

Review Article

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AMALAKI (INDIAN GOOSEBERRY): AN ANCIENT FOOD SUPPLEMENT

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ABSTRACT

'Nutraceutical' is an infant in the field of modern research. Ayurveda, a science of life, had explained a number of food substances with its therapeutic indications thousands of years back. With the modernization of lifestyle, Indians did not value the science. The researches these days have again started to highlight the benefits of the foodstuffs in both promotion of health, prevention of illness and treatment of diseases. Amalaki is one such substance which can enhance level of health, prevent ample of diseases and also treat a number of health conditions and their complications. Addition of this fruit in raw or dry form in the daily food items can be compared with icing on the cake.

Key words: Amalaki, Amla, Ayurveda, Food supplement, Nutraceutical, Indian gooseberry

INTRODUCTION

Food is anything which, when consumed, serves to nourish or build up the tissues or to supply body heat. It is of two type viz., functional i.e., foods and food supplements marketed for presumed health benefits like vitamin supplements and isodynamic i.e., foods which generate equal amounts of energy in heat units1. Ayurveda, the life science which is practiced in India since ages, pays utmost importance to food. It agrees that food is supreme energy; all the living beings originate from food and they live by consuming it²; food is cause for both health and diseases. For many years, role of nutrition in disease causation was not thought in modern medicine. Studying of disease conditions helped researchers to find out how important nutrition is to maintain health. After years of focus on individual nutrients, researchers began to focus on whole foods, finding that food is more than just a sum of its nutrient parts. So, the advice that came down the scientific pipeline was "Eating a variety of fresh fruits and vegetables every day has superior health benefits because of the 'synergy' of food"3. The ancient Indians called such foods as Hita or Pathya. Hita are those which maintains the normalcy of Doshas, and balance the hampered (both increased and decreased) Doshas4 and thereby maintains the health. Pathya is any food that will not block the channels in the body⁵ and thus maintains health. Ayurvedic classical texts mention about those food which have to be consumed daily under Nitya Sheelaneeya, Hitatama (best and wholesome)6 and Pathyatama (congenial) food which include cereals, legumes, vegetables, fruits, fats and water etc. All come under the group of health promotive foods or food supplements as per Dietary Supplement Health and Education Act of 1994. One among the suggested fruit for daily consumption is Amalaki (Indian gooseberry).

Amalaki - The Wonder Fruit

Among the list of fruits that can be consumed on daily basis (Nitya Sheelaneeya) and also food materials which are best suited for health, Amalaki (Embelica officinalis) is given first priority⁷. This may be because it pacifies Tridoshas (all the three basic elements of body) ⁸; provides necessary micronutrients to the body and its common availability in India. Probably this was the cheapest fruit available then, which was easy to store, with a high nutritional value. But as the time went on, due to the less common availability and change in the lifestyle of the people, the practice of consumption of Amalaki (Embelica officinalis) on daily basis was gradually withdrawn from society.

Collection of Amalaki

Ayurvedic classics mention that the Amalaki is usually grown in Jangala Desha (arid places) ⁹. This can now interpreted as fruits of *Amalaki* have a higher nutritional and therapeutic value as these days Amalaki is not only wild but cultivated. The best time to collect the fruit is a period of three months between mid-January to mid-March i.e., Pushya, Magha and Phalguna Masa. One should collect only such fruit which have the features of maturity viz., Snehavanti (juicy) and Mrudu (pulpy) ¹⁰.

Attributes of Amalaki

Amalaki when fresh has five Rasa viz., Amla, Madhura, Kashaya, Tikta and Katu; and Sheeta, Rooksha and Laghu Guna¹¹. Though it mainly acts on Pitta and Kapha, it is considered to pacify all three Doshas¹² i.e., Vata by its Amlatwa (sourness); Pitta by Madhuryata (sweetness) and Sheetata (cold potency); Kapha by Kashayatwa (astringent flavour) and Rookshatwa (ability to produce dryness) ¹³. It is one of the best Rasayana¹⁴ and best among the Vayahsthapana (Anti-aging) ¹⁵. The other actions on the general health are Ruchya¹⁶ (enhances interest in food), Swedahara (Reduces sweating) ¹⁷,

Medohara (Reduces fat/lipids) ¹⁸ Shukrala (Increases production of semen and sperm), Vrushya (Aids in ejaculation), ¹⁹ Keshya (Good for hair)²⁰, Chakshushya (Good for eyes)²¹, Jara Vyadhi Vinashana (Checks the diseases due to aging)²¹, Sara (Laxative)²², Deha Vidharana (Nourishes body) and Vajeekara (Aphrodisiac)²³.

