

Frugal Chemoprophylaxis against COVID-19: Possible preventive benefits for the populace

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Abstract

Introduction: Since the outbreak of Covid-19 identified around December 2019 which is rapidly expanding with confirmed cases in over 210 countries. Global incidence is on a ravaging increase and with new cases reported daily which has imposed threat to global health and economy. Some of the notable symptoms include dry cough, cold, fever and respiratory distress alongside inflammation.

Methods: In order to curtail the community spread and reduce the incidence of new cases of Covid-19 we reviewed some medicinal foods, leafs and spices that has chemoprophylaxis and potent pharmacological activities.

Results and Discussion: The anti-inflammatory, anti-viral, anti-bacterial, antioxidant, anti-pyretic and inhibition of viral replication properties against the SARS-COV-2 (Severe acute respiratory syndrome coronavirus 2) symptoms and elucidate their bioactive compounds with their mechanism of action and suggest possible preventive roles they play in the abating the spread of the Covid-19 and reduce the cases globally in a bid of raising the immune system function and possible abate the development of symptoms and general health function.

Conclusion: In this present review, we presented the preventive potentials of some medicinal foods, natural products, and their role in abating the community spread of Covid-19 globally as well as the enhancement of immunity.

Keywords: Frugal Chemoprophylaxis; COVID-19; Medicinal foods; Bioactive compounds; Pharmacological properties; Mechanism of action; Proventive benefits.

1. Introduction

The outbreak of a novel coronavirus disease; a respiratory syndrome, referred to as COVID-19, was first recognized in Wuhan, China, in December 2019. The causative agent for this deadly viral infection is a coronavirus known as SARS-CoV-2. COVID-19 is demonstrated by fever, dry cough, persistent pressure in the chest, and shortness of breath (Huang et al., 2020; CCDC, 2020). There are several symptoms of coronavirus infection, such as sore throat, running nose, cough, sneezing, fever, viral conjunctivitis, loss of smell and taste and severe pneumonia (Chen et al., 2020; Li et al., 2020; Xia et al., 2020) Sneezing, runny nose, and symptoms similar to the common cold are observed in only 5% of patients. The novel coronavirus-related pneumonia COVID-19 has continued to disseminate, with the current case count close to 75,704,857 cases, and more than 1,690,061 deaths according to the World Health Organization (WHO) as of 21st December, 2020 (WHO, 2020).

The mortality rate of COVID-19 is about 7% which varies by countries and regions is less than that of SARS (severe acute respiratory syndrome), which has a mortality rate of 9.6%, and less than that of MERS (Middle East respiratory syndrome), up to 34.4% deaths. Individuals already suffering from

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