

## Amalaki... the Miracle Plant

### Clinical Research

**Cancer:** Nandi et al. report that the supplementation P. emblica to mice in vivo significantly reduced the cytotoxic effects of a known carcinogen, 3,4-benzo(a)pyrene, in much smaller doses than the carcinogen (1997). When an aqueous extract of P. emblica is administered prior to radiation treatment, it has been found to have a protective effect upon radiation induced chromosomal damage (Yadav 1987).

**Cardiovascular:** Researchers studied the effect of P. emblica in normal and hypercholesterolaemic men aged 35-55 years to determine its effect on total serum cholesterol....

**Digestive:** Research conducted at the Amala **Cancer** Research Centre in Kerala, India, has found that an extract of P. emblica significantly inhibited **hepatocarcinogenesis** induced by N-nitrosodiethylamine (NDEA) in experimental animals (Jeena 1999). In addition to its hepatoprotective activities, P. emblica also appears to be functional in acute necrotizing pancreatitis, reducing inflammation and the damage to acinar cells (Thorat 1995).

**Immune:** P. emblica has been found to enhance natural killer cell activity and antibody dependent cytotoxicity in **tumor** bearing mice, enhancing lifespan to 35% beyond the control animals

**Indications:** Dyspepsia, gastritis, biliousness, hyperacidity, hepatitis, constipation, flatulent colic, colitis, hemorrhoids, convalescence from fever, cough, asthma, skin diseases, bleeding disorders, menorrhagia, anemia, **diabetes**, gout, osteoporosis, premature graying, alopecia, asthenia, mental disorders, vertigo, palpitations, cardiovascular disease, cancer.

## **Medicinal uses:**

Amalaki is among the most important medicinal plants in the Ayurvedic materia medica, and along with Haritaki and Vibhitaki forms the famous Triphala formula, used to cleanse the dhatus of ama, pacify all three doshas, and act as a rasayana to promote good health and long life. A synonym for Amalaki is Dhatri or 'nurse,' indicating that it has the power to restore health like a mother caring for her child.

The fruit is the most commonly used plant part, and the fresh fruit is preferred. An excision in the unripe fruit is made and the exudate collected is used topically in conjunctivitis (Kirtikar and Basu 1935, 2221).

The unripe fruits are also made into pickles and given before meals to stimulate the appetite in anorexia (Nadkarni 1954, 481). The fresh juice of the fruit mixed with ghrita is a rasayana, has a beneficial activity upon the intestinal flora, and is a corrective to colon function.

The fresh fruit is very hard to come by outside of the subcontinent, and can usually be found in Indian markets for only a few weeks during the fall.

The dried fruit is used as a decoction to treat ophthalmia when applied externally, and is used internally as a hemostatic and antidiarrheal (Nadkarni 1954, 482). The boiled, reconstituted dried fruit, blended into a smooth liquid with a small quantity of gur added, is useful in anorexia, anemia, biliousness dyspepsia, and jaundice. This is also an excellent restorative in chronic rhinitis and fever, with swollen and dry red lips and rashes about the mouth.

The dried fruit prepared as a decoction and taken on a regular basis is useful in menorrhagia and leucorrhea, and is an excellent post-partum restorative. Similarly the Chakradatta recommends the fresh juice of Amalaki with Amalaki churna, taken with ghee and honey as a vajikarana rasayana.

In the treatment of cardiovascular disease Amalaki is an excellent antioxidant botanical, used to treat all of the cardiovascular effects of poorly controlled diabetes and insulin resistance, including diseases of microcirculation such as macular degeneration.

Amalaki is similarly taken in polluted urban areas to keep the immune system strong. For coronary heart disease in particular Amalaki can be combined with Arjuna, or non-Indian botanicals such as Hawthorn, and with Guggulu for dyslipidemia. Taken with Guduchi, Katuka, and Bhunimba, Amalaki forms an important protocol in the treatment of hepatitis and cirrhosis.

Amalaki is also an important herb to consider to protect the body against the deleterious effects of chemotherapy and radiation in conventional cancer treatments.

In combination with Chitraka, Haritaki, Pippali and saindhava, Amalaki churna is mentioned by the Sharangadhara samhita in the treatment of all types of fever (Srikanthamurthy 1984, 85). In the treatment of nausea, vomiting and poor appetite fresh Amalaki is crushed with Draksha (*Vitis vinifera*) and mixed with sugar and honey (Sharma 2002, 170). Amalaki fruit fried in ghee and reduced to a paste and mixed with kanjika (fermented rice water) is applied over the head to treat nosebleeds (Srikanthamurthy 1984, 242).

In the treatment of agnimandya, edema, abdominal enlargement, hemorrhoids, intestinal parasites, diabetes and allergies three parts Amalaki churna is mixed with the same amount each of Ajamoda (*Trachyspermum ammi*), Haritaki and Maricha (*Piper nigrum*), with 1 part pancha lavana (the 'five salts,' i.e. saindhava, samudra, sambara, sauvarchala and vid lavana), macerated in buttermilk until it has fermented (Sharma 2002, 71).

Combined with equal parts Guduchi (*Tinospora cordifolia*), Shunthi (*Zingiber officinalis*), Aragvadhya (*Cassia fistula*) and Gokshura (*Tribulus terrestris*), dried Amalaki fruit is recommended by the Chakradatta as a decoction in the treatment of urinary tenesmus (Sharma 2002, 307).

Amalaki is the primary constituent of a complex polyherbal lehya called Chyavanaprash that is used as a rasayana, and in the treatment of chronic lung and heart diseases, infertility and mental disorders (Sharma 2002, 140).

Another valued rasayana that contains Amalaki as the primary constituent is Brahma rasayana, giving the person that takes it “...the vigor resembling an elephant, intelligence, strength, wisdom and right attitude (Srikanthamurthy 1995, 386).

The dried fruit made into an oil and applied to the head, and taken internally as a decoction or powder, is reputed to be useful in alopecia and adds luster and strength to the hair. Similarly, the Chakradatta recommends a nasya of equal parts Amalaki and Madhuka (*Glycyrrhiza glabra*), decocted in milk, in the treatment of alopecia (Sharma 2002, 488).

Both the fresh juice and crushed seeds are combined with Haridra (*Curcuma longa*) as an effective treatment for diabetes (Sharma 2002, 327; Dash and Junius 1983, 90). The seeds are made into a fine powder and mixed with equal parts powder of Ashvagandha (*Withania somnifera*) root as a rasayana in the cold winter months (Nadkarni 1954, 482-3). For scabies and skin irritations the seed is charred, powdered and mixed into sesame oil and applied externally (Nadkarni 1954, 482).