

## TULSI, QUEEN OF HERBS

*"THE LEGENDARY "INCOMPARABLE ONE" OF INDIA, IS ONE OF THE HOLIEST AND MOST CHERISHED OF THE MANY HEALING AND HEALTH-GIVING HERBS OF THE ORIENT"*

In India, the herb **Tulsi** also called holy basil (sometimes spelled "Tulasi") has been widely known for its health promoting and medicinal value for thousands of years. Commonly called sacred or holy basil, it is a principal herb of Ayurveda, the ancient traditional holistic health system of India. Holy basil is known as "**The Incomparable One**", "**The Mother Medicine of Nature**", and "The Queen of Herbs".

The **sacred basil Tulsi** is renowned for its religious and spiritual sanctity, as well as for its important role in the traditional **Ayurvedic** and Unani systems of holistic health and herbal medicine of the East.

An impressive array of health promoting, disease preventing and life prolonging properties of Tulsi have been described and documented over five millennia. In the past few decades, many of these benefits have been investigated and verified by modern scientific research.

According to ancient Indian legend, the plant came into being as an incarnation of the Hindu goddess Tulsi. In her botanical form she is the favoured herb of the gods Vishnu, Krishna and Ram, as well as being greatly revered by Brahma and Shiva. Tulsi is thought to open the heart and mind, and bestow love, compassion, faith and devotion. The plant is widely incorporated in religious rituals and auspicious ceremonies throughout the subcontinent, and is carefully grown and worshipped by traditional Hindu families today.

Medical, religious and culinary use of Tulsi has also been documented for centuries in China and the rest of Asia, the Middle East, North Africa, Europe and Australia.

Tulsi initially met with mixed reactions in Europe as it traveled west along the early trade routes from the Orient. After a period of cultural assimilation, the plant became known to Christians as sacred or holy basil, and was hailed as "**The King of Herbs**" by European herbalists and physicians, as well as cooks. The name basil is likely derived from Greek and is likely derived from Greek words referring to "royalty" or "king."

Holy basil became routinely included in legends, offerings and worship rituals of many of the Christian denominations of Europe — perhaps most noteworthy being the Greek Orthodox Church. The sacred plant was given

an especially festive central role in the annual celebration of the birth of St. Basil. Also known as St. Josephwort in parts of Europe, the herb is looked on by many as a gift of Christ.

Tulsi is often enjoyed as a simple **herbal tea** and is frequently blended with other herbs and spices for various medicinal and culinary purposes.

### **Tulsi's Health Benefits**

In recent years there has been a resurgence of interest in investigating the traditional health promoting uses of Tulsi. A considerable, rapidly expanding body of modern scientific information is currently available confirming many of the life-supporting benefits described in ancient India **Ayurvedic** ("Knowledge of Life") writings.

Key historical documents include the Rigveda ("Book of Eternal Knowledge"), thought to have been developed around 5000 BC, the *Carak* and *Susrut Samhita* medical texts, circa 2700 to 600 BC, and *Nighantu Adarsha*, revised in 800 AD. In such Ayurvedic scriptures, Tulsi is frequently mentioned as one of the main pillars of herbal medicine. The sacred plant is described as a protector of life, preventing misery and disease from birth through old age and death — and even then aiding the passage to the heavens.

### **Traditional medical uses**

Renowned as a general tonic and vitalizer, "**The Elixir of Life**", Tulsi has been traditionally employed in hundreds of different formulations for the treatment of a wide range of disorders, including those of the mouth and throat, lungs, heart, blood, liver, kidney, and the digestive, metabolic, reproductive and nervous systems. Tulsi is commonly used to treat coughs, colds and flu, head and ear aches, rheumatism and arthritis, malaria, fever, allergies, and various skin diseases, to reduce the toxicity of various poisons, including insect and reptile bites, to expel intestinal parasites, repel insects and purify the air.

### **Modern perspectives**

Current scientific research offers substantial evidence that Tulsi protects against and reduces stress; enhances stamina and endurance; increases the body's efficient use of oxygen; boosts the immune system; reduces inflammation; protects against radiation damage; lessens aging factors; supports the heart, lungs and liver; has **antibiotic**, antiviral and antifungal properties; enhances the efficacy of many other therapeutic treatments; and provides a rich supply of **antioxidants** and other nutrients.

Overall, Tulsi is a premier **adaptogen**, helping the body and mind to adapt and cope with a wide range of physical, emotional, chemical and infectious stresses, and restore disturbed physiological and psychological functions to a normal healthy state.

### **How can Tulsi offer so many health benefits?**

The unique chemistry of Tulsi is highly complex. Tulsi contains hundreds of beneficial compounds known as **phyto-chemicals**. Working together, these compounds possess strong **antioxidant, antibacterial, antiviral, adaptogenic, and immune-enhancing properties** that promote general health and support the body's natural defense against stress and diseases. The essential oils in the leaves of Tulsi that contribute to the fragrance and refreshing flavor of Tulsi Tea, are a particularly rich source of valuable phyto-chemicals.

### **What is an adaptogen?**

An **adaptogen** is an agent that helps the body adapt more efficiently to stress. Adaptogens reduce the intensity and negative impact of the stress caused by mental tension, emotional difficulties, poor lifestyle habits, disease and infection, pollution and other factors. Tulsi is one of the most effective adaptogens known.

