

Gooseberry

Phyllanthus emblica



Emblica exhibits **strong antioxidant activity**. It is one of the most important plants in the traditional Ayurvedic medical system as well as in other traditional health systems for immunomodulatory, anti-inflammatory, antiulcer, hepatoprotective, and anticancer actions.

Gooseberry (*Ribes* spp.) scientifically known as *Phyllanthus emblica* is a small spiny bush in the family Rosaceae which is grown for its edible fruit of the same name. It is also known as “fayberries” because of the ancient belief that fairies used bushes of gooseberry to hide from danger. The plant is native to Nepal, India and Sri Lanka, throughout South-East Asia to southern China. Apart from gooseberry it is also known as Amla, Emblic, Indian Gooseberry, Malacca Tree and Myrobalan. The bush begins fruiting 2-3 years after plantation. One gooseberry bush produces 8 to 10 pounds of fruit per season. Gooseberry can produce fruit and survive at least 20 years in the wild. Fredonia, Pixwell, Downing and Poorman are few of the popular varieties of Gooseberry.

Plant

Gooseberry is a fast growing, small to medium-sized, low, deciduous tree, 5–25 m tall; trunk often crooked and gnarled, up to 35 cm in diameter; bark thin, smooth, grey, peeling in patches, with numerous knobs, main branches angular and densely pubescent.

The plant has sharp thorns all along its woody branches. It is normally found growing in tropical and subtropical regions from near sea-level. It grows equally well in arid and wet or humid conditions. It is light demanding plant, common in grassy areas, brush and village groves. The plant is not fastidious of soil type and grows on a wide range of soil types ranging from sandy loam to clay, light or heavy, and slightly acidic to slightly alkaline. It flourishes in deep, fertile soil. It is moderately drought resistant but some cultivars may be sensitive to drought and frost. It is fire-resistant and is one of the first trees to recover after a fire. Branchlets are glabrous or finely pubescent, 10–20 cm long, usually deciduous.

History

Phyllanthus emblica commonly known as gooseberry is considered to have originated in Nepal, India and Sri Lanka, throughout South-East Asia to southern China. It is widely cultivated for its fruits throughout its natural area of distribution, particularly in India, and also in the Mascarene Islands (Réunion, Mauritius), the West Indies (Cuba, Trinidad), Central America (Honduras, Costa Rica), and the West Indies and Japan. Formerly it was cultivated in Madagascar. It is commonly cultivated in home gardens in India, Malaysia, Singapore and southern China. Nowadays because of its wonderful taste and health promoting benefits it is grown throughout the world.

Nutritional value

Apart from their sweet, slightly tart taste, gooseberry is a good source of nutrients, vitamins and minerals. Consuming 150 gram of gooseberry offers 41.6 mg of Vitamin C, 6.4 g of Total dietary Fiber, 15.27 g of Carbohydrate, 0.105 mg of Copper, 0.216 mg of Manganese, 0.12 mg of Vitamin B6, 0.429 mg of Vitamin B5, 297 mg of Potassium, 0.46 mg of Iron and 40 mg of Phosphorus.

Health benefits of Gooseberry

The gooseberry features a higher nutrient content and is also obtainable in white-colored, green, or even red types. One fourth of the everyday requisite of vitamin C is available in the average offering of gooseberries. Gooseberries usually have an acidic sour taste to them, yet recently, new versions have been discovered to become fairly sweet. These types of berries are generally utilized whilst producing jams, jellies as well as puddings.

Gooseberries are not typically the most popular of fruits, and lots of individuals don't have any idea exactly what a gooseberry is, however this unusual, somewhat sour fruit has numerous health advantages. From assisting in avoiding ageing to maintaining the body powerful from problems, this particular remarkable gooseberry has numerous healthy and balanced advantages!



1. Eye Care

Regular consumption of Gooseberry juice along with honey is quite beneficial for improving eyesight, and research has shown it to improve nearsightedness and cataracts, while decreasing intra-ocular tension. This is mainly due to its remarkable content of carotene, which has long been known for their powerful effect on vision-related disorders, including those that stem from free radical activity. Vitamin A and carotenes reduce macular degeneration,

night blindness, and strengthen your vision before the age-related degeneration from free radicals can occur!

