

## Guava: Nature's Gift to Mankind

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Guava (*Psidium guajava* L.; Vern.- *amrood*) is a tropical/subtropical fruit plant of the world. It belongs to family Myrtaceae and originated from tropical America. The flowers of guava are white, incurved petals, 2 or 3 in the leaf axils, and they are fragrant, with four to six petals and yellow anthers. The fruit is berry, with green and thin epicarp when unripe, but it becomes pale yellow or pink on ripening. Guava is also known as poor man's apple.

The major constituents of guava fruit are carbohydrates. A guava fruit is comprised of about 9 % epicarp, 74 % mesocarp and 17 % endocarp (Marcelin *et al.*, 1993). The fruit is also higher in vitamin C than citrus (80 mg of vitamin C in 100 g of fruit) and contains appreciable amounts of vitamin A as well (Joseph and Mini Priya, 2011). One can fulfil the requirement of vitamin C by eating fresh fruits of guava without being affected by sourness. Guava is normally consumed as fresh fruit but it can also be processed and preserved in the form of pulp, jelly, jam, juice beverages, squash, syrup, concentrate, and dehydrated and canned products.

Guava contains broad spectrum of phytochemicals including polysaccharides, vitamins, essential oils (Smith and Siwatibau, 1975), minerals, enzymes, proteins (Deo and Shastri, 2003). Guava is very rich in antioxidants and vitamins (Tee *et al.*, 1997; Hobert and Tietze, 1998), and a good source of pectin - a dietary fiber (Joseph and Mini Priya, 2011). The plant also contains alpha tocopherol (vitamin E) at nearly 1.7 mg/100g (Ching and Mohamed, 2001).

The medicinal utilities of guava for the treatment of various problems/diseases are discussed below:

**Cold:** The guava becomes very effective medicine for the treatment of any type of cold when baked on coal or gas thoroughly and eaten with black salt and black pepper. This method should be applied after meal. Kamath *et al.* (2008) also reported the use of guava for treating cold in Cuba.

**Worm problem:** The children suffering from worm problems can be cured by using guava with honey and *sendha namak*. In Peruvian and Mexican herbal medicine systems also the plant is employed for gastroenteritis, intestinal worms, gastric disorders and vomiting (Ticzon, 1997; Kamath *et al.*, 2008; Raintree data base).

**Constipation:** The constipation can be cured by using guava powder mixed with salt, black pepper and few drops of lemon, regularly for 3-4 days. It paves way for easy bowel with complete cleaning. The person suffering from chronic cold should avoid this formula. Nadkarni and Nadkarni (1999) reported that guava jelly is tonic to the heart and good for constipation.

**Toothache:** By chewing the fresh green leaves or gargling with solution obtained from boiling fresh green leaves of guava, the ordinary toothache can be cured. Burkill (1997) also reported that in Ghana and in Nigeria the leaves are chewed to relieve toothache.

**Headache:** The application of paste of guava fruit on forehead before sunrise can be ideal medicine for curing headache.

**Blood purifier:** Sweet ripened guava fruit is considered as a good blood purifier. It helps in cleaning the blood impurities and keeps the person free from various skin diseases. Pimples can also be cured by applying liquid obtained from leaves of guava after boiling with small amount of salt. According to Ojewole (2005) the plant reduces arterial blood pressure whereas Kamath *et al.* (2008) found it to be useful for blood cleansing in Trinidad.

**Diarrhoea:** Taking guava, mixed with *mishri*, at least thrice a day regularly for three days proves very good medicine for the treatment of diarrhoea. It is only the fruit that can cure both constipation as well as diarrhoea. The fruit and leaves of guava are also used for treating diarrhoea in various parts of the world (Burkill, 1997; Ticzon, 1997; Conway, 2001; Kamath *et al.*, 2008; Ojewole *et al.*, 2008). Quercetin has been reported as the main active constituent of *P. guajava* and has been attributed to be responsible for the spasmolytic and anti-diarrhoeal effects of the leaf extract (Lozoya *et al.*, 2002).

**Gum ache and bleeding:** Take 500g of green guava peel mix it with 10g of *phitkari* (alum), black pepper and *sendha namak*, and rub the gums and teeth with mixture twice a day. A decoction of the root-bark is recommended as a mouthwash for swollen gums and a decoction of the leaves makes an efficacious gargle for swollen gum and ulceration of the mouth

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(Nadkarni and Nadkarni, 1999) and also for bleeding gums (Conway, 2001).

*Diabetes*: Cut the guava fruit into small pieces and put them in drinking water for about three hours. Drinking this water will lower the blood sugar. The leaf infusions are used in the Cape for diabetes (Wyk *et al.*, 1997). Water in which the fruit is soaked is good for thirst in diabetes (Conway, 2001). Mukhtar *et al.* (2004; 2006) found both leaves and ethanol extract obtained from stem bark to be highly effective against diabetes.

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