

9.10: Spices

Spices are aromatic substances obtained from the dried parts of plants such as the roots, shoots, fruits, bark, and leaves. They are sold as seeds, blends of spices, whole or ground spices, and seasonings. The aromatic substances that give a spice its particular aroma and flavor are the essential oils. The flavor of the essential oil or flavoring compound will vary depending on the quality and freshness of the spice.

The aromas of ground spices are volatile. This means they lose their odor or flavoring when left exposed to the air for extended periods. They should be stored in sealed containers when not in use. Whole beans or unground seeds have a longer shelf life but should also be stored in sealed containers.

Allspice

Allspice is only one spice, yet it has a flavor resembling a blend of cloves, nutmeg, and cinnamon. At harvest time, the mature (but still green) berries from the allspice trees (a small tropical evergreen) are dried in the sun. During drying they turn reddish-brown and become small berries. The berries are about 0.6 cm (1/4 in.) in diameter and contain dark brown seeds.

Allspice is grown principally in Jamaica and to a lesser degree in Mexico. Allspice is available whole or ground. Bakers usually use ground allspice in cakes, cookies, spices, and pies.

Anise

Anise is the small, green-grey fruit or seed of a plant of the parsley family. The plant grows to a height of 45 cm (18 in.) and has fine leaves with clusters of small white flowers. It is native to Mexico and Spain, with the latter being the principal producer. Anise seeds are added to pastries, breads, cookies, and candies.

Caraway

Caraway is the dried fruit or seed of a biennial plant of the parsley family, harvested every second year, primarily in the Netherlands. It is also produced in Poland and Russia. The many-branched, hollow-stemmed herb grows up to 60 cm (24 in.) high and has small white flowers. Caraway is a small crescent-shaped brown seed with a pleasant aroma but somewhat sharp taste. Although it is most familiar in rye bread, caraway is also used in cookies and cakes.

Cardamom

Native to India, Sri Lanka, and Guatemala, cardamom is the fruit or seed of a plant of the ginger family. The three-sided, creamy-white, flavorless pod holds the tiny aromatic, dark brown seeds. It is available in whole and ground (pod removed). Cardamom in ground form flavors Danish pastries and coffee cakes, Christmas baking, and Easter baking such as hot cross buns.

Cinnamon

Cinnamon comes from the bark of an aromatic evergreen tree. It is native to China, Indonesia, and Indochina. Cinnamon may be purchased in ground form or as cinnamon sticks. Ground cinnamon is used in pastries, breads, puddings, cakes, candy, and cookies. Cinnamon sticks are used for preserved fruits and flavoring puddings. Cinnamon sugar is made with approximately 50 g (2 oz.) of cinnamon to 1 kg (2.2 lb.) of granulated sugar.

Cassia

Cassia, sometimes known as Chinese cinnamon, is native to Assam and Myanmar. It is similar to cinnamon but a little darker with a sharper taste. It is considered better for savory rather than sweet foods. It is prized in Germany and some other countries as a flavor in chocolate.

Cloves

Cloves are the dried, unopened buds of a tropical evergreen tree, native to Indonesia. The flavor is characterized by a sweet, pungent spiciness. The nail-shaped whole cloves are mainly used in cooking, but the ground version of this spice heightens the flavor of mincemeat, baked goods, fruit pies, and plum pudding.

Ginger

Ginger is one of the few spices that grow below the ground. It is native to southern Asia but is now imported from Jamaica, India, and Africa. The part of the ginger plant used is obtained from the root. Ground ginger is the most commonly used form in baking — in fruitcakes, cookies, fruit pies, and gingerbread. Candied ginger is used in pastries and confectionery.

Mace

Originating in the East and West Indies, mace is the fleshy growth between the nutmeg shell and outer husk, yellow-orange in color. It is usually sold ground, but sometimes whole mace (blades of mace) is available. Mace is used in pound cakes, breads, puddings, and pastries.

Nutmeg

Nutmeg is the kernel or seed of the nutmeg fruit. The fruit is similar to the peach. The fleshy husk, grooved on one side, splits, releasing the deep-brown aromatic nutmeg. It is available whole or ground. Ground nutmeg is used extensively in custards, cream puddings, spice cakes, gingerbread, and doughnuts.

Poppy Seed

Poppy seed comes from the Netherlands and Asia. The minute, blue-grey, kidney-shaped seeds are so small they seem to be round. Poppy seeds are used in breads and rolls, cakes and cookies, and fillings for pastries.

Sesame or Benne Seed

Sesame or benne seeds are the seeds of the fruit of a tropical annual herb grown in India, China, and Turkey. The seeds are tiny, shiny, and creamy-white with a rich almond-like flavor and aroma. Bakers use sesame seeds in breads, buns, coffee cakes, and cookies.

Vanilla

The Spaniards named vanilla. The word derives from vaina, meaning pod. Vanilla is produced from an orchid-type plant native to Central America. The vanilla beans are cured by a complicated process, which helps explain the high cost of genuine vanilla. The cured pods should be black in color and packed in airtight boxes. Imitation vanilla extracts are made from a colorless crystalline synthetic compound called vanillin. Pure vanilla extract is superior to imitation vanilla. Artificial vanilla is more intense than real vanilla by a factor of 3 to 4 and must be used sparingly.

To use vanilla beans, split the pod down the middle to scrape out the seeds. The seeds are the flavoring agents. Alternatively, the split pod can be simmered in the milk or cream used in dessert preparation. Its flavoring power is not spent in one cooking and it can be drained, kept frozen, and reused. A vanilla bean kept in a container of icing sugar imparts the flavor to the sugar, all ready for use in cookies and cakes.

Vanilla extract is volatile at temperatures starting at 138°C (280°F) and is therefore not ideal for flat products such as cookies. It is suitable for cakes, where the interior temperature does not get so high.

Vanilla beans and vanilla extract are used extensively by bakers to flavor a wide range of desserts and other items.

This page titled [9.10: Spices](#) is shared under a [CC BY-NC-SA 4.0](#) license and was authored, remixed, and/or curated by [Sorangel Rodriguez-Velazquez](#) via [source content](#) that was edited to the style and standards of the LibreTexts platform.