

Ocimum sanctum

Common Name – Holy Basil (Tulsi)

Abstract

The predominant cause of global morbidity and mortality is lifestyle-related chronic diseases, many of which can be addressed through Ayurveda with its focus on healthy lifestyle practices and regular consumption of adaptogenic herbs. Of all the herbs used within Ayurveda, tulsi (*Ocimum sanctum* Linn) is preeminent, and scientific research is now confirming its beneficial effects. There is mounting evidence that tulsi can address physical, chemical, metabolic and psychological stress through a unique combination of pharmacological actions. Tulsi has been found to protect organs and tissues against chemical stress from industrial pollutants and heavy metals, and physical stress from prolonged physical exertion, ischemia, physical restraint and exposure to cold and excessive noise. Tulsi has also been shown to counter metabolic stress through normalization of blood glucose, blood pressure and lipid levels, and psychological stress through positive effects on memory and cognitive function and through its anxiolytic and anti-depressant properties. Tulsi's broad-spectrum antimicrobial activity, which includes activity against a range of human and animal pathogens, suggests it can be used as a hand sanitizer, mouthwash and water purifier as well as in animal rearing, wound healing, the preservation of food stuffs and herbal raw materials and traveler's health. Cultivation of tulsi plants has both spiritual and practical significance that connects the grower to the creative powers of nature, and organic cultivation offers solutions for food security, rural poverty, hunger, environmental degradation and climate change. The use of tulsi in daily rituals is a testament to Ayurvedic wisdom and provides an example of ancient knowledge offering solutions to modern problems.

Keywords: Adaptogen, Ayurveda, holy basil, lifestyle, *Ocimum sanctum*, stress, tulsi

INTRODUCTION

Diseases of modern life

Despite the many wonders of science and industry, modern life is fraught with stress. Mobile devices and the web have vastly increased the pace of life so that many people feel that they are now drowning in an ever-expanding ocean of data, while industrial agriculture has burdened us with increasing exposure to unhealthy processed and packaged food and a plethora of pesticides, food packaging materials and other toxic industrial chemicals. Urban dwellers are also faced with increasing wealth inequality, social isolation, excessive noise, air, water and soil pollution and disconnection from nature. Thus, while industrialization has led to longer lifespans and vast increases in human populations, it is now recognized that the greatest causes of death and disease on the planet are preventable lifestyle-related chronic diseases.

We are in the midst of a global pandemic of obesity, diabetes, cancer, dementia, depression and other chronic diseases caused by modern lifestyles and their associated lack of physical activity, high intake of sugar, fat, salt, alcohol and tobacco and exposure to a toxic cocktail of

industrial chemicals. The solutions to this current health crisis are therefore more likely to be found in the homes and behaviors of individuals than in medical clinics, hospital or pharmacies.

Ayurveda and lifestyle medicine

As a science of life and the world's oldest medical system, Ayurveda has a holistic approach to health and disease that focuses on preserving and promoting good health and preventing disease through healthy lifestyle practices. These practices include consumption of fresh, minimally processed foods, the use of Rasayanas (formulas) that eradicate ageing and disease, sophisticated detoxification practices and regular consumption of adaptogenic herbs that enhance the body's capacity to maintain balance in the midst of a variety of stressors.

Ayurveda's use of medicinal and culinary herbs draws upon India's incredible biodiversity with a variety that is unsurpassed by any medical system; yet, of all the herbs used, none has a status comparable to tulsi or holy basil (*Ocimum sanctum*).

Tulsi: A potent adaptogen

Tulsi is an aromatic shrub in the basil family Lamiaceae (tribe ocimeae) that is thought to have originated in north central India and now grows native throughout the eastern world tropics.[2] Within Ayurveda, tulsi is known as “The Incomparable One,” “Mother Medicine of Nature” and “The Queen of Herbs,” and is revered as an “elixir of life” that is without equal for both its medicinal and spiritual properties. Within India, tulsi has been adopted into spiritual rituals and lifestyle practices that provide a vast array of health benefits that are just beginning to be confirmed by modern science. This emerging science on tulsi, which reinforces ancient Ayurvedic wisdom, suggests that tulsi is a tonic for the body, mind and spirit that offers solutions to many modern day health problems.

Tulsi is perhaps one of the best examples of Ayurveda's holistic lifestyle approach to health. Tulsi tastes hot and bitter and is said to penetrate the deep tissues, dry tissue secretions and normalize kapha and vata. Daily consumption of tulsi is said to prevent disease, promote general health, wellbeing and longevity and assist in dealing with the stresses of daily life. Tulsi is also credited with giving luster to the complexion, sweetness to the voice and fostering beauty, intelligence, stamina and a calm emotional disposition. In addition to these health-promoting properties, tulsi is recommended as a treatment for a range of conditions including anxiety, cough, asthma, diarrhea, fever, dysentery, arthritis, eye diseases, otalgia, indigestion, hiccups, vomiting, gastric, cardiac and genitourinary disorders, back pain, skin diseases, ringworm, insect, snake and scorpion bites and malaria.

Considered as a potent adaptogen, tulsi has a unique combination of pharmacological actions that promote wellbeing and resilience. While the concept of an “adaptogen,” or herb that helps with the adaptation to stress and the promotion of homeostasis, is not widely used in Western medicine, Western science has revealed that tulsi does indeed possess many pharmacological actions that fulfill this purpose.

The medicinal properties of tulsi have been studied in hundreds of scientific studies including *in vitro*, animal and human experiments. These studies reveal that tulsi has a unique combination of actions that include: Antimicrobial (including antibacterial, antiviral, antifungal, antiprotozoal, antimalarial, anthelmintic), mosquito repellent, anti-diarrheal, anti-oxidant, anti-cataract, anti-inflammatory, chemopreventive, radioprotective, hepatoprotective, neuro-protective, cardio-protective, anti-diabetic, anti-hypercholesterolemia, anti-

hypertensive, anti-carcinogenic, analgesic, anti-pyretic, anti-allergic, immunomodulatory, central nervous system depressant, memory enhancement, anti-asthmatic, anti-tussive, diaphoretic, anti-thyroid, anti-fertility, anti-ulcer, anti-emetic, anti-spasmodic, anti-arthritis, adaptogenic, anti-stress, anti-cataract, anti-leukodermal and anti-coagulant activities. These pharmacological actions help the body and mind cope with a wide range of chemical, physical, infectious and emotional stresses and restore physiological and psychological function.