



## Immune Boosters: A Review on Natural Herbal Remedies for Covid-19 Related Symptoms

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### ABSTRACT

Indian herbs and spices are often used in culinary preparation long back 1400 years ago. These herbs and spices are rich in nutritional as well as pharmaceutical properties. Herbs and spices are cultivated all over the world. People stay behind using this herbs and spices for their taste, but only few people know that these have diseases curing properties. Various research studies have too proved it for antibacterial and antiviral properties. As we all know that poor immunity is also a major reason for spreading Covid-19, in this paper the authors focus on preparing immunity drinks by using culinary herbs and spices like Tulsi, Neem, Ginger, Garlic, Cardamom, Lemon, Turmeric, Black Pepper, Black Cumin, Betel Leaves and Country Sugar for protecting us from Covid-19 related symptoms and by improving our immunity.

**Key Words:** COVID-19, Immunity, Herbs, Spices, Antibacterial, Antiviral,

### INTRODUCTION

Covid-19 is newly discovered viral diseases caused by corona virus and if affected it causes severe problems like respiratory illness. Covid-19 may spread from a person to person by contact, shaking hands, spitting, without social distancing and without using a mask. It may enter in a new body where immunity finds very low. During olden days people used to prepare herbal drinks and drink often, so spreading of these types of viral diseases won't emerge and appear. Various Indian herbs to boost the immune system were used back in the day for the people with poor resilience. People who are most prone or sensitive to infection consume these herbs to get rid of cold and flu. These herbs are purely healthy and can be easily added to our diet (Suchi Rajput, 2020).

### REVIEW MATERIALS:



Fig No 1: Tulsi (Holy Basil)



Fig No 2: Neem



Fig No 3: Ginger

## 2.1 TULSI

This medicinal plant is available in all parts of the country. Tulsi is rich in phytonutrients (antioxidants, flavanols) chlorophyll, vitamins and minerals. It contains eugenol a bioactive compound which has anti-microbial, antifungal and anti-bacterial properties. (Bonny Shah, 2020).

## 2.2 NEEM

Since the time immemorial neem has been respected and widely used as an immunity booster. It is very effective in keeping the body safe from attacks by harmful pathogens, thanks to its anti-viral, anti-bacterial and anti-fungal properties. Neem can also keep your blood clean. It purifies the blood by flushing away the toxins and this can strengthen immunity (Ritu Budania, 2020)

## 2.3 GINGER

Ginger has been an age related remedy for flu and the common cold. It can also be effective against covid-19. It contains Gingerol-an antioxidant that can power our immune system and kill viruses. Ginger is particularly good in preventing respiratory tract infection (Ritu Budania, 2020). Ginger may help decrease inflammation, which can help reduce a sore throat and inflammatory illness. Ginger may help with nausea as well (James Schend, 2020).



Fig No 4: Garlic



Fig No 5: Cardamom



Fig No 6: Lemon

## 2.4 GARLIC

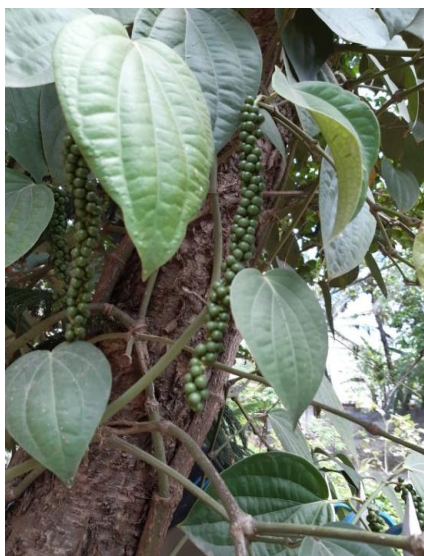
Garlic is a potent fighter for your immune system too. Garlic contains antioxidants and has anti-inflammatory properties. Studies suggest that garlic may help reduce the severity of cold and flu symptoms and may also stimulate the immune system helping in produce more of the cells that fight off infection or invading viruses and bacteria (Sharmin Sampat, 2020).

## 2.5 CARDAMOM

An ancient medicinal spice cardamom has long been used as a