2. Digestion

Just like most of the fruits, gooseberry is very high in fiber. Fiber helps to add bulk to the stool and helps food move through the bowels and keeps bowel movements regular. This reduces the chances of constipation, and fiber bulk up loose stools and decrease diarrhea. Fiber also encourages the secretion of gastric and digestive juices, hence food is digested efficiently, nutrients are absorbed in an optimal way, and you feel lighter and healthier.

Reducing constipation can also help protect your from several gastrointestinal disorders, even colorectal cancer!



3. Diabetes

Gooseberry consists of chromium, which has a therapeutic value for diabetic patients. Indian Gooseberry encourages the isolated group of cells that secrete the hormone insulin, thus decreasing blood sugar in diabetic patients and keeping their body balanced

as well as healthy. When blood sugar is reduced, it means that glucose is also being used by the cells as functional energy, thus the metabolism is stronger and you have more energy, without the plunges and spikes in blood sugar that are so dangerous for diabetic patients. Chromium also improves the effect of beta blockers, which are used for heart health, by decreasing the LDL cholesterol content of the body.

4. Calcium Absorption

Gooseberry helps the body absorb calcium in a positive way. Calcium is a crucial component of our bones, teeth, and nails, and also ensures that we have attractive lustrous hair. Thus, regular consumption of vitamin C-rich fruit like Indian gooseberries is a wonderful way to keep the body looking and feeling great.



5. Cancer

Gooseberry is a rich source of antioxidants which is effective to prevent DNA cell damage from free radicals. Similarly due to its high Oxidative Radiance Activity Capacity (ORAC) it protects cell damage from oxidative stress. The Best part of Gooseberry is that it doesn't lose its nutrients value even in powdered form. During

research it was found that Gooseberry has tremendous effect on multiple cancers.

First, it slows down the growth of cancer. Later it starts killing the cancer cells. After complete slow down, it also starts to kill the cancer cells. Also, the major part is that it didn't harm any healthy cells. It shows beneficial in preventing and protecting from cancer. It is effective to prevent growth and spread of cancer cell. It is effective to prevent tumor cell growth.

6. Menstrual Cramps

Gooseberry consists of huge variety of minerals and vitamins which is quite useful in the treatment of menstrual cramps. Since it takes a while for the necessary elements to accumulate in the body, it is better to consume gooseberry on a regular basis so it is always in the system and menstrual cramps can be prevented every month for women.



7. Brain health

Gooseberry consists of huge amount of vitamin and minerals that helps to improve brain health. Due to the high iron in the blood, it offers oxygen to the brain. Also, it improves memory.

Apart from that it contains a high amount of antioxidants; it is effective to prevent degeneration of brain caused due to oxygen free radicals. Therefore, it provides complete health benefits to the brain.

8. Aging

Aging is common with the increase in age. But the process of aging is totally changed. Skin starts to show sign of aging at an early age.

These early signs of aging are due to unhealthy diet, pollution, stress and much more.

Gooseberry helps you fight the problem of aging due to its high antioxidants content. Oxidative Radiance Activity Capacity (ORAC) value is 3387 micromole per 100 g. Free radicals are known to damage healthy cells. They damage the healthy skin and accelerate the process of aging. But antioxidants fight these free radicals and slow down the process of aging.

9. Diarrhea and Dysentery

Due to its strong cooling and laxative properties, Gooseberry is a wonderful component in remedies for diarrhea and dysentery. It offers great relief for gastric syndrome as well as hyperchlorhydria (burning sensation in the abdomen). As a laxative, it helps flush out toxins or harmful substances you may have eaten that are causing your discomfort or illness, thus removing it from your system so the healing process can begin, and cooling the burning and discomfort often felt when diarrhea occurs.

10. Hair care

Gooseberry is used in several hair tonics because it enhances hair growth and hair pigmentation. It fortifies the roots of hair, maintains color, and improves luster. Regular consumption of fresh gooseberry or applying its paste on hair roots improves hair growth and color. Gooseberry oil is quite popular in India because it has been shown to decrease the chances of hair loss and baldness. This quality is due to the carotene content of gooseberry, as well as its iron content and general antioxidant capacity, which reduces hair loss by not allowing free radicals to damage hair follicles or impact the hormones that can cause premature hair loss.



11. Improving Appetite

Regular consumption of Gooseberry powder with butter and honey before a meal improves appetite. It also helps to balance nitrogen levels, thus increasing weight in a healthy ways.