Nutrients in Amalaki

Among the nutrients, it is the micronutrients which are rich in Amalaki. It is a richest source for Vitamin C. The nutritional value of Amalaki (mature, fresh) per 100 grams is as follows²⁴:

Nutrients	Percentage (%) or per 100 gm
Calories	60
Moisture	81.2 %
Fibre	3.4%
Macronutrient	
Protein	0.4 g
Fat	0.5 g
Carbohydrates	14 g
Micronutrients	
Vitamin B ₁ (Thiamine)	28 mcg
Vitamin B ₃ (Niacin)	0.4 mg
Nicotinic Acid	0.2 mg
Vitamin C	720 mg
Calcium	15 mg
Iron	1 mg
Phosphorous	21 mg

The main nutrient in Amalaki is Vitamin C. While storing dry or in other forms it may get destroyed if exposed to heat. But it is the tannins which protect them from being destroyed. It also has ample of chemical constituents which render it with a very high antioxidant value.

Therapeutic Benefits

Amalaki and its preparations can though be used in any type of ill health^{25, 26} are commonly used in following conditions—

- Adhmana (Flatulence)^{27, 28}
- Amlapitta (Hyperacidity and peptic ulcer)²⁹
- Pitta Roga (diseases caused to to vitiation of Pitta Dosha)²⁶
- Arsha (piles/haemorrhoids)
- Avruta Vata (diseases due to covering of Vata over any among three Dosha)²⁶
- Baddha Vitkatwa (constipation)³⁰
- Bhagna (fracture)
- Chardi/Vami (vomiting/nausea)²⁶
- Drustigata Roga / Nayanamaya (diseases related to vision or eye)^{31, 32}
- Gulma Vataja (a disease due to aggravated Vata in abdomen)
- Hikka (hick up)³³
- Jwara (fever) 34
- Kamala (Jaundice/liver disease)35
- Kasa (cough)³⁶
- Kshatakshaya (Debilitated due to injuries)³⁷
- Kushta (skin diseases) 38
- Meha/prameha (Diabetes)³⁹
- Mutra Krichra (Dysuria)⁴⁰
- Mutraaghata (Scanty urination/anuria)
- Paktishoola (colicky pain)

- Pandu (Anaemia)
- Raktapitta (a bleeding disorder)
- Retodosha (Seminal abnormalities)
- Shopha/Shotha (oedema/inflammation)
- Shosha (lean due to under nutrition)
- Shwasa (breath related problems/asthma) 41
- Swabhavaja Vyaadhi (?genetic? age related diseases)
- Timira (?Cataract)
- Trishna/Pipasa (polydipsia)⁴²
- Vatavyaadhi (Diseases related with Vata/neurological diseases) 43, 44
- Vrana (wound/ulcer) 45
- Yoni Srava (Vaginal discharge including menorrhagia)

As Herbal Food Supplement

A number of researches are being done on the foods that yield not only nutrients but also have the therapeutic use under the name of 'nutraceutical' or 'therapeutic food'. Many food supplements are being manufactured including herbal supplements. Such foods act both as preventive and curative foods. Dietary Supplement Health and Education Act of 1994⁴⁶ defines food supplement as "a product (other than tobacco) intended to supplement the diet that bears or contains one or more of the following dietary ingredients: a vitamin; a mineral; an herb or other botanical; an amino acid; a dietary substance for use by man to supplement the diet by increasing the total dietary intake; or a concentrate, metabolite, constituent, extract, or combination of any ingredient described earlier". Further, herbal supplements are defined as a type of dietary supplement that contains herbs plant or part of a plant used for its flavor, scent, or potential therapeutic properties. Parts of plant includes flowers, leaves, bark, fruit, seeds, stems, and roots, either singly or in mixtures⁴⁷. Amalaki (Embelica officinalis) can be used in any of fresh, dried or baked forms. But when it comes to storage, the dried form is better choice. Maharshi Sushruta opines it is the best fruit among all the fruits. This fruit can be consumed any time in relation to food without the fear for any vitiation of the Dosha⁴⁸ and is good for health if consumed daily. Free radicals are natural by-products of our own metabolism. Apart from supplementing nutrition, Amalaki gets rid of these free radicals which enhance cell aging due to high amount of vitamin C and flavonoids in it49. The presence of tannoid principles also keeps away the stress induced brain damage. Also when supplemented it protects from the DNA damage by heavy metal poisoning

CONCLUSION

The concept of 'Nutraceutical' in Ayurveda is much more advanced than the concept of functional foods and food supplements of the present era. Usage of dietary substances as means not only of promotion of health, prevention of diseases but also as a control measure can be traced back to centuries ago. Amalaki is one such substance which, though available in one form or the other, finds limited usage in the present era of fast foods. These days the common man does not even consider it as a fruit but just a medicine. While the junks do harms the body, consumption of Amalaki will be beneficial in both

health promotive and curative aspects. Thus it will be wise to consume it on a daily basis.

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