

AMLA: A NOVEL AYURVEDIC HERB AS A FUNCTIONAL FOOD FOR HEALTH BENEFITS"- A MINI REVIEW

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ABSTRACT

Medicinal plants are natural gift to human lives to promote disease free healthy life. *Phyllanthus emblica*, commonly known as amla is widely distributed in tropical and subtropical areas and has therapeutic potential against deleterious diseases. Earlier it becomes a notable fruit for its rich amount of vitamin C, polyphenols such as tannins, gallic acid, ellagic acid, flavonoids like quercetin and rutin.

INTRODUCTION

In this century, unparalleled medicinal inventions have been achieved to resolve incalculable diseases, including cancer and AIDS. Yet most of the investigation studies have been conducted in all over the world against newly discovered diseases. Thus, we have forgotten our ancient medicines such as Siddha, Ayurveda and Unani systems. In spite of synthetic medicines like antibiotics, steroids and advanced surgical practices gives faster action and bring quick relief, it cause some life threatening side effects including death. Furthermore, regular ingestion of antibiotics and some pain killer tablets may produce toxic substances in liver. The synthetic drugs may be effective on one sickness and cause another trouble. Thus, men gradually start living against nature and lost his life. Ancient people had been live long when compared to nowadays. Because of their life style, which is completely depends on nature. Traditionally life threatening diseases have been deals with herbal medicines which are taken as food not as medicine or drug. In previous studies, authors postulated that phytochemicals present in fruits and vegetables could reduce various risks of diseases owing to prevent the oxidative damage produced by free radicals[1]. *Phyllanthus emblica* (amla), one of the most common medicinal herbs has been widely used in ayurvedic medicines[2]. In this article the nature of amla and its medicinal properties have been briefly discussed.

AMLA: A NATURAL WONDER

Amla is one of the precious gifts of nature to mankind. Fruit known in Sanskrit as- Amalaka, Hindi- Amla, Bengali- Amalaki, Nepalese- Amala, Telugu- Usirikai, Tamil- Nellikai. Amla is a rich source of vitamin C, among 1 gm of vitamin C per 100 ml fresh juice, and requisite for the synthesis of collagen, which is liable for keeping the cells of the body together. It has the same amount of vitamin C present in two oranges[3]. It increases the red blood cell count and helps to promote good health. Numerous experimental evidences has shown that amla fruit possess antioxidant[4], hepatoprotective[5], hypocholesterolemic[6] and antiinflammatory activities[7].

MORPHOLOGY OF THE PLANT

It is a small medium sized tree grown up to 8 to 18 meters in height, and having asymmetrical shape with spreading branches. The leaves are oval shaped and very short in size up to 7-10 cm long. Greenish yellow color flowers and fruits are appears. The fruits are shown fleshy with sour, astringent taste with spherical in shape and six vertical bands.

AMLA: THE DIVINITY THING IN AYURVEDA

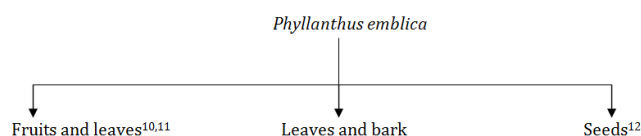
Traditionally amla was believed that amrit/ambrosia packed with all rasas thereby, it becomes an unavoidable part in ayurveda. In that sense, amalaki and hareetaki stand next to amrit since they exhibit five rasas. The fruit amla is deliberated as a rasayana for pitta. Charaka samhita mentioned amalaki is viewed one of the most potent and nutritious and also it says "Amalaki is the best rejuvenative herb"[8], and specifically observed that amla is a great rasayana that helps to protect from disease and reduce the possibilities of premature ageing. Amla has low molecular weight

hydrolysable tannins (Emblicanin A and Emblicanin B, punigluconin) thereby it is considered as one of the more strong antioxidant herb in ayurveda[9].

AMLA: THE NATURAL REFRESHNER

Vitamin C present in amla is one of the main factors that can help to retrieve or refill the energy lost by body. So, the replenishment of new energy causing by amla is considered as a natural refresher.

MAJOR CONSTITUENTS IN AMLA



As an energy refiller

One teaspoon of amla powder over with honey after taking milk in the morning helps to improve freshness and strength to the body.

In anaemia therapy

Amla is a good absorption agent of iron. Ascorbic acid is highly present in amla, which helps to reduce iron deficiency[13].

Amla fights with acidity

The irregular food habits and abnormal intake of sweet, sour, spicy and oily food may cause acidity, and also tea, coffee and smoking are causing that trouble. The physiological factors are anger, grief and depression. This problem is overcome by taken of one gram of amla powder and small amount of sugar mixed with milk or water twice a day.

Action on toxins

Some of the toxins may be stored in liver by regular uptake of pain killers, antibiotics, medication and alcohol consumption. Amla prevents the body from these toxins by strengthening the liver thereby amla act as good detoxifier helps to purify the blood.

