

Immunity Augmenting Food to Fight Covid-19

Anil Kumar*

School of Agriculture, Lovely Professional University, Punjab, India

*Corresponding author: Anil Kumar

✉ anilkumar2586xyz@gmail.com

School of Agriculture, Lovely Professional University, Punjab, India

Citation: Kumar A (2021) Immunity Augmenting Food to Fight Covid-19. J Nutraceuticals Food Sci Vol.6 No.5:22

Abstract

Fever, cough, shortness of breath or trouble breathing, as well as fatigue, aches, chills, sore throat, loss of smell, taste, headache, diarrhoea, and severe vomiting are some of major symptoms of Corona Virus Infectious Disease (COVID-19). Its worsening symptoms, such as shortness of breath, multi-organ failure, respiratory failure, cardiac difficulties, acute renal damage, and pneumonia in elderly people. There is currently no vaccination available to prevent COVID-19 infection; however WHO and CDC-recommended preventative measures can be used to minimise the risk of infection. Garlic, ginger, turmeric, acid lime, aonla, spinach, broccoli, and other anti-viral foods should be included in one's diet to strengthen the immune system and protect the body against infectious illnesses.

Keywords: COVID-19; Anti-viral food; Infection; Immune system

Received: June 02, 2021; **Accepted:** June 15, 2021; **Published:** June 23, 2021

Introduction

COVID-19 is a recently identified corona virus that causes an infectious illness. It's an encapsulated virus with a helical symmetry nucleo-capsid and a positive-sense single-stranded RNA genome. Among the RNA viruses, this is one of the most common. They feature club-shaped spikes that protrude from their surface, giving them an elongated appearance in electron micrographs. There are no particular vaccinations or treatments available for this disease at this time. COVID-19 therapy, however, many clinical trials are currently taking place across the world to evaluate new therapies. COVID 19 has been designated a pandemic by the World Health Organization, and according to their study, more than 35 lakh individuals from more than 200 countries have been infected, with more than 2 lakh people dying.

Corona virus illness symptoms might emerge two to fourteen days after exposure. The incubation period is the time between exposure and onset of symptoms. Fever, cough, shortness of breath, or trouble breathing are common symptoms, and additional signs and symptoms include fatigue, aches, chills, sore throat, loss of smell, loss of taste, headache, diarrhoea, and severe vomiting. Symptoms such as shortness of breath, multi-organ failure, respiratory failure, cardiac difficulties, acute renal damage, and pneumonia may increase in certain patients, particularly the elderly.

Food as Protective Agent Against Covid-19

There is currently no vaccination available to prevent COVID-19

infection; however precautions can be taken to minimise the risk of infection. While maintaining good cleanliness is a must, it is also critical to strengthen one's immune system in order for it to operate effectively. The following are the most powerful anti-viral foods that should be included in one's diet to strengthen one's immune system and protect one's body against infectious illnesses.

Amla/Aonla/Indian Goose Berry (*Emblica officinalis*)

Amla is a native fruiting plant that may be found in several Indian states viz. Himachal Pradesh, Punjab etc. Throughout the plant kingdom, the one of most concentrated source of vitamin C is possessed by amla i.e., 500 mg-600 mg/100 g, and the entire fruit has been proven to have powerful antioxidant effects. Proteins and minerals such as calcium, phosphorus, and iron are also present. Fruit is often used in Ayurvedic treatment due to its high vitamin C content. It is used to increase lifespan, improve digestion, treat constipation, decrease fever, cleanse the blood, relieve cough, relieve asthma, strengthen the heart, benefit the eyes, stimulate hair growth, enliven the body, and improve intelligence. Apart from its other benefits, it has been vividly used in Ayurvedic formulations like Chyawanprash, triphala etc.

Pepino (*Solanum muricatum*)

A South American native, it's a branching perennial small shrub that grows to be 1 m-1.5 m tall. Minerals and vitamin C are abundant in the fruits, which are low in starch and soluble carbohydrates. These are utilised as cooked veggies, fresh fruit, fruit salad, tasty fruit juice, squash, and so on. It aids in

the treatment of liver illness, reduces blood pressure, aids in the recovery of stroke victims, and promotes cardiovascular health. Pepino can also aid in cancer prevention and cholesterol reduction. Furthermore, it has an anti-inflammatory effect, which helps to relieve aches and pains. Fruits are high in vitamin A, C, K, and B vitamins, as well as protein, Fe, and Cu, all of which are necessary for a strong immune system.

