

Health Benefits of Basil Seeds

Roselet P Cherian¹

¹Department of Botany, Assumption College, Changanacherry, Kerala, India

ABSTRACT

Basil seeds or kuskus is a very potential health supplement which is enriched with much more nutrients and beneficial chemicals. This study aimed to understand the health aspects of *Ocimum basilicum*. Also it point out some of the side effects of basil seeds.

Keywords : Basil seeds, Health benefits, *Ocimum basilicum*

I. INTRODUCTION

Basil seeds are rich with phytochemicals with significant nutritional as well as antioxidant capabilities and health benefits. Sweet basil is scientifically known as *Ocimum basilicum L.* which belongs to the family Lamiaceae or Labiatae. Basil has been grown traditionally in worldwide as a decorative, medicinal, seasoning and ritual herbs. Although distributed in worldwide, it is found mainly in the tropical regions of Asia, Africa and Central and South America (Paton *et al.*, 1999). It is cultivated in large quantities in different regions of Iran and India.

Some of the key active ingredients in basil seeds are dietary fibre, vitamin K, iron, protein, phytochemicals, polyphenolic compounds, orientin, vicentin and other powerful antioxidants. Secondary metabolites from *Ocimum* species possess an exceptional biological activity and have bactericide, fungicide, repellent, anti-inflammatory, antioxidative, antidiarrheic, chemopreventive and radioprotective effect (Opalchenova and Obreshova, 2003; Lukmanul Hakkim *et al.*, 2009; Runyoro *et al.*, 2010).

Basil seeds are completely black and tear shaped when dry (Hosseini- Parvar *et al.*, 2010).

Basil seeds are traditionally believed to be used for therapeutic purpose to improve digestive health regulate blood sugar, aid in weight loss efforts, cool

the body, relieves stress, lowers blood pressure, improve vision, lower cholesterol and reduce inflammation.

In many parts of Asia, basil seeds are frequently used in beverages (sarbath) and ice desserts (Falooda) for aesthetic purpose as well as a source of dietary fibre. In traditional medicine basil seeds have been used for a time to treat colic ulcer, dyspepsia, diarrhoea an inflammations, among other ailments. Sweet basil seeds are also known as Sabja seeds, Falooda seeds, or Tukamaric seeds.

When the seed of *Ocimum basilicum L.* is soaked in water, the outer pericarp swells in a gelatinous mass (Azuma and Sakamoto, 2003) due to the presence of a polysaccharide layer. Polysaccharide are usually used as gelling, thickening and stabilizing agents to improve stability and textural properties of many food products such as jellies, salad dressings, and desserts. In early studies (Anjaneyalu & Tharanathan, 1972; Tharanathan & Anjaneyalu, 1975; Anjaneyalu & Channe Gowda, 1979) the polysaccharides extracted from basil seeds by cold water extraction and alcohol precipitation, have been reported to have two major fractions: (i) an acid-stable core glucomannan(43%) having a ratio of glucose to mannose 10:12, and (ii) (1-4)- linked xylan (24.29%) having acidic side chains at C-2 and C-3 of the xylosyl residues in acid-soluble portion.

The mucilaginous layer of the swollen seeds is a pectinous matrix, consisting of considerable amount of unesterified galacturonic acid with a large capacity for hydration (Fahn and Werker, 1972).

Basil seeds contain a reasonable amount of hemicellulose and cellulose, accounting for their hydrophilic character. They are high in fibre and associated nutritional properties and can be considered an a new conventional source of fibre (Mathews *et al.*,1993). Essential oil extracted from *Ocimum basilicum* L. has antioxidative and antimicrobial activity (Javanmardi *et al.*, 2003). Basil seeds are used in drinks of summer times because of its capability to maintain the cooling effect of drink and keep your stomach cool and also maintain a fine digestive system. It contains zero percent calories, antibacterial, anti-spasmodic, antiviral, carminative and nervine.

With its great benefits, the basil seeds also have side effects that can be extremely hazardous if precautions are not taken. Consumption of basil seeds can cause bleeding, pregnancy complications, impact fertility, cause hypoglycaemia etc.

II. METHODS AND MATERIAL

A questionnaire was prepared to get an idea about the awareness of people about the benefits and side effects of basil seeds

III. RESULTS AND DISCUSSION

From the survey results it was clear that most of the people were unaware about basil seeds even though they often use this in juices, sarbaths etc. From the survey it was clear that many of the people uses these seeds as a refreshment.

The Basil seeds are often overlooked, despite having a rich concentration of powerful compounds and active ingredients that can impact human health. Some of the key active ingredients in Basil seeds are dietary fibre, vitamin K, iron, protein, phytochemicals, polyphenolic flavonoids like orientin and vicenin and other powerful antioxidants.

Basil seeds have both advantages and disadvantages on human health. The most notable health benefits of basil seeds include their ability to improve digestive health, aid in weight loss efforts, boost the appearance of the skin, strengthen the hair, regulate blood sugar, cools the body, relieves stress, builds strong bones, lowers blood pressure, improve vision, reduce inflammation, lower cholesterol, and prevent certain infections.

