Nutmeg and powder profile

Also known as

Myristica fragans, mace, mace fruit, nutmeg fruit.

Introduction

The nutmeg tree is a native of the Banda Islands, a cluster of small volcanic islands historically known as the Spice Islands and now part of the province of Molucca in Indonesia. Nutmeg isn't really a nut, but the kernel of an apricot-like fruit. The closely related is an arillus, a thin leathery tissue between the stone and the pulp. As noted by Ginger Webb in Herbalgram (1996), natives of the Banda islands use nutmeg oil for treatment of flu. The oil is rubbed on the abdomen for stomachaches and on the forehead for headaches. Grated nutmeg seed, combined with eucalyptus oil, treats diarrhea. Nutmeg can be combined with citronella, cloves, ginger, and softened uncooked rice to make an ointment used in the treatment of rheumatism and other various limb and joint aches.

Constituents

Essential oil containing camphene, p-cymene, phellandrene, terpinene, limonene, myrcene, linalool, geraniol, terpineol, myristicin, elemicin, safrol, eugenol and eugenol.

Parts Used

The "nut" (aril), ground to a fine powder. Buy powdered nutmeg from a reputable source that guarantees that the powder is not made from previously BWP (broken-wormy-punky) nuts. It's also better not to use an irradiated product. Irradiating nutmeg breaks down the fatty acids that contain the essential oils that give nutmeg its aroma and flavor. Avoid irradiated nutmeg for best quality.

Typical Preparations

Most popularly added to food in either ground, chopped or powdered form. May also be taken as a tea or extract.

Summary

As an herbal medicine, nutmeg powder is used to relieve or prevent flatulence and to break up chest congestion. Recent research shows that it may inhibit the growth of the rota-viruses associated with diarrhea in children. Nutmeg may also be employed as noted above. An article in the July 2005 edition of BMC Complementary and Alternative Medicine suggests that alcohol extracts made with nutmeg may help treat erectile dysfunction.

Precautions

Nutmeg is a very weak hallucinogen; caution and moderation should be exercised.

Botanical: Myristica fragrans (HOUTT.) Family: N.O. Myristicaceae

- Description
- Constituents
- Medicinal Action and Uses
- Uses of Nutmeg
- ---Synonyms---Nux Moschata. Myristica officinalis (Linn.). Myristica aromata. Myristica.
- ---Part Used---Dried kernel of the seed.
- ---Habitat---Banda Islands, Malayan Archipelago, Molucca Islands, and cultivated in Sumatra, French Guiana.

---Description---The tree is about 25 feet high, has a greyish-brown smooth bark, abounding in a yellow juice. The branches spread in whorls - alternate leaves, on petioles about 1 inch long, elliptical, glabrous, obtuse at base - acuminate, aromatic, dark green and glossy above, paler underside and 4 to 6 inches long. Flowers dioecious, small in axillary racemes. Peduncles and pedicles glabrous. Male flowers three to five more on a peduncle. Calyx urceolate, thick and fleshy, covered with an indistinct reddish pubescence dingy pale yellow, cut into three erect teeth. Female flowers differ little from the male, except pedicel is often solitary. Fruit is a pendulous, globose drupe, consisting of a succulent pericarp - the mace arillus covering the hard endocarp, and a wrinkled kernel with ruminated endosperm. When the arillus is fresh it is a brilliant scarlet, when dry more horny, brittle, and a yellowish-brown colour. The seed or nutmeg is firm, fleshy, whitish, transversed by red-brown veins, abounding in oil. The tree does not bloom till it is nine years old, when it fruits and continues to do so for seventy-five years without attention. In Banda Islands there are three harvests, the chief one in July or August, the next in November, and the last in March or April. The fruit is gathered by means of a barb attached to a long stick. The mace is separated from the nut and both are dried separately. The nutmeg or kernel of the fruit and the arillus or mace are the official parts.

After the mace is removed, the nutmegs are dried on gratings, three to six weeks over a slow charcoal fire - but are often sun-dried for six days previously. The curing protects them from insects.

When thoroughly dried, they rattle in the shell, which is cracked with a mallet. The nutmegs are graded, 1st Penang, 2nd Dutch (these are usually covered with lime to preserve them from insects), 3rd Singapore, and 4th long nutmegs.

