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## Name Of Review Article: Health Benefits Of Tulsi

Authors name : Ms. Nilambari kailas gosavi

Ms.Mundhe Shruti Sudam

Name of institutions: PRES's college of pharmacy (for women's) chincholi, Nashik 422102 Maharashtra India



(HEALTH BENEFITS OF TULSI (OCIMUM SANCTUM.L))

## ABSTRACT

Tulsi (*Ocimum sanctum* L.), holly basil, is indigenous to the Indian mainland and is profoundly respected for its restorative uses inside the Ayurvedic and Siddha clinical Frameworks. Numerous in vitro, creature and human investigations bear witness to tulsi

Having different restorative activities including adaptogenic, antimicrobial, calming, Cardioprotective, and immunomodulatory impacts, yet to date there are no precise surveys of human research on tulsi's clinical adequacy and security. We directed a complete writing Audit of human examinations that gave an account of a clinical result after ingestion of Tulsi. We scanned for examines distributed in books, theories, meeting procedures, and Electronic databases including Cochrane Library, Google Scholar, Embase, Medline, PubMed, Science Direct, and Indian Medical databases.

**Keywords:** Adaptogenic Antimicrobial Calming Cardioprotective Immunomodulatory Impacts.

## INTRODUCTION

Plants are known for various medicinal properties from ancient times. The essential oils extracted from therapeutic plants are safe, economical, effective and easily available. Tulsi is considered to be a ubiquitous plant in India. Tulsi is one of the most common herb used in Indian traditional system. It is named 'Holy Basil' 'Queen of Herbs'. The name of tulsi comes from Sanskrit word that means "The incomparable one" tulsi an aromatic plant family Lamiaceae. Tulsi plant branched sub shrub 30-60 cm tall with hairy stems and simple opposite green leaves that are strongly is an erect sweet scented. Shrub which grows up to a height of 3-5 feet. Pungent taste and fragrant smell. The only plant that can absorb carbon dioxide throughout its life. It releases the oxygen in the early morning which is beneficial for the people in breathing disorders. Tulsi plant has a lot of significance for mankind, due to the manifold medicinal benefits. In Ayurveda, it is explained as "the elixir of life" and believed to promote longevity. The extracts obtained from the plant are extensively brought to use for curing various diseases such as the common cold, inflammation, malaria, heart disease, headaches, stomach disorders, kidney stones, heart disorders, and many more. [1].

### PROPERTIES OF TULSI :

1. It might be antioxidant.
2. It might have anti-inflammatory activity.
3. It might be antiemetic.
4. It might act as analgesic activities.
5. It helps reduce stress.
6. It might have anti-cancer potential.
7. Tulsi reduces blood pressure.
8. Used as mouth wash for reducing tooth ache.
9. Tulsi oil shows larvicidal activity against malarial larva. [3].

**Botanical classification of Ocimum Santum :**

Taxonomic : Rank Taxon

Kingdom : Plantae

Division Magnoliophyta

Class : Magnoliopsida

Order : Lamiales

Family : Lamiaceae

Genus : Ocimum

Species:Ocimum sanctum

**Synonyms:**

Sanskrit : Surasa, Krishna tulasi, Banal Tulasi.

Assamese : Tulasii

Bengali : Tulasai.

English : Holy Basil.

Gujrati : Tulasei.

TulsiHindi : Tulasii.

Kannada : Tulaseii Shri Tulsi, Vishanu Tulsi

Malayalam : Tulsii, Tulasea.

Punjabi : Tulsi.

Tamil : Tulaesi, Thulasii, Theiru Theezaei

Telugu : Tulasii.

