

HERBAL MEDICINE TO CURE AND TREAT SARS-COV-2 EFFECTS: AN EMERGING TREND FOR IMMUNITY BOOSTER

*Nirmal Kasekar, ¹Shweta More, ¹Yashashri Inamdar, ²Vilasrao Kadam

¹Bharati Vidyapeeth Institute of Pharmacy, C.B.D, Navi Mumbai, India

²Bharati Vidyapeeth College of Pharmacy, C.B.D, Navi Mumbai, India

*Corresponding Author: Nirmal Kasekar, Bharati Vidyapeeth Institute of Pharmacy, Navi Mumbai, India

Email: nirmalkasekar1978@gmail.com Contact: +91 9819735658

ABSTRACT

With respect to herb and spices, the current review's findings can help to inform and support unborn recommendations for a standard within the profession of fitness to give a bettered, healthier, and well- educated valuable guidance for individualities. Further studies are demanded on the consumption of herbs and spices in mortal trials to evoke substantiation beyond preclinical and beast studies in the forthcoming period of SARS- CoV- 2.

Keywords: Herbs; Health; Preclinical and animal studies; SARS-CoV-2.

INTRODUCTION

It's normal for contagions to change and evolve as they spread between people over time. When these changes come significantly different from the original contagion, they're known as "variants". To identify variants, scientists collude the inheritable material of contagions (known as sequencing) and also look for differences between them to see if they've changed. Since the SARS- CoV- 2 contagion, the contagion that causes COVID- 19, has been spreading encyclopaedically, variants have surfaced and been linked in numerous countries around the world [1-3]. In order to overcome the resistant of medicine, herbal source is used for the treatment of COVID and other diseases and disorder. so in the era, their came into existence the flourished use of herbs and condiments for various disease and disorder.

COVID- 19 induces a seditious vulnerable response. Release of seditious cytokines in the case of COVID- 19 leads to a deregulation of cytokine storm and impunity, acute respiratory torture pattern, and multiorgan dysfunctions [4- 6]. Presently,

colourful type of vaccine is available to help the COVID- 19 epidemic but deliverability is still a challenge especially for developing countries [7]. Remdesivir is a lately approved antiviral medicine available with limited force. Herbal drugs have also helped to palliate the goods of contagious conditions similar as SARS- CoV- 2. Substantiation supports that herbal drug may be effective in reducing and managing the threat of COVID- 19 [8].

The use of herbal drug as an indispensable remedy for COVID- 19 in combination with ultramodern drug, and has released several recommendations on herbal remedy [9-11]. Since numerous botanical medicines show antiviral efficacy, the use of herbal drug for remedial purposes shouldn't be undervalued. presently, well- known herbal drugs with antiviral conditioning are being used as a fresh treatment to suppress SARS- CoV - 2, since conventional treatments are still not well succeeded [12- 14].

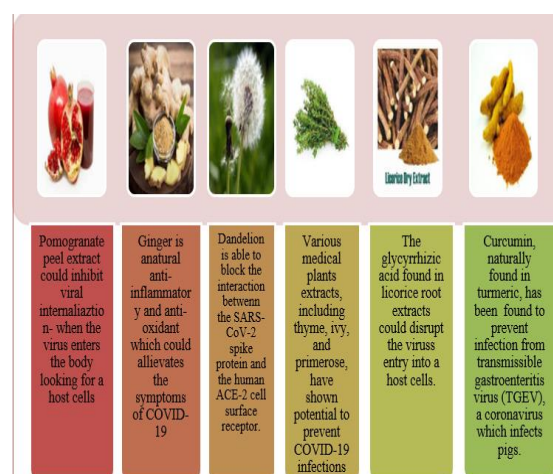









Fig. No.:1: Naturally occurring herbal medicines for the treatment of SARS-CoV-2

Table 1 [15, 16, 17]
Common Spices Used with Potential Impact for Immune Support [11-16]

Common Name	Uses	Marketed Preparations
Black pepper	Antioxidant Anti-inflammatory Anticancer Antipyretic	
Cinnamon Ceylon Cassia Saigon	Antibacterial Antimicrobial Antioxidant Anti-inflammatory	
Cumin black cumin black seed	Anticancer Antitumor Antifungal	
Chili pepper paprika	Chemo-preventative Antioxidant Anticancer	
Cloves	Antioxidant Anti-inflammatory Analgesic & Anticancer	
Garlic	Antibacterial Antifungal Antitumor Antihypertensive	

Ginger	Antioxidant Antitumor Antiplatelet formation Antiviral	
Moringa	Immunity Booster Nutritional supplement or tonic Antioxidant	
Onion	Antibacterial Antifungal	
Turmeric	Anti-inflammatory Antibacterial antioxidant Antitumor	
Various teas	Anti-inflammatory Antiviral Antibacterial Antifungal	

CONCLUSION

The use of herbal drug is an implicit platform for answering colourful types of COVID- 19 contagion operation. An antiviral medicine that's primarily approved by WHO for exigency operation was Remdesivir. Herbal drug and its bioactive fragments are potentially salutary in preventative COVID- 19 and as probative measures. Different precious herbal drug can intrude with COVID- 19 pathogenesis by inhibiting SARS- CoV-2 replication and entry to its host cells. Different factors of shops biochemicals are the most desirable herbal drink or fruit that can be introduced as effective adjuvant factors in COVID- 19 operation; and also, to reduce fever and cough as the most common complication of COVID- 19 via the anti-inflammatory effect.

