

Vitamin C Rich Indian Gooseberry “Amla” – A Review

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SUMMARY

Ayurveda, the oldest health system in the world, provokes the uses amla to treat a host of diseases and promote positive health. It is a well-known fact that all parts of amla are useful in the treatment of various diseases. Among all, the most important part is fruit. Amla fruit is the richest source of vitamin C. Chemical composition of the amla fruit contains more than 80% of water. It also contains protein, carbohydrates, fiber, amino acids and minerals such as calcium, phosphorus, iron, niacin, carotene, thiamine, riboflavin etc. Amla fruit is widely used as diuretic, laxative, liver tonic, antipyretic, hair tonic, ulcer preventive and for common cold, fever as alone or in combination with other plants. Research reports on amla reveals its analgesic, anti-tussive, cardioprotective, cytoprotective, immunomodulatory, chemopreventive, antioxidant, memory enhancing, anticancer, antidiabetic and some others properties.

INTRODUCTION

Amla (*Emblica officinalis*) (EO) has a hallowed position in Ayurveda an Indian indigenous system of medicine. According to belief in Indian mythology, Amla is the first tree to be created in the universe; which belongs to the family of Euphorbiaceae and is also known as *Phyllanthus emblica* or Indian gooseberry. The fruits of Amla are widely used in the Ayurvedic preparation and are believed to increase defence against diseases (Kaushik *et al.*, 2018). The Fruits of Amla are widely used as major constituents in several ayurvedic preparations such as *chyavanprash* and *rasayana*, which promotes health and longevity. Amla is one of the richest sources of ascorbic acid (500–1,500 mg/100 g) and used as a strong rejuvenator herb in Indian pharmacopoeia. Amla has a beneficial effect in decreasing the cholesterol content of blood (Suman *et al.*, 2020). The fruits are sour, astringent, bitter, acrid, sweet, cooling, anodyne, ophthalmic, carminative, digestive, stomachic, laxative, alterant, aphrodisiac, rejuvenative, diuretic, antipyretic and tonic. They are useful in vitiated conditions of tridosha, diabetes, cough, asthma, bronchitis, cephalalgia, ophthalmopathy, dyspepsia, colic, flatulence, hyperacidity, peptic ulcer, erysipelas, skin diseases, leprosy, haematogenesis, inflammations, anemia, emaciation, hepatopathy, jaundice, strangury, diarrhoea, dysentery, hemorrhages, leucorrhoea, menorrhagia, cardiac disorders, intermittent fevers and greyness of hair (Singh *et al.*, 2011). It is consumed as a fresh fruit or in the form of food products like preserve. The fruit also forms an important constituent of nearly 300 Ayurvedic preparations of which the most popular formulations are *chyvanprash* and *triphala*. Amla fruit are not popular as table fruit because of its astringent taste. However, excellent nutritive and therapeutic values of the fruit have great potentiality for processing into several quality products (Srivasuki 2012)



Nutritional value of Amla fruit (Nutritive value per 100g of Amla fruit)

Chemical components	Percentage
Moisture	81.2%
Mineral matter	0.7%
Fat	0.1%
Fiber	3.4%
Carbohydrate	14.1%
Protein	0.5%
Calcium	0.05%
Phosphorus	0.02%
Iron	1.2 mg/100g
Vitamin C	600 mg
Nicotinic acid	0.2 mg/100g

(Fairuz *et al.*, 2019)

Medicinal Benefits of amla (Harpreet *et al.*, 2015)

Immunity booster: One reason for amla's reputation as a general energy promoting, disease-preventing tonic may be its effect on the immune system. Multiple studies have shown significant increases in white blood cell counts, and other measures of strengthened immunity in rodents given amla.

Respiratory disorders : Indian gooseberry is beneficial in the treatment of respiratory disorders. It is especially valuable in tuberculosis of lungs asthma and bronchitis.

Diabetes : This herb, due to its high Vitamin C content, is effective in controlling diabetes. A tablespoon of its juice mixed with a cup of bitter gourd juice, taken daily for 2 months will stimulate the pancreas and enable is to secrete insulin, thus reducing the blood sugar in diabetes.

Eye disorder : The juice of Indian gooseberry with honey is useful in preserving eyesight. It is beneficial in the treatment of conjunctivitis and glaucoma. It reduces intraocular tension in a remarkable manner. Juice mixed with honey can be taken twice daily for this condition.

Natural cure for anemia : Amla is rich in Vitamin C or ascorbic acid, an essential ingredient that helps in the absorption of Iron. Supplements of amla can be very beneficial to patients suffering from Iron deficiency Anaemia.

Balances stomach acids : It improves digestion but does not heat the body; Amla-Berry is ideal for calming mild to moderate hyperacidity and other pittarelated digestive problems

Promotes healthier hair : Amla-Berry boosts absorption of calcium, thus creating healthier bones, teeth, nails, and hair. It also helps to maintain youthful hair color and retards premature graying, and supports the strength of the hair follicles, so there is less thinning with age. The crushed fruits have a good effect on hair growth and prevent hair graying.

Processed Products from Amla

Many different products have been reported from amla like ready-to-serve beverage, candy, jam, powder, and Amla bar. Amla berries can be used as a valuable ingredient for the production of an herbal fermented beverage (Vinita *et al.*, 2012).

CONCLUSION

Amla is one of the richest natural sources of Vitamin C and plays a vital role in preventing innumerable health disorders. It is considered to be a safe herbal medicine without any adverse effects. So it can be concluded

that the Indian gooseberry is a traditionally and clinically proven fruit for both its application and efficacy. Amla has an important position in Ayurveda- an Indian indigenous system of medicine. Amla due to its strong antioxidant and biological properties prevent innumerable health disorders as it contains essential nutrients.

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