Also known as

Piper nigrum, black pepper, Blanc Poivre, Kosho, Krishna, Maricha, Pepe, Pepper, Pepper Extract, Pepper Plant, Peppercorn, Pfeffer, Pimenta, Pimienta, Piper, Piperine, Poivre, Poivre Noir, Vellaja, White Pepper.

Introduction

Peppercorns are the fruit of Piper nigrum, an evergreen climbing vine. Black, white, and green peppercorns all come form the same plant, but they are harvested at different times and handled in different ways. To make black pepper, the clusters are plucked when they are not quite ripe. They are then left in piles to ferment. After a few days, the berries are spread out on a mat and left to dry in the sun for two or three more days until they are shriveled and nearly black. Black pepper has been cultivated for thousands of years on the Malabar coast of southwestern India, in the region defined by the modern state of Kerala. For much of the last two thousands years, black pepper was a luxury for the very rich, a commodity so valuable that it was even used as money. Nowadays black pepper is common around world and used in the cuisine of almost every nation.

Constituents

Black pepper contains about 3% essential oil. The aroma is due to the 80% content of monoterpenes: sabinene, beta-pinene, limonene, furthermore terpinene, alpha-pinene, myrcene, delta-3-carene and monoterpene derivatives (borneol, carvone, carvacrol, 1,8-cineol, linalool). Sesquiterpenes make up about 20% of the essential oil: beta-caryophyllene, humulene, beta-bisabolone and caryophyllene ketone.

Parts Used

The dried whole berries, ground.

Typical Preparations

Traditionally added to food. Can be taken in capsule form.

Summary

The black pepper many of us use every day to season food has a wide variety of medicinal applications. Ancient herbalists used pepper as a stimulant to weak membranes, especially to treat runny nose, and also to treat hemorrhoids. Ayurvedic medicines use tiny amounts of black pepper to make the other herbs in the formula more available to the body. Recent scientific investigations indicate that the piperine in black pepper may act as:

- Antidepressant
- Antioxidant, protecting cholesterol from changes that lead to calcification and formation of atherosclerotic plaques,
- Antiproliferative, preventing spread of cancer cells and

• A pain relief agent even stronger than capsaicin.

Ground black pepper (although not peppercorns) can keep food fresh. In 1998, the Quarterly Review of Biology reported that ground black pepper killed about 25% of the bacteria that could cause spoilage of food. In combination with garlic, allspice, onion, or oregano, black pepper could kill almost all of the bacteria that could cause food to spoil.

Precautions

Avoid excessive use of black pepper (more than 1 teaspoon per day) if you take prescription digoxin (Lanoxin) or phenytoin (Dilantin). Too much pepper may slow the rate at which the liver clears these medications from the bloodstream.

Green Pepper

Introduction

Peppercorns are the fruit of Piper nigrum plant, an evergreen climbing vine. Black, white, and green peppercorns all come form the same plant, but they are harvested at different times and processed in different ways. Green peppercorns are picked before they are mature and not allowed to dry, thus capturing their green color, and slightly unique flavor. They have a bright aroma, crisp flavor, and uniform green color. Due to the fact that green peppercorns decay rather quickly, they are either pickled in brine or freeze dried to preserve them. The green peppercorns offered by Mountain Rose Herbs have been freeze dried.

Parts Used

The dried whole berries, or crushed.

Typical Preparations

Traditionally added to food throughout history.

Summary

Green peppercorns have a piquant and fresh flavor that suits wild game dishes like duck and geese quite well. They have been used quite liberally in French/Creole and Thai cooking, and can be substituted in any dish that calls for regular pepper. Unlike black or white peppercorns, green peppercorns can easily be crushed between your fingers just prior to use.

Precautions

Avoid excessive use of black pepper (more than 1 teaspoon per day) if you take prescription digoxin

(Lanoxin) or phenytoin (Dilantin). Too much pepper may slow the rate at which the liver clears these medications from the bloodstream.

Pepper

Botanical: Piper nigrum (LINN.) Family: N.O. Piperaceae

- Description
- <u>Constituents</u>
- <u>Medicinal Action and Uses</u>
- Dosages
- Adulteration of Pepper
- Other Species Uses

---Synonyms---Black Pepper. Piper (United States Pharmacopceia).

---Part Used----Dried unripe fruit.

---Habitat---In South India wild, and in Cochin-China; also cultivated in East and West Indies, Malay Peninsula, Malay Archipelago, Siam, Malabar, etc.

---Description----The best Pepper of commerce comes from Malabar. Pepper is mentioned by Roman writers in the fifth century. It is said that Attila demanded among other items 3,000 lb. of Pepper in ransom for the city of Rome. Untrained, the plant will climb 20 or more feet, but for commercial purposes it is restricted to 12 feet. It is a perennial with a round, smooth, woody stem, with articulations, swelling near the joints and branched; the leaves are entire, broadly ovate, acuminate, coriaceous, smooth, with seven nerves; colour dark green and attached by strong sheath-like foot-stalks to joints of branches. Flowers small, white, sessile, covering a tubular spadix; fruits globular, red berries when ripe, and surface coarsely wrinkled. The plant is propagated by cuttings and grown at the base of trees with a rough, prickly bark to support them. Between three or four years after planting they commence fruiting and their productiveness ends about the fifteenth year. The berries are collected as soon as they turn red and before they are quite ripe; they are then dried in the sun. In England, for grinding they mix Peppers of different origin. Malabar for weight, Sumatra for colour, and Penang for strength. Pepper has an aromatic odour, pungent and bitterish taste.

---Constituents---Piperine, which is identical in composition to morphia, volatile oil, a resin called Chavicin. Its medicinal activities depends mainly on its pungent resin and volatile oil, which is colourless, turning yellow with age, with a strong odour, and not so acrid a taste as the peppercorn; it also contains starch, cellulose and colouring.

The concrete oil is a deep green colour and very acrid.

---Medicinal Action and Uses---Aromatic, stimulant, carminative; is said to possess febrifuge properties. Its action as a stimulant is specially evident on the mucous membrane of the rectum, and so is good for constipation, also on the urinary organs; externally it is a rubefacient, useful in relaxed

conditions of the rectum when prolapsed; sometimes used in place of cubebs for gonorrhoea; given in combination with aperients to facilitate their action, and to prevent griping. As a gargle it is valued for relaxed uvula, paralysis of the tongue. On account of its stimulant action it aids digestion and is specially useful in atonic dyspepsia and torbid condition of the stomach. It will correct flatulence and nausea. It has also been used in vertigo, paralytic and arthritic disorders. It is sometimes added to quinine when the stomach will not respond to quinine alone. It has also been advised in diarrhoea, cholera, scarlatina, and in solution for a wash for *tinea capititis*. Piperine should not be combined with astringents, as it renders them inert.

[Top]

---Dosages---Black Pepper, 5 to 15 grains in powder. Piperine, 1 to 8 grains.

The root of the Pepper plant in India has been used by the natives as a cordial tonic and stimulant.

B.P. dose of Pepper, 1 to 2 drachms.

Oleoresin, U.S.P.: dose, 1/2 grain.

Heliotropin is recommended medicinally as an antiseptic and antipyretic. It is obtained by the oxidation of piperic acid and is used in perfumery. From the time of Hippocrates Pepper has been used as a medicine and condiment.

---Adulteration of Pepper---Linseed mustard seed, wheat and pea-flour, sago, ground rice. At one time when the duty levied on Pepper was very high, fictitious peppercorns were made of oil-cake, clay, with a little cayenne added.