ACKNOWLEDGEMENTS

Authors are thankful to Principal and Director of Bharati Vidyapeeth Institute of Pharmacy, for the encouragement and support.

REFERENCES

1. Academy of Nutrition and Dietetics. Coronavirus (COVID-19): Follow these tips to help keep your family safe. 2020. Accessed May 16, 2020, from <https://www.eatright.org/coronavirus> [Google Scholar]
2. Centers for Disease Control and Prevention. How to protect yourself and others. April 24, 2020. Accessed May 16, 2020, from <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html> [Google Scholar]
3. Mehta P, McAuley DF, Brown M, Sanchez E, Tattersall RS, Manson JJ. COVID-19: Consider cytokine storm syndromes and immunosuppressant. *The Lancet*. 2020; 395(10229): 1033-1034. [PMC free article] [PubMed] [Google Scholar]
4. Prompetcha E, Ketloy C, Palaga T. Immune responses in COVID-19 and potential vaccines: Lessons learned from SARS and MERS epidemic. *Asian Pac J Allergy Immunol*. 2020. March; 38(1):1-9. [PubMed] [Google Scholar]
5. Yanuck SF, Pizzorno J, Messier H, Fitzgerald KN. Evidence supporting a phased immunophysiological approach to COVID-19 from prevention through recovery. *Integrative Medicine: A Clinician's Journal*. 2020; 19(1). Epub ahead of print. Accessed May 24, 2020, [PMC free article] [PubMed] [Google Scholar]
6. Arshad Ali S, Baloch M, Ahmed N, Arshad Ali A, Iqbal A. The outbreak of Coronavirus Disease 2019 (COVID-19) - An emerging global health threat. *Journal of Infection and Public Health*. 2020; 13(4):644-646. <https://doi.org/10.1016/j.jiph.2020.02.033>. [PMC free article] [PubMed] [Google Scholar]
7. Richardson S, Hirsch JS, Narasimhan M, Crawford JM, McGinn T, Davidson KW, et al. Presenting characteristics, comorbidities, and outcomes among 5700 patients hospitalized with COVID-19 in the New York City area. *JAMA*. 2020. [PMC free article] [PubMed] [Google Scholar]
8. Yang J, Zheng Y, Gou X, Pu K, Chen Z, Guo Q, et al. Prevalence of comorbidities in the novel Wuhan coronavirus (COVID-19) infection: A systematic review and meta-analysis. *International Journal of Infectious Diseases*. 2020; 94:91-95. <https://doi.org/10.1016/j.ijid.2020.03.017> [PMC free article] [PubMed] [Google Scholar]
9. Jain V, Yuan JM. Systematic review and meta-analysis of predictive symptoms and comorbidities for severe COVID-19 infection. *MedRxiv*. 2020. [PMC free article] [PubMed] [Google Scholar]
10. Centres for Disease Control and Prevention. At risk for severe illness. May 14, 2020. Accessed May 16, 2020, from <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/groups-at-higher-risk.html> [Google Scholar]
11. Garg S, Kim L, Whitaker M, O'Halloran A, Cummings C, Holstein R, et al. Hospitalization rates and characteristics of patients hospitalized with laboratory-confirmed coronavirus disease 2019-COVID-NET, 14 states. March 1-30, 2020. *MMWR*. 2020; 69(15), 458.
12. Oliver G, Wardle J. Perceived effects of stress on food choice. *Physiology & Behavior*. 1999; 66(3):511-515. [PubMed] [Google Scholar]
13. Kandiah J, Yake M, Jones J, and Meyer M. Stress influences appetite and comfort food preferences in college women. *Nutrition Research*. 2006; 26(3):118-123. [Google Scholar]
14. Born JM, Lemmens SG, Rutters F, Nieuwenhuizen AG, and Formisano E, Goebel R, Westerterp-Plantenga MS. Acute stress and food-related reward activation in the brain during food choice during eating in the absence of hunger. *International Journal of Obesity*. 2010; 34(1):172-181. [PubMed] [Google Scholar]
15. Oliver G, Wardle J, Gibson EL. Stress and food choice: A laboratory study. *Psychosomatic Medicine*. 2000; 62(6):853-865. [PubMed] [Google Scholar]
16. Food and Agriculture Organization of the United Nations. Maintaining a healthy diet during the COVID-19 pandemic. March 27, 2020. Rome. Accessed May 25, 2020, from <https://doi.org/10.4060/ca8380en> [Google Scholar]
17. World Health Organization, Regional Office for Europe. Food and nutrition tips during self-quarantine. March 27, 2020. Accessed May 25, 2020, from <http://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/technical-guidance/food-and-nutrition-tips-during-self-quarantine> [Google Scholar]