SKIN CARE

Basil seeds are able to improve the health of the skin and stimulate the growth of new cells with the help of antioxidants and flavonoids present in them. Basil seeds crushed into coconut oil and applied on affected areas help in treating several skin infections like eczema and psoriasis. Eating Basil seeds regularly helps in secreting collagen, which is required to form new skin cells as and when they are damaged due to normal wear and tear. It also helps to improve the elasticity of the skin, thus is an anti-aging super food.

HAIR CARE

Basil seeds are rich in the level of iron and various antioxidants, these seeds can stimulate the production of hair and prevent premature hair fall. It also helps to prevent inflammation and oxidative stress on the scalp, which can often lead to hair loss. These seeds are rich in vitamin K, protein etc. which are beneficial to get shiny and healthy hair.

WEIGHT LOSS

Sabja seeds are known to be rich in alpha-linolenic acid (ALA), which comes from high levels of Omega-3 fatty acids present in the seeds. These acids help in boosting the fat burning metabolism in the body. Basil seeds are also high in fibre which gives you the sensation of fullness throughout the day and you don't feel hunger thus losing the weight.

LOWER CHOLESTROL

They help to decrease bad cholesterol levels, which means a lower risk of arthero-sclerosis and plaque deposition in the arteries and blood vessels. This will also reduce strain on the heart and reduce chances of heart attack and stroke.

CONTROL BLOOD PRESSURE

The level of potassium in these seeds is enough to directly impact blood pressure. This hypotensive effect is because potassium is a vasodilator, meaning that it can relax the tension in the arteries and blood vessels, thus reducing strain on the cardio vascular system.

BOOST BONE HEALTH

Basil seeds contain a diverse range of minerals including iron, potassium, copper, calcium, manganese and magnesium which help to support bone mineral density. This will lower the risk of developing osteoporosis and keeps feeling young and strong.

HELPS IN DENTAL HEALTH

Basil seeds help to protect against mouth ulcers, bad breath, cavities, and also the plaque for the reason that they have anti-fungal, antibacterial, antiviral and antimicrobial activities. Basil seeds can be chewed as a mouth freshner.

CONTROLS BLOOD SUGAR LEVEL

Basil seeds contains dietary fibres which are able to control blood sugar level. They are considered to be good for type II diabetics as it is known to keep a check on blood sugar levels. They slow down the metabolism of the body and thus controls the conversion of carbohydrates into glucose. A glass of water with basil seeds in the morning can improve insulin sensitivity throughout the whole day.

IMPROVE VISION

Basil seeds have notable amount of vitamin A, they are recommended for people with failing vision or those who with high levels of oxidative stress. Vitamin A acts as powerful antioxidant in the retina, preventing the development of cataracts and slowing down the advent of macular degeneration.

RELIEVE PAIN

In conditions like arthritis, gout, headaches and irritable Bowel syndrome, basil seeds are known to reduce the severity of those episodes and provide pain relief. Basil seeds have anti-inflammatory properties which relieve pain, swelling, and inflammation. In

Ayurveda, it is utilised since ages for controlling the development of plaque in blood vessels.

COOLING EFFECTS

They help to retain the cold temperature of beverages and soothe the stomach.

RELIEVE STRESS

Basil seeds help to reduce episodes of depression, boost your mood.

REDUCES BODY HEAT

In many regions of Asia, basil seeds are used to make drinks along with water, sugar, honey etc. It is a great drink to escape from the scorching summer. Basil seeds are one of the best body coolants. They are known to reduce body heat. Basil seeds are added to the drinks to increase its coolant properties.

RELIEVES CONSTIPATION AND BLOATING

Basil seeds are known to naturally detoxify your body and acts as a stomach cleanser and helps to flush out toxin from the stomach. They contain volatile oils that help in relieving gas from gastrointestinal tract and aids in digestion. It also have cooling and relaxing effects on the stomach.

CURES COUGH AND FLU

Basil seeds have an antispasmodic property, which means that they soothe tension in the spasmodic muscles and relax them. This way they help in controlling whooping cough. They strengthen the immunity of the body. Flavonoids like vicenin, orietin, and beta carotene forify the body's defense system.

SIDE EFFECTS

These seeds can deliver a significant number of health benefits, but that comes along with a few side effects, such as the choking hazards they pose, as well as potential hormone fluctuation.

REDUCE HORMONE LEVELS

One of the side effects of basil seeds is their potential impact on hormone levels in the body, namely, Estrogen. In case of pregnant women, these seeds are known to lower down the levels of estrogen in the

body. This can be dangerous, as it can stimulate menstruation and may result in complications for babies.

Over consumption of basil seeds may result in lowering of blood pressure beyond the minimum level and cause many serious problems. Consumption of basil seeds by little children may result in sticking in throat.(John Staughton)

IV. CONCLUSION

Basil seeds or kuskus a black tear shaped seed obtained from *Ocimum basilicum* is an antioxidant which scavenges free radicals. It controls the blood pressure, boosts immunity and also it can be used to reduce weight. It can be used to cure modern health issues of human.

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