Acid Lime (*Citrus aurantifolia*)

Limes are naturally acidic and contain a lot of vitamin C, citric acid, sugar, and minerals including calcium and phosphorus. The major components of lime pericarp essential oil (7%) are citral limonene, beta pinene, and fenchone 15%. Terpinol, basabolence, and certain terpenoids are other aromatic chemicals. Limes are used to make refreshing drinks, juices, cordials, and to flavour meals. Essential oils are extracted using the peels. Citric acid and cosmetics are made from juice. The peel is used to extract essential oils, which are mostly utilised in cosmetics. Confectionery, medicines, and toilet preparations are only a few examples. The peel is used to extract essential oils, which are mostly utilised in confectionary, medicines, and toilet treatments. It boosts people's resistance to a variety of illnesses, improves wound healing, and improves eye health. It helps to maintain a healthy dentition by preventing toothaches, dental caries, inflamed gums, bone fragility, and gum bleeding. In the treatment of gastrointestinal diseases such as indigestion, constipation, and peptic ulcers, lime is essential [1].

Turmeric (*Curcuma longa*)

Turmeric rhizome contains up to 7.3% curcumin, a polyphenol, and 5% essential oils. It is used as a preservative for food and as a food colouring component in curries. Because of its antioxidant, anti-inflammatory, antimutagenic, antimicrobial, antibacterial, and anticancer qualities, it has traditionally been utilised as a medicinal herb. It's been used to treat stomach aches, skin conditions, and arthritis. It is used as a sedative and to treat colic, hepatitis, ringworms, and chest discomfort in China. Otherwise, it's an antibiotic for wounds, burns, and sprains, and it's used to boost the body's general vitality.

Giloe (*Tinospora cordifolia*)

It is a twinner that thrives in tropical and subtropical climates. Tinosporine, a bitter chemical, is abundant in the stems. Gilonin, gilsterol, gilenin, and furanoditerpenes are among the other substances. It's a tonic with aphrodisiac, diuretic, and alterative effects. It's a febrifuge that can help with malaria and persistent fevers. It's also employed as a liver tonic. General debility, loss of appetite, fevers, urinary problems, diabetes, rheumatism, and

dyspepsia are all treated with this herb. The efficacy of a fresh plant is superior to that of a dried plant.

Broccoli (*Brassica oleracea var. italica*)

A biennial cruciferous vegetable crop with a compact growth habit with stalks and blossom buds reaching 45 cm tall. Usually, the profusion of flower heads is surrounded by lush foliage. Heading broccoli produces a curd like cauliflower, but sprouting broccoli produces a head with a bunch of green immature buds and a thick meaty flower stem. It's a cool-season crop; therefore temperatures between 15°C and 20°C are optimum for head development. When the bud clusters are green and compact, the heads are ready to harvest. Vitamins C, K, and A, as well as dietary fibre, are abundant in this fruit. It contains compounds like diindolyl methane etc. which also helps in prevention of cancer [2], and tiny quantities of selenium. It was discovered that 3,3'-Diindolylmethane is a powerful regulator of the innate immune system with antiviral, antibacterial, and anti-cancer properties. Broccoli is used in prepared dishes, soups, and salads. It has acids that protect against prostate cancer and heart disease.

Ginger (*Zingiber Officinale*)

The oleoresin extracted from ginger rhizomes contains numerous bioactive components, including gingerol, which is thought to have a wide range of pharmacological and physiological effects. For thousands of years, ginger has been used to treat a variety of ailments, including colds, nausea, arthritis, migraines, high blood pressure, indigestion, flu, pain, cancer, heart disease, and overall body illness.

Garlic (*Allium sativum*)

Garlic is used to flavour the dish. Young bulbs are pickled and served as an appetiser in China, and shoots are pickled and served as an appetiser in Russia. Garlic has been shown to lower the risk of heart disease, high cholesterol, high blood pressure, and cancer. Garlic is used to treat intestinal worms, infections, digestive problems, and fungal infections like thrush in contemporary medicine. Garlic containing diallyl disulfide, a sulphur component [3] is thought to be anti-carcinogenic. Its high in 'allicin,' a strong anti-biotic and antifungal substance that helps boost people's immune. It also includes alliin, ajoene, enzymes, vitamin B, minerals, and flavonoids, among other things.

The above-mentioned foods can be consumed by any person healthy or un-healthy, and these foods had been found to cure a lot of ailments. But this is not an exhaustive list of the protectant foods, other commodities like lai sag (*Brassica juncea*), Spinach (*Spinacea oleracea*) and, Bitter brinjal (*Solanum incanum*) etc. are equally beneficial in giving desired results.

References

- 1 Subha G (2013) Medicinal properties of lime and its traditional food value. Res J Pharm Sci 2: 19-20.
- 2 Latté K, Appel K. E, Lampen A (2011) Health benefits and possible risks of broccoli-An overview. Food Chem Toxicol 49: 3287-3309.
- 3 Bongiorno PB, Fratellone PM, LoGiudice P (2008) Potential health benefits of garlic (*Allium sativum*): a narrative review. J Complement Integr Med 5(1).