12. Heart Disease

Gooseberry helps to strengthen the heart muscles, so the heart pumps blood effortlessly throughout the body. By decreasing excess cholesterol buildup, the chromium can reduce the chances of atherosclerosis, or plaque buildup in the vessels and arteries. This reduces the chances of strokes and heart attacks. The iron content encourages the creation of new red blood cells, increasing

circulation and the oxygenation of organs and cells to maximize growth and regeneration of tissue, while keeping the blood vessels and arteries clean.

13. Diuretic Activity

Besides being a fruit that is very high in water, Gooseberry is slightly diuretic in nature. This means that it increases the frequency as well as volume of urination. Urination helps to eliminate unwanted toxins and excess levels of water, salts, and uric acid from the body. Additionally, it can help you lose weight, since up to 4% of urine is actually composed of fat. Thus, a diuretic substance is always essential for keeping our kidneys healthy, and also preventing urinary infections and uterine infections. Gooseberry is a great way to do this.

14. Infection

Gooseberries have antibacterial and astringent attributes; so it protects the body against infection and improves the body's immune response. They are also a very good source of vitamin C, which is eminent for its impressive antioxidant abilities and its stimulation of the immune system. It increases the white blood cell count in the body, which is the main line of defense for the immune system, since white blood cells attack and remove foreign toxins and substances in the bloodstream and throughout the body.

15. Metabolic Activity

Regular consumption of protein rich foods is one of the most significant ways to stay healthy, since proteins are an essential part of our body's metabolic activities. Our enzymes can breakdown plant proteins into amino acids and reunite them into usable proteins for our body. Protein is essential for cellular growth; muscle development, organ health, and a wide range of other metabolic activities that we need to remain healthy and happy!

How to Eat

- Emblic fruit is extremely rich in vitamin C and edible fresh, cooked, dried or pickled.

- Fruit is cooked in various cuisines in a dhal (lentil) preparation and in a sweet dish amle ka murabbah indigenous to the northern part of India (wherein the berries are soaked in sugar syrup for a long time) which is traditionally consumed after meals in Andhra Pradesh.
- Fresh fruits are also baked in tarts.
- It is a common practice for Indian housewives to cook the fruits with sugar and saffron and give one or two to a child every morning.
- Fruit is used to as sour seasoning in sambal and sayor in place of tamarind pulp in Indonesia and Malaysia.
- Ripe or half-ripe fruits are used to make sweetmeats, jams, jellies, “emblic myrobalan” fruit preserves, candies, emblic powder, chutney, pickles and relishes.
- Emblic preserves are manufactured and marketed in large quantities in India.
- Preserved amblics are available in enameled cans or crystallized as a confection.
- Emblic flesh can be dried and made into chips.
- Fruit juice is used to flavor vinegar.
- Fruit is extensively used by local Thais to quench the thirst when walking in the forest in Thailand.
- Phyllanthus drink prepared from fruit extract is commonly known, and wine made from fruit extract is sold in the market in China.
- Tart, astringent quality berries are favored in fish, poultry, and meat dishes.
- Berries are also used in muffins, pie-fillings, and ice creams.
- They are also used to flavor beverages such as sodas, flavored waters, or milk, and can be made into fruit wines and teas.
- Gooseberries can be preserved in the form of jams, dried fruit, or as the primary or a secondary ingredient in pickling, or stored in sugar syrup.

Other Traditional Uses and benefits of Gooseberry

- According to Baliga and Dsouza *Emblica officinalis* is debatably the most important medicinal plant in the Indian traditional system of medicine, the Ayurveda.

