noticeable your dish.
- . It is sometimes confused with fennel, caraway, and anise seeds, but you can tell the difference by looking at its color (brown, as opposed to green fennel) and taste (smoky, as opposed to a stronger licorice taste).

# Coriander seeds





## **Coriander**

Coriander is probably the most ubiquitous of spices in the Indian spice rack. It is one of the oldest-known spices in the world, and it's characterized by its golden-yellow color and gently ridged texture. The seeds are very aromatic with citrus notes.

Whole coriander is used as a base for many spice mixes, and ground coriander is one of the most commonly used ground spices in Indian cuisine.

# Mustard seeds



## **Mustard seeds**

**Mustard seeds can be yellow, black, or brown and are used interchangeably in Indian cooking. The flavor of mustard seeds is released when they are crushed or cooked in oil.**

**Their smoky, nutty flavor is a staple in curries and curry powders, and mustard oil is commonly used in the North of India.**

Mustard seeds are rich in a nutrient called selenium, known for its high anti-inflammatory effects. n The high source of magnesium in mustard seeds helps reducing the severity of asthma attacks and certain symptoms of rheumatoid arthritis and lowering blood pressure.



# Fenugreek seeds

## Fenugreek

Fenugreek is the spice which gives Madras curry powder its very characteristic, earthy, musky “curry” flavor and fragrance. The seeds are yellowish and look like tiny wheat kernels. Fenugreek leaves are also dried and used as a spice (they are commonly called kasuri methi) and are what make butter chicken unique.

Fenugreek seeds are strongly fragranced and should be used with caution, just like cloves. They are also used in traditional medicine, and strangely enough, to make fake maple syrup.



Turmeric

**Turmeric is another common Indian spice. Grown as a rhizome, it can be used fresh (like ginger) or dried. It has been known to have a host of health benefits and is used in a lot of spice mixes and curries. The flavor of fresh turmeric is slightly stronger than dried, and it stains very easily.**

Turmeric and especially its most active compound curcumin have many scientifically-proven health benefits, such as the potential to prevent heart disease, Alzheimer's and cancer. It's a potent anti-inflammatory and antioxidant and may also help improve symptoms of depression and arthritis.



# Saffron



**The most expensive spice in the world, saffron is actually more valuable by weight than gold, due to the fact that it is one of the most labor-intensive spices to produce. Saffron is the stigma of crocus flowers and needs to be picked by hand. The best saffron is dark-red in color and comes from Kashmir, Iran, or Spain. The fresher the saffron, the deeper the color. The flavor of saffron is very unique, with everybody experiencing a different aspect of its fragrance. I always notice floral and honey notes when I smell my saffron. Saffron is an intense spice, and is used in small quantities, usually dissolved in warm water or milk before being added to dishes.**

# *Condiments*

# Ketchup & sauce



Tomato ketchup is a sweet and tangy sauce made from tomatoes, sugar, and vinegar, with seasonings and spices. The spices and flavors vary, but commonly include onions, allspice, coriander, cloves, cumin, garlic, and mustard, and sometimes include celery, cinnamon, or ginger.

# Maple syrup



Maple syrup is often used as a condiment for pancakes, waffles, French toast, oatmeal or porridge. It is also used as an ingredient in baking and as a sweetener or flavouring agent. Culinary experts have praised its unique flavour, although the chemistry responsible is not fully understood



# Mayonnaise

**Mayonnaise** is a **condiment** which is not a sauce, but something to pair with a sandwich. You can use it as a sauce which is most common with putting on sushi or maybe use as a dip for fries.



*Thank you*