Urdu : Raihana, Tuls.[5]



**TULSI (OCIMUM SANCTUM.L)**



**TULSI (OCIMUM SANCTUM.L)**



**TYPES OF TULSI:**

1. Rama Tulsi (osimum sanctum)
2. Krishna Tulsi (osimum tenuiflorum)
3. Amrita Tulsi (osimum tenuiflorum )
4. Vana Tulsi (osimum gratissimum)
5. Sweet basil (osimum basilicum)
6. Thai basil ( osimum thyriflora)
7. Purple basil (osimum basilicum)
8. Lemon basil (osimum citriodorum)
9. American basil (ocimum americanum)
10. African blue basil (ocimum kilimandscharicum)
11. Italian genovese basil (ocimum basilicum)
12. Lettuce basil
13. Green ruffles basil
14. Cardinal basil
15. Greek basil
16. Spicy globe basil
17. Summer long basil [6]

**THERE ARE COMMONLY THREE TYPES OF TULSI :****1. RAMA TULSI (OSIMUM SANCTUM) :**

The plant has pure green leaves and better tolerance to winters, sun light, plant requires more watering and fertilization than the other varieties. The Queen of herbs is one of the most worshiped aromatic herbs that is found at almost every house in India.

Location – Outdoors

Light – Full Sun

Watering – Daily, except winters

Temperature – Loves range 15 to 40 degree celsius

Common names – Ram Tulsi

Botanical name – Ocimum Sanctum [7]

## 2. KRISHNA TULSI (OCIMUM TENUIFLORUM) :

The plant has purple fringed leaves and purple stems with pungent and strong testof leaves, it Has more medicinal properties than the other species. Below are its growing habits:

Location – Outdoors

Light – Full Sun

Watering – Daily, except winters

Temperature – Loves range 20 to 45 degree celsius

Common names – Krishna Tulsi

Botanical name – Ocimum tenuiflorum

## 4 .VANA TULSI (OCIMUM GRATISSUM):

It is Woody type perennial, aromatic and sacred species of holy basil in India. Beloware its growing

Habits:

Location – Outdoors

Light – Full Sun

Watering – Daily, except winters

Temperature – Loves range 15 to 40 degree celsius

Common names – Vana Tulsi

Botanical name – Ocimum gratissum

## ACTIVE INGREDIENT IN OCIMUM SANCTUM :

- 1.Eugenol (1-hydroxy -2-methoxy-4 allybenzene
2. Caryophyllene
- 3.Terpene-4- ol
- 4.Eugenol methyl ester
5. 3- careen
- 6.Vitamin c
7. Galic acid
8. Vallinin
- 9.Caravacrol
- 10.Palmitirc acid
- 11.Vitamin A
12. Ursolic acid
- 13.Estragole ko

**Tulsi formulations**

- 1 .Tribhuvanakirti Rasa
- 2 Muktapancamrta Rasa.
- 3.Manasamitra Vataka.
- 4 Muktadi Mahanjana.

**TULSI TEA :-**

Wash 10 to 20 fresh leaves of Tulsi, and pound them to a pulp. Mix this pulp with a Cupful of water. Spice the mixture with proper amounts of powdered dry ginger, Cardamom seeds and roots of pepar (piper longum). Add a spoonful of sugar, and boil. Drink this decoction while it is still hot. Do not strain the decoction. Chew and swallow The cooked pulp of Tulsi leaves after drinking the decoction. Take this decoction every Morning. This decoction is believed to be capable of curing various diseases, Stimulating appetite, and imparting a feeling of freshness and vigour. Alternatively, 10 Grams of Tulsi leaves are boiled in 250 grams of water till only half or one-fourth of The water remains.

An equal amount of milk is added, and 20 to 25 grams of crystal sugar dissolved in It, the amount being adjusted as needed. Tulsi tea prepared thus.

**COLD EXTRACT OF TULSI :**

Grind five to seven leaves of Tulsi with three or four black pepper seeds in a mortar With a little water till a homogeneous thick liquid is obtained. Drinking a glass of such A cold extract of Tulsi every morning on an empty stomach soothes the brain by Removing the heat, and strengthens it. This drink stimulates and strengthens the heart Also. The drink is more desirable in the cold season. Almonds added to the drink improve its Quality and render it more salubrious.