Nutmegs have a strong, peculiar and delightful fragrance and a very strong bitter warm aromatic taste.

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---Constituents---They contain lignin, stearin, volatile oil, starch, gum and 0.08 of an acid substance. By submitting nutmegs and water to distillation, a volatile oil is obtained. The small round heavy

nutmeg is the best. Those that are larger, longer, lighter, less marbled, and not so oily, are inferior.

The powder of nutmegs, beaten to a pulp with water, then pressed between heated plates, gives from 10 to 30 per cent of orangecoloured scented concrete oil erroneously called 'oil of mace' - an inferior oil is prepared in Holland from the spoiled or inferior nutmegs - and an artificial preparation is made by mixing together tallow, spermaceti, etc., colouring it with saffron and flavouring it with essential oil of nutmeg.

After the nutmegs have been collected, the outside fleshy pericarp is made into a preserve.

The mace of commerce should be somewhat flexible, cinnamon-yellow coloured, in single or double blades, with nutmeg-like smell and a warm, sharp, fatty, aromatic taste.

There is a large trade in wild nutmegs, which are known in commerce under the names of long, female, Macassar, Papua, Guinea, or Norse nutmegs. All these varieties have been traced to *Myristica argentea* of New Guinea, from whence they enter commerce as Macassar nutmegs.

There is much adulteration and fraud in the nutmeg trade. The essential oil has often been extracted before they are marketed - a fraud which can be detected by the light weight. This renders them more subject to attacks by insects.

Concrete oil of nutmeg, often erroneously termed 'oil of mace' or 'nutmeg butter,' is made by bruising the nuts and treating them with steam. The best nutmeg butter is imported from the East Indies in stone jars, or in blocks wrapped in palm leaves - it should be softly solid, unctuous to touch, orange yellow colour and mottled, with the taste and smell of nutmeg.

Holland prepares an inferior kind of oil sometimes offered for sale - it is said to be derived from nutmegs that have been deprived of their volatile oil by distillation. It is found in hard shining square cakes, light coloured and with less taste and smell than the East Indies oil. *Ucuhula* nut is the round or oval seed of *M. surinamensis*. It is distinguished by very large albuminous crystalloids, the seeds containing over 70 per cent solid yellow fat. The Brazilian *M. officinalis* resembles the nutmeg in form and structure, it contains crystals like the preceding one, though less large; has a black shell covered with broad furrows and yields a fat or bicuhyba balsam very like the ordinary nutmeg, with a sharp sour taste, and a peculiar fatty acid, bicuhybastearic acid. From *M. otoba* otoba fat is procured. Almost colourless with a fresh smell of nutmeg, it contains myristin, olein, and otobite. The fruit of virola or *M. sebifera* also gives a fatty substance termed ocuba wax. The following are erroneously called nutmegs:

CALIFORNIAN NUTMEG. The seed of a coniferous tree, *Sorreya Californica* - its odour and taste terebinthinate.

JAMAICA or CALABACH NUTMEG. Obtained from *Monodora myristica*.

NEW HOLLAND or PLUME NUTMEG. Obtained from the Atherosperma moschata.

CLOVE NUTMEG. Obtained from Agathophyllum aromaticum.

Insects that attack nutmegs only extract the fat oil. They do not interfere in any way with the essential oil.

[Top]

- ---Medicinal Action and Uses---The tonic principle is Myristicin. Oil of Nutmeg is used to conceal the taste of various drugs and as a local stimulant to the gastro-intestinal tract.
- --- Uses of Nutmeg---Powdered nutmeg is rarely given alone, though it enters into the composition of a

number of medicines. The expressed oil is sometimes used externally as a gentle stimulant, and it was once an ingredient of the *Emplastrum picis*.

The properties of mace are identical to those of the nutmeg. Dose, 5 to 20 grains.

Both nutmeg and mace are used for flatulence and to correct the nausea arising from other drugs, also to allay nausea and vomiting.

Nutmeg is an agreeable addition to drinks for convalescents.

Grated nutmeg mixed with lard makes an excellent ointment for piles.

In some places roasted nutmeg is applied internally as a remedy for leucorrhaoea. Dose of the powder, 5 to 20 grains. Fluid extract, 10 to 30 drops. Larger doses are narcotic and produce dangerous symptoms. Spirit, B.P., 5 to 20 drops.

See MACE.