Urinary trouble frustration agent

The fresh juice of amla acts as a diuretic which normalize acidic urine. It is helpful in burning urinary infection[14].

Relieves leucorrhoea

The major problem of females is the discharge of white mucous material, often an indication of infection. This problem is overcome by taken of 3 gms of powdered amla with 6 gms of honey everyday for one month can cure this problem.

Effects on urinary stone

Having amla powder with radish can break the stones present in urinary bladder and washed it out through urine. The best time to have them is morning or evening.

Amla therapy for diarrhea

Paste of amla leaves mixed with honey is an effective cure for diarrhea.

Amla as a febrifuge

The leaves and seeds of the fruit can make get well back from fever. The leaf extracts are widely used for the treatment of fever in Malays homeo medicines. Emblic seeds are boiled with chitrak root and chebulic myrobalan and the boiled contents are good for curing fever[15].

Relieves headache

Applying mixtures of amla with buttermilk make temperature reduction and give chillness to head[16]and its paste reduce headache.

Well digestive agent

Fresh green leaves of amla is crushed and mixed with curd taken before food can improves good digestion.

Improves body weight

It assists in balancing nitrogen levels and increasing protein levels very well, which helps in increasing your weight. Amla contains minerals including chromium, zinc, and copper, which helps in maintaining proper functioning of the metabolic activities of the body.

AMLA: THE BENEFICIAL HEALTH TONIC

Amla tonic has a haematinic and lipolytic function widely used to treat scurvy, jaundice, and prevents indigestion and controls acidity. Amla improves vitality, resistance to illness, slow down the ageing process and it is also an important part of an ayurvedic health tonic known as chyawanprash. The benefits of amla health tonic are given below. Figure 1 shows the benefits of amla.

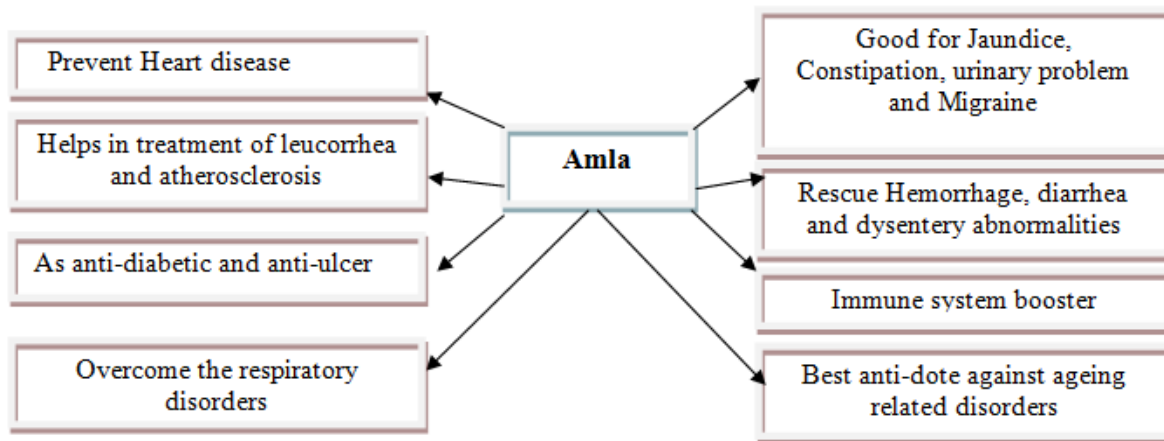


Fig. 1: Benefits of Amla

HEALTH ASSETS OF AMLA

AMLA POWDER

Treat cardiac disease

Cholesterol is an essential component in human body. Hypertension, diabetes and cholesterol are the major factors which cause heart disease. Blood vessels involve the collection of unused cholesterol that leads to high pressure, which increase the possibility of heart attacks. To overcome these impediments, making the mixture of powdered dry amla powder with sugar candy. One teaspoonful of this mixture is mixed with a glass of water and taken in empty stomach may neutralize the blood cholesterol level. Vitamin C present in amla which enlarge the blood vessels and reduce pressure[17-19].

Action on diabetes

Amla fruit powder enhances to control high blood pressure. Triphala comprises three herbs namely amla, harada and bihara. The blood sugar level may be increased by the action of an enzyme alanine transaminase which is present in liver. This enzyme can be normalized by taken one teaspoonful of this mixture (equal quantities of amla, jamun and bitter gourd powder) once or twice per day. Chromium, a mineral present in amla fruits responsible for the anti-diabetic effect[20].

Eye tonic

Triphala powder (made by mixing over of Hirda, behde and amla powder) with honey makes the vision of eye bright and keeps shining and also good for the digestive system[21].

Physical and mental health

Physical and mental infirmity is overcome with taken of amla, murabba everyday in the morning.