**Vegetable soup:**

Clean and cut four bundles of onion saplings, including the leaves, into small pieces. Keep these other ingredients ready Water, 3 cups; Celery leaves cut into small pieces, 1 cup Diced carrots, 1 cup skinned and diced tomatoes (of the larger variety) 3 nos, 1 capsicum cut into Small pieces, salt and pepper according to them leaves, one spoonful of ajwan Seeds, one spoonful of Tulsi

## . Nutritious sweet (pak) prepared from Tulsi seeds:

Tulsi seeds are used extensively in the preparation of medicines, eatables, essences, perfumes Antiseptics, etc. The seeds of the Shyam Tulsi are considered to be of greater medicinal value than Those of Ram Tulsi. The clusters of flowers, or inflorescences, of the Tulsi plants are known as ‘maanjars’ (from ‘manjari’, inflorescences).

The seeds are formed in these flowers, and are released from the dry maanjars on shaking. More Seeds are produced by Ram Tulsi. The seeds are of the size of poppy seeds, and resemble mustard Seeds in colour.

## Medicinal formulation :

1. Panch tulsi
2. Vedaone
3. Organika
4. Mukthi
5. Feverex syrup
6. Koflet syrup
7. B cough
8. Tussnil syrup
9. Pneumonoram syrup

## HEALTH BENEFITS OF TULSI:-

### Healing Power:

The tulsi plant has many medicinal properties. The leaves are a nerve tonic and also sharpen Memory. They promote the removal of the catarrhal matter and phlegm from the bronchial tube. The Leaves strengthen the stomach and induce copious perspiration. Theseed of the plant are mucilaginous.

### 1.Fever and Common Cold:

The leaves of basil are specific for many fevers. During the rainy season, when malaria and Dengue fever are widely prevalent, tender leaves, boiled with tea, act as preventive against these Diseases. In case of acute fever a decoction of the leaves boiledwith powdered cardamom in half a liter Of water and mixed with sugar and milk brings down the temperature.

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**Coughs:**

Tulsi is an important constituent of many Ayurvedic cough syrups and expectorants.

**Sore Throat:**

Water boiled with basil leaves can be taken as drink in case of sore throat.

**Eyes Disorders :-**

Basil juice is an effective remedy for sore eyes and night-blindness, which is generally caused by Deficiency of vitamin A. Two drops of black basil juice are put into the eyes daily at bedtime.

**Mouth Infections :-**

The leaves are quite effective for the ulcer and infections in the mouth. A few leaves chewed will Cure these conditions.

**Skin Disorders :-**

Applied locally, basil juice is beneficial in the treatment of ringworm and other skin diseases. It Has also been tried successfully by some naturopaths in the treatment of leucoderma.

**Teeth Disorder :-**

The herb is useful in teeth disorders. Its leaves, dried in the sun and powdered, can be used for Brushing teeth. It can also be mixed with mustard oil to make a paste and used as toothpaste. [10]

**TULSI USED AS TRADITIONAL INDIAN AYURVEDIC MEDICINES :-**

Organic India an organization dedicated to organic agriculture and sustainable development, one of The qualities that make the Tulsi plant such a potent medicinal herb is its ability to reduce stress. Tulsi is abundant in essential oils and antioxidants, which are tremendously effective in reducing the effect Of stress. On the body.

Tulsi has got diverse healing properties. Though traditionally used by Hindus or Indians not others Are using it too recognizing its immense therapeutic properties. The Tulsi has the property of acting as an Adaptogen. It balances different processes In the body and is of great help in stress management. The extracts of Tulsi have been used in traditional Indian Ayurvedic system of medicine. It is also used in the Unani System of medicine.

**Tulsi in Modern Medicine: -**

In modern medicine there has been research indicating Tulsi might potentially be an effective Treatment for conditions like ulcers, high cholesterol, Type 2 diabetes, obesity and Compromised/suppressed immune systems (from conditions like cancers and AIDS).

**Tulsi in your home:-**

The Tulsi plant, like most herbs, is a delicious way to enhance the flavor of your cooking, or make an excellent tea. This sub-shrub looks quite attractive in a decorative pot, is not harmful to animals and it is fairly easy to grow.

**Diabetes—Western medicine:-**

According to diabeteshealth.com, "Researchers have theorized that holy basil (tulsi) leaves may improve pancreatic beta cell function and thus enhance insulin secretion.

## Snake and Insect Bites Traditional Medicine:

According to Plantcultures.org, oil from tulsi is a natural antiseptic and natural anti-inflammatory.