- Various parts of the plant are used to treat a range of diseases, but the most important is the fruit.
- Fruit is used either alone or in combination with other plants to treat many ailments that include common cold and fever; as a diuretic, laxative, liver tonic, refrigerant, stomachic, restorative, alterative, antipyretic, anti-inflammatory, hair tonic; to prevent peptic ulcer and dyspepsia, and as a digestive.
- Fruit has been used in Ayurveda as a powerful rasayana and in traditional medicine for the treatment of diarrhea, jaundice, and inflammation.
- Gooseberry is used as a rasayana to promote longevity, and traditionally to enhance digestion, to treat constipation, reduce fever, reduce cough, alleviate asthma, stimulate hair growth, purify the blood, strengthen the heart, benefit the eyes, enliven the body, and enhance intellect.
- Gooseberry is the primary and most important constituent of an ancient Ayurvedic polyherbal formulation called Chyavanaprash which is used as a rasayana, and in the treatment of chronic lung and heart diseases, infertility and mental disorders.
- For sexual rejuvenation, Chyavanprash is added into warm milk or spread on toast, and consume every day.
- Triphala composed of the three medicinal fruits Emblica of ficinalis, Terminalia chebula and Terminalia belerica is an important herbal preparation in the traditional Indian system of medicine, Ayurveda.
- Triphala is an antioxidant-rich herbal formulation and possesses diverse beneficial properties.
- Triphala is used to cleanse the body tissues, pacify all three Ayurvedic doshas, and act as a rasayana to promote good health and long life.
- Triphala is administered for hemorrhoids, chronic dysentery, enlarged liver, biliousness and other disorders.
- Fresh fruit is purgative and used as poultices.
- Fruit juice is taken internally for dyspepsia and as a diuretic.
- Unripe fruit is cored and the exuding juice is used topically in conjunctivitis.
- Unripe fruits are also made into pickles and given as aperients before meals to stimulate the appetite in anorexia.

- Dried fruit is used as a decoction to treat ophthalmia when applied externally, and is used internally as a hemostatic and antidiarrheal.
- The boiled, reconstituted dried fruit, blended into a smooth liquid with a small quantity of honey or jaggery added is beneficial 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.
- 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.
- Powder prepared from the dried fruit is an effective expectorant as it stimulates the bronchial glands.
- Infusion made by steeping dried fruit overnight in water also serves as an eyewash, as does an infusion of the seeds.
- Liquor made from the fermented fruits is recommended as a treatment for indigestion, anaemia, jaundice, some cardiac problems, nasal congestion and retention of urine.
- Emblic leaves are taken internally for indigestion and diarrhea or dysentery, especially in combination with buttermilk, sour milk or [fenugreek](#).
- Decoction of the leaves is used as a mouthwash and as a lotion for sore eyes.
- Plant is considered an effective antiseptic in cleaning wounds, and it is also one of the many plant palliatives for snakebite and scorpion stings.
- Flowers, considered refrigerant and aperient, and the roots is said to be emetic.
- Bark is strongly astringent and used in the treatment of diarrhea.
- Milky sap of the fresh bark is mixed with honey and turmeric and administered in cases of gonorrhoea.
- Root bark, mixed with honey, is applied to inflammations of the mouth.
- Seeds are burnt, powdered and mixed in oil as a useful pruritis for scabies or itch.

- Seeds are used in treating asthma, bronchitis, diabetes and fevers.
- Seeds are fried in **ghee** and ground in congee is applied to the forehead to stop bleeding from the nose.
- Ma-khaam pom fruits are traditionally used as an expectorant, antipyretic, diuretic, anti-diarrhoeal and anti-scurvy in Thailand.
- Emblic has been used for anti-inflammatory and antipyretic treatments by rural populations in its growing areas.
- Malays use a decoction of its leaves to treat fever.
- Dried fruit is used for dysentery and a poultice of it on the head the pulp of the fruit is smeared on the head to dispel headache and vertigo caused by excessive heat in Indonesia.

Other Facts

- The hard but flexible red wood, that is susceptible to warping and splitting, is used for minor construction, furniture, implements, gunstocks, hookahs and ordinary pipes.
- Wood is used to clarify water in crude aqueducts and inner braces for wells.
- Branches and chips of the wood are thrown into muddy streams for clarification and to impart a pleasant flavor.
- Wood serves also as fuel and a source of charcoal.
- Tannin-rich bark, as well as the immature fruit and leaves, are highly valued and widely used for tanning in India and Thailand, often in combination with other tanning materials such as chebulic myrobalan and beleric myrobalan.
- Twig bark is mainly esteemed for tanning leather.
- Leaves and fruits are used for animal fodder, whereas leaves can also be applied as green manure.
- An essential oil is distilled from the leaves for use in perfumery.
- Leaves and immature fruits are used for dyeing matting, bamboo wickerwork, silk and wool into light-brown or yellow brown hues.
- Matting can be dyed dark colors with a decoction of the bark.
- The fruits are used to prepare a black ink and a hair dye.
- In Hinduism, amla is considered as a sacred tree worshipped as Mother Earth