Impedes constipation

The irregular and infrequent evacuation of the bowels is known as constipation. This problem is cures by taken of 1 teaspoon of amla powder with milk or water every morning. On the other hand 4 tea spoon of fresh amla juice and 3 teaspoon of honey mixed with water may deal this constipation. If constipation is caused by parasites, take 20gms of fresh amla juice every day may destroy the worms[22].

Jaundice

Fresh amla fruits are soaking with 4 munnakkas, both are grind with amla juice after one hour. This portion may gives relief in jaundice.

AMLA JUICE

Taken of amla juice mixed with honey every morning and evening expose number of medicinal benefits, include cures weakness of the generative system, blood purification, act on diabetes, act on cold and cough.

Gout

Gout is nothing but an inflammation of the big toe caused by defects in uric acid metabolism resulting in acid deposit and its salts in the blood and joints. This problem is cured by taken of amla juice with old ghee makes softening of joints and helps in curing gout and also removing the spots caused by measles, chicken pox, small pox.

Piles

Drinking fresh amla juice with half teaspoon of ghee and 1 teaspoon of honey and 100 Gms of milk after lunch cures chronic piles problem.

AMLA PASTE**Respiratory disorder**

Amla has been witnessed that it can retrieve the normal respiration while the system gets affected. The paste made by 10gm leaves of *Phyllanthus emblica*, 5 fruits of *Terminalia chebula*, 9 seeds of *Piper nigrum*, one garlic are crushed over and mixed with 25 ml ghee made from cow's milk and a clove. The fresh juice of amla mixed with honey can get back best from asthma, cough, and other respiratory disorders.

Urinary problem

The paste made by 20gms of pulp of dried amla in 160 gms of water till 40 gms is left. This was mixed with 20gms of Gur. Regular use of this portion may cure urinary problem.

Migraine

Migraine is a severe vascular headache in female rather than men. This is cured by applying the paste made by dried amla powder with kumkum, neelkamal and rose water.

Therapy for diarrhea

Paste of amla leaves mixed with honey is an effective cure for diarrhea.

As cosmetics**Helps in hair growth**

Consumption of green vegetable juice with 2-3 amla fruits can prevent from hair greying. It has the potent astonishing effect on hair and skin. Amla stimulates the hair follicles and improves the hair growth and gives the complete nourishes to hair roots.

Prevents skin damage

Various layers present in skin may be damaged due to UV radiation from sun is known as photo-aging which is a complex biological process. Amla reduce this problem due to its free radical assuaging nature. It improves skin elasticity by taken of dried amla powder mixed with water[23].

Act against pimples

Pimples on face caused by impure blood and can be removed by taken of amla combined with neem.

As natural mouth freshner

Zeatin, a cytokine like substances is also present in amla leaves. It helps in refining the mouth, strengthens teeth and bones.

Immune system enhancer

Amla is considered as a versatile and powerful antioxidant that protects the body against all types of cancer and helps to reduce the blood pressure[24].

Anti-venom activity

Phyllanthus emblica has been shown to possess anti-venom activity. The plant extracts which neutralized the defibrinogenating and inflammatory activity of *Vipera russellii* snake venom[25].

Amla oil

Applying amla oil before going to bed removes mental weakness.

Ameliorates eyesight

Diseases like reddening, itching and watering of eyes are counteracted by amla, which shows fine consequences in cataracts.

Hinders gallbladder disorders

A person who develops gallbladder disorders due to low vitamin C levels. Taking amla saves one from gallbladder infections.

Good for reproductive health

Amla can increase sperm count and it act as an aphrodisiac. White discharge in women is the major problems which can be reduced by taking of dried amla seeds mixed with honey[26].

TRIPHALA

Triphala comprises 3 herbs namely amla, harad (*chebulic myrobalan*) and beheda (*belleric myrobalan*). During day time, it should be taken with warm water and at bedtime with warm milk and in morning with honey. Normal dose should be 2 gm. Amla is believed to rejuvenate the organ systems of the body, afford strength and wellness. Amla strengthening the central nervous system and helps in lowering the blood cholesterol, enhance vision, strengthen lungs and the respiratory system. These all things make the fruit amla become "King of Rasayana". According to ayurvedic experts, regular treatment of amla will make our live more than 100 years like a youth.

Recommended dosage of vitamin C

Nowadays, amla powder is extensively used for enhancing entire immune system. According to U.S. Recommended Dietary Allowance (RDA), daily ingestion of nutritional vitamin C is given as below:

Infants (age below 1 year):30 to 35mg

Children (age 1 to 14 years):40 to 50mg

Adolescent (age 15 to 18 years): 65 to 75mg

Men (age over 18 years): 90mg

Women (age over 18 years):75mg

Various doses have been studied, and there is no proven effective dose for amalaki. 1-2 capsules have been taken three times daily after meals.

CONCLUSION

In this review, we have attempted to congregate morphological, phytochemical and health assets of *Phyllanthus emblica*, a medicinal herb widely used in many traditional medicinal systems. Further study on the isolation of active compounds and to elucidate its mechanism of action.

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