According to Botanical.com, tulsi effectively treats snake bites, including those of poisonous snake [11]

## SIDE EFFECTS OF TULSI:

Oral side effects of chewing basil leaves: According to botanists, basil leaves are said to contain high

Levels of mercury and iron. Chewing them can be harmful to your teeth, although there is not much

Evidence to prove this. May interfere with anticoagulant drugs: Based on various studies, tulsi oil is found to have blood thinning properties

## Male infertility problems:

According to a study, 'Effect of tulsi (*Ocimum Sanctum* Linn.) on sperm count and reproductive hormones in male albino rabbits', by Sethi et al, published in the International Journal of Ayurveda Research (2010), it was found that consuming tulsi in excessive doses can cause a reduction in sperm count and sperm motility in animals.

**Complications during pregnancy:** Basil leaves contain a high concentration of estragole which causes uterine contractions in women and can cause a miscarriage. It can also affect the regularity of menstrual cycles.

**Nausea and breathing difficulties:** The holy basil is part of the Lamiaceae (mint) plant family and contains eugenol, which is a bioactive compound. Excessive consumption of tulsi leaves can lead to eugenol overdose, resulting in symptoms of nausea, dizziness, breathing difficulty and abdominal pain. [12]

## Pharmacological uses:

The ancient Ayurvedic text, the Charaka Samhita, Tulsi has been documented to be of immense use in the treatment of headaches, rhinitis, stomach disorders, inflammation, heart diseases, various forms of poisoning and malaria. Each part of the plant has proven to offer protection against various diseases; the aqueous and alcoholic extract from the leaves have various pharmacological activities such as anti-inflammatory, antipyretic, analgesic, antiasthmatic, antiemetic, antidiabetic, hepatoprotective, hypotensive, hypolipidemic, and anti-stress agents. [13]

## Antimicrobial activity:

Tulsi is known to possess antimicrobial activity against various bacteria, the most common being *Candida albicans*, *Staphylococcus aureus*, *Escherichia coli* by its phytoconstituents isolated from various parts. In view of this, various studies have been conducted, wherein according to Singh et al., higher content of linoleic acid in *O. Sanctum* L. Fixed oil could contribute toward its antibacterial activity.

## Anti-inflammatory activity:

Methanol extract (500 mg/kg) and aqueous suspension of *O. Sanctum* is known to have analgesic, antipyretic and anti-inflammatory effects in acute and chronic inflammation in rats.

## Antidiabetic activity:

Oral administration of *O. Sanctum* extract led to a marked lowering of blood sugar in normal, glucose-fed hyperglycaemic and streptozotocin-induced diabetic rats. A randomized, placebo-controlled, cross over single blind human trial indicated a significant decrease in fasting and postprandial blood glucose levels by 17.6% and 7.3%, respectively.

**Antipyretic activity:**

Fixed oil has antipyretic activity by virtue of prostaglandin inhibition which was evaluated by Testing it against typhoid–paratyphoid A/B vaccine-induced pyrexia in rats. The antipyretic activity was elicited by decreased fever in the rats when the oil was administered Topically on their lips.

**Anticancer activity:**

Tulsi has been shown to possess an excellent anticancer activity. Detoxification of carcinogens and Mutagens which is carried out by enzymes such as glutathione-S-transferase, cytochrome b5 and Cytochrome P450, and aryl hydrocarbon hydroxylase is modulated by the alcoholic extract (AIE) of Leaves of O. Sanctum.

**Adaptogenic activity/antistress activity :**

Tulsi has antihypoxic effect and it increases the survival time during anoxic stress. A study done on Rabbits showed that Tulsi has tremendous ability to reduce the oxidative stress produced in the body .[14]

**CONCLUSION:**

These medicinal ingredients makes Tulsi a must have for longer and peaceful life. This small plant is Certainly a very good source of medicinal properties. After in depth and rigorous research it has been Proved and certified that it is safe to consume tulsi in any form. All these remedial properties are well accepted and honored by modern science. Tulsi is the herb That cures the mankind from all odds naturally in today's superficial not-so good lifestyle. It is Considered as India's Queen of herbs.

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