



Medicinal Plants for Immunity Boosting in Covid-19

Mansi Dwivedi

Psychologist, Amity University, Uttar Pradesh, Lucknow, 226010
Mansidwi.7@gmail.com

KEYWORD

Keyword1; Keyword2;
Keyword3;
Keyword4; Keyword5

ABSTRACT

Abstract: COVID-19 has infected approximately 164,000,000 people and caused over 3,000,000 fatalities. Due to inadequate immunity, patients with non-infectious and infectious disorders such as hypertension, diabetes, and renal dysfunction are at risk from this epidemiologic infection. Boosting immunity (natural bodily system) may be a preventive approach against different pathogens and sustain health. The Ministry of AYUSH of India suggests 'Ayush Kwath,' 'Kada,' or 'Ayush Joshanda' for public health promotion. The article provided therapeutic plants.

1. Introduction

Over 164 million individuals worldwide have contracted the new coronavirus illness (COVID-19), which has caused over 3 million fatalities [3]. Unadorned acute respiratory syndrome, or COVID-19 The corona virus 2 is a contagious virus that is thought to have started in bats and transmitted to people [6]. Due to their compromised immunity, individuals with chronic illnesses like diabetes, hypertension, or renal disease are thought to be more susceptible to getting this virus. Therefore, enhancing immunity (a natural bodily mechanism) may be crucial for protecting against many harmful diseases and maintaining good health. According to study, these viruses may produce drug-resistant mutants, which reduce the effectiveness of the existing medication. Therefore, these viruses may pose a long-term hazard to humans [2].

The global human population is struggling as a result of the Covid 19 epidemic. Immunity enhancement is critical for ensuring optimal fitness. We all aware that treatment is preferable to remedy. Although there is currently no cure for COVID-19, it is prudent to take preventative steps that improve our immunity during these trying times.

As the philosophy of creation, Ayurveda propagates nature's gifts for sustaining a safe and balanced lifestyle. Ayurveda employs the concepts of "Dinacharya" and "Ritucharya" to promote wellness through the use of natural remedies (herbal medicines) on a daily/seasonal basis. Ayurveda, an ancient science of existence, advocates for simplifying one's lifestyle and often emphasizes the importance of boosting and preserving one's immunity by using several plants/herbs found in the kitchen gardens of the majority of society.

The Ministry of AYUSH proposes self-care recommendations for maintaining good health and improving immunity, emphasizing respiratory health. These assertions are backed up by Ayurvedic and empirical literature [8]. As a preventative measure against the severity of infection induced by a novel coronavirus (COVID-19), this analysis aimed to determine the possible modulated pathways by the combined action of AYUSH-recommended

Corresponding Author: Mansi Dwivedi, Psychologist, Amity University, Uttar Pradesh, Lucknow, 226010
Email: Mansidwi.7@gmail.com

herbal tea and golden milk (half teaspoon *Curcuma longa* (turmeric) powder in 150 mL hot milk) as an immune booster against COVID-19.

2. Ayush Kwath

In light of the critical nature of immunity-boosting measures in the aftermath of the COVID-19 outbreak, the Ministry of AYUSH of the Government of India, in the interest of mass health promotion, recommends 'Ayush Kwath,' 'Ayush Kudineer,' or 'Ayush Joshanda,' which contains four medicinal herbs [5, 12]. Herbs such as holy basil, cinnamon, ginger, and black pepper are readily affordable, affordable, and commonly used in the kitchen, making it easy to teach and train community health professionals, members of the group, and even the general public about the benefits of herbal home remedies. This would aid in the promotion of immunity and reduce hospital and pharmacy crowding through this pandemic [14]. This form of public health measure will ultimately advocate 'health for everyone under the slogan 'our health is in our own hands,' holding every individual accountable for their health by direct participation in it rather than focusing on mass delivery of any medication. When people migrate to make a living, this herbal infusion can ensure widespread access to health care. The WHO SEARO approved a resolution to revitalize primary health care by improving health services to promote wellness for everyone, focusing on disease prevention and health promotion [13]. This Kwath is not merely a mechanical concoction produced in response to the COVID-19 pandemic; it is a resurrection of ancient health practices. The Ministry of Ayurveda and Ayurvedic Medicine proposed a combination of the following medicinal plants.

Ocimum tenuiflorum (Holy basil, Tulasi):

2.1. *Ocimum Tenuiflorum* (Holy basil, Tulasi)

Tulsi, also known as Holy basil, is a well-known member of the Lamiaceae family of herbs. It is indigenous to India and extensively grown in Southeast Asia [1]. Tulsi is very effective in protecting our systems from many illnesses and ailments that affect the kidneys, liver, skin, heart, and liver. Tulsi is therefore aptly referred to be the "Queen of Herbs," and with good reason. Tulsi has a particular position in both Ayurveda and India, the land of Hindus. Hindus see it as holy, and they adore it. There are three primary varieties of tulsi that thrive in India: Ram Tulsi, Krishna Tulsi, and Vana Tulsi, which is a common wild variety. Ram Tulsi is recognised for its bright green leaves. Tulsi leaves are an excellent source of fibre and protein, as well as vitamins A, C, and K, as well as other minerals including calcium, iron, phosphorus, and potassium [11].



Figure 1: Type of Talsi, Rama, Krishna, and Vana

2.2. Cinnamomum Verum (Cinnamon):

Cinnamon is a spice that is commonly used in lattes and toast. However, for thousands of years, extracts of the cinnamon tree's wood, leaves, flowers, vegetables, and roots have been used in herbal medicine in the world. It is a popular ingredient in cooking and baking, as well as in a variety of foods [15].