### **What are antioxidants?**

**Antioxidants** slow down the process of excess oxidation and protect cells from the damage caused by free radicals. When cells are attacked by free radicals, excess oxidation occurs which damage and destroy cells. Antioxidants stop this process. The cellular damage caused by free radicals can be responsible for causing and/or accelerating many diseases. Tulsi is rich in antioxidants and is recommended to guard against free radicals and protect from damaging excess oxidation.

### **What is an immuno-modulator?**

An **immuno-modulator** is an agent that balances and improves the immune response of the body in fighting **antigens** (disease causing agents such as bacteria, viruses, microbes, allergens etc.) and maintaining health.

These general vitality enhancing and health promoting properties, in addition to Tulsi's many more specific therapeutic actions, likely account for much of the exceptionally broad range of Tulsi's traditional medical uses, as well as contributing to its mythological importance and religious sanctity.

## Tulsi's Botanical Identity

Tulsi is identified by botanists primarily as *Ocimum sanctum* (Rama and Krishna Tulsi varieties) or more recently *Ocimum tenuiflorum*, and *Ocimum gratissimum* (Vana Tulsi variety). Belonging to the *Lamiaceae/Labiatae* mint family, these and other closely related species and varieties (e.g., *Ocimum canum*) are cousins of the familiar sweet basil cooking herb *Ocimum basilicum*. In parts of India, all of the basil plants are honoured as Tulsi.

Basils are native to tropical Asia, likely having originated in India. Robust Tulsi varieties readily grow wild in many areas of Asia and Africa. Tulsi is a bushy perennial shrub, usually cultivated annually from seed, although it can also be propagated from tip or root cuttings. It is usually planted (or transplanted) immediately after the rainy season ends. In good soil and hot sunny weather, Tulsi may grow to a meter or more in height and be ready for harvest in a few months. Much larger specimens have been noted and under special circumstances an individual plant may live for a decade or more.

Leaf color ranges from light green (Vana) to dark purple (Krishna); the tiny flowers range from white to reddish purple. Highly aromatic, different varieties of Tulsi may smell and taste of peppermint, cloves, licorice or lemon, as well as having distinct characteristics of their own.

The leaves of Tulsi are most commonly used for their health benefits, although all parts of the plant, including the roots, stems, flowers and seeds, have significant and differing medicinal and religious symbolic properties. Tulsi beads, made from the woody stalks, are commonly strung in necklaces, bracelets, belts, and meditation **malas** or rosaries, which are believed by many to have spiritual as well as physical protection benefits.

## Tulsi's Chemistry

The chemical composition of Tulsi is highly complex, containing many nutrients and other biologically active compounds, the proportions of which may vary considerably between strains and even among plants within the same field. Furthermore, the quantity of many of these constituents is significantly affected by differing growing, harvesting, processing and storage conditions that are not yet well understood.

The nutritional and **pharmacological** properties of the whole herb in its natural form, as it has been traditionally used, result from **synergistic** interactions of many different active **phytochemicals**. Consequently, the overall effects of Tulsi

cannot be fully duplicated with isolated compounds or extracts. Because of its inherent botanical and biochemical complexity, Tulsi standardization has, so far, eluded modern science. Perhaps best known of the many active compounds that have been identified and extracted are eugenol (an essential oil) and ursolic acid. Although Tulsi is known as a general vitalizer and increases physical endurance, it contains no caffeine or other stimulants.

Tulsi is traditionally taken in a variety of forms, including cold and hot fresh or dried leaf tea infusions (herbal teas), fresh green leaf, leaf juice, ground or powdered leaf, **alcohol tinctures**, **poultices** and oil (ghee) preparations, as well as seed, root and stem formulations, both internally and topically. In addition, modern human clinical studies and animal experiments also employ various extracts and isolated compounds, sometimes administered by injection. The differing Tulsi preparations likely vary to a considerable degree, both chemically and in their overall pharmacological effects.

### **Tulsi in Modern Society**

In spite of the many impressive accomplishments of Western medical science, the typically fragmented approach of modern allopathic medicine has not been able to cope with the growing array of chronic degenerative environmental, lifestyle and personal stress-related disorders that plague modern society. The mental and biological stressors of the demanding and rapidly changing social and physical environments of modern urban life are leading factors in illness and premature death throughout the industrialized nations, and are emerging as health crises in developing countries worldwide.

Stress-related disorders, such as cancer, cardiovascular disease, diabetes, **neurological dementia**, arthritis and other **auto immune disorders**, have almost become synonymous with Western-style material progress. Furthermore, many modern medical treatments entail substantial adverse side effects and compounding secondary health risks.

A significant complementary role is emerging for traditional herbal medicines and holistic approaches to health in the prevention and treatment of the pervasive illnesses of modern civilization. Recognizing the importance of broadening Western medical perspectives, the World Health Organization has recommended that traditional health and folk medicine systems be integrated with modern medical therapies to more effectively address health problems worldwide. This ongoing evolution in health care includes the growing scientific examination and verification of many previously unexplored or prematurely rejected traditional treatments and holistic perspectives.

Substantial evidence has accumulated that, in addition to Tulsi's many specific therapeutic applications, the herb's powerful general adaptogenic properties offer significant preventative and curative potential with respect to the stress-related degenerative diseases endemic to industrialized societies. Ongoing clinical investigation of Tulsi's health promoting qualities is sure to bear rich fruit.

Relatively little known in the West, the holy basil Tulsi is certain to emerge in the near future as a major player in the growing field of **herbal health supplements** and medicines, both in daily self-care and in professionally managed health care systems.