There are four major types of cinnamon.

Cinnamomum Verum (Ceylon Cinnamon)

Cinnamomum Burmannii (Korintje Cinnamon)

Cinnamomum Cassia (Saigon Cinnamon)

Cinnamomum Loureiroi (Royal Cinnamon)



Figure 2 : Cinnamon Leaf and Bark

2.3. Piper Nigrum (Black pepper):

Black pepper (*Piper nigrum*), also known as pepper, is a perennial climbing vine in the Piperaceae family that produces a pungent spice from its fruits. Its fruits are circular and measure 6 mm in diameter. They are grouped. It is the dried fruit of the pepper plant as shown in figure 3. Black pepper has historically been used as a seasoning and natural remedy for a wide variety of ailments [2].



Figure 3: Fruit or Dried Fruit of Black pepper

2.4. *Zingiber officinale* (Ginger)

Ginger (*Zingiber officinale*) is one of the most commonly used natural ingredients as a seasoning and remedy for dehydration, dysentery, heartburn, flatulence, diarrhea, appetite loss, infections, coughs, and bronchitis. Ginger is a herbaceous flowering plant native to Southeast Asia. It is one of the world's most nutritious (and delectable) spices. It is closely linked to turmeric, cardamom, and galangal and is a member of the Zingiberaceae genus. The rhizome (an underground portion of the stem) is the portion of the plant that is most often used as a seasoning. Ginger root is frequently referred to as Ginger or simply Ginger. Fresh, roasted, powdered, or as an oil or juice, Ginger may be used [10].



Figure4: Ginger with Plant and Ginger

2.5. *Vitis Vinifera* (Munakka)

Munakka, generally referred to as Raisins, is one of the most nutrient-dense dried fruits with a substantial therapeutic benefit. It is naturally sweet and has no known side effects. It contains calcium, fiber, and antioxidants, making it an excellent nutrient for healthy bones. Catechin is a unique antioxidant found in Munakka that helps avoid colon cancer. Another nutrient contained in Munakka is polyphenolic, which is highly beneficial for the eyes and skin. Continue reading to learn more about this marvelous fruit [16].



Figure 5: Grapes(Green), Munakka or dried Grapes

2.6. Methods of use of Ayush Kwath

Prepare coarse powder from all the ingredients in their dried state according to Ayurvedic Pharmacopoeia requirements. Prepare sachets or tea bags containing 3 g of powder or 500 mg of aqueous extract to be drunk as tea or hot beverage by dissolving in 150ml of boiling water once or twice every day. While drinking the formulation, you can add Gud (Jaggery)/Draksha (Resins) and/or Lemon Juice .

3. Conclusion

The worldwide human population is struggling as a result of the Covid 19 widespread. Immunity improvement is critical for safeguarding optimal fitness. We all aware that treatment is preferable to remedy. Although there is currently no cure for COVID-19, it is prudent to take preventative steps that improve our immunity during these trying times. Ministry of AYUSH of the Government of India, recommends 'Ayush Kwath,' or 'Kada,' or 'Ayush Joshanda,' which contains some medicinal herbs. In presented paper, discussed about these medicinal herbs.

4. References

- Baliga MS, Jimmy R, Thilakchand KR, Sunitha V, Bhat NR, Saldanha E, Rao S, Rao P, Arora R, Palatty PL. Ocimum sanctum L (Holy Basil or Tulsi) and its phytochemicals in the prevention and treatment of cancer. *Nutr Cancer*. 2013; . doi: 10.1080/01635581.2013.785010. PMID: 23682780.
- Black pepper plant, <https://www.britannica.com/plant/black-pepper-plant> (Accessed on 18/05/2021)
- Coronavirus Cases:<https://www.worldometers.info/coronavirus/> (Accessed on 18/05/2021)
- Health Benefits of Basil Leaves, <https://www.naturalfoodseries.com/12-health-benefits-basil/> (Accesses on 18/05/2021)
- http://www.ccras.nic.in/sites/default/files/viewpdf/Publication/AYUSH_System.pdf [Accessed 18/05/2021].
- Opitz B, van Laak V, Eitel J, Suttrop N. Innate immune recognition in infectious and noninfectious diseases of the lung. *Am J Respir Crit Care Med* 2010;181(12):1294e309. <https://doi.org/10.1164/rccm.200909-1427SO>.
- Nicholson LB. The immune system. *Essays Biochem* 2016;60(3):275e301. <https://doi.org/10.1042/EBC20160017>.
- Ministry of AYUSH. Ayurveda's immunity boosting measures for self care during COVID 19 crisis. 2020. Available at: <https://www.ayush.gov.in/docs/123.pdf>. [Accessed 19/05/2021].
- Mair CE, Liu R, Atanasov AG, Schmidtke M, Dirsch VM, Rollinger JM. Antiviral and anti-proliferative in vitro activities of piperamides from black pepper. *Planta Med* 2016;82(S 01):S1e381. <https://doi.org/10.1055/s-0036-1596830>.
- Kaushik S, Jangra G, Kundu V, Yadav JP, Kaushik S. Anti-viral activity of Zingiber officinale (Ginger) ingredients against the Chikungunya virus. *Virusdisease* 2020;31(3):1e7. <https://doi.org/10.1007/s13337-020-00584-0>.
- R. K. Upadhyay, Tulsi: A holy plant with high medicinal and therapeutic value, *International Journal of Green Pharmacy*, Jan-Mar 2017
- Sharma PV. *Dravyaguna Vijnana*. Vol. II, reprint 2009. Varanasi: Chaukhambha Bharati Academy. pp. 513 and 709, 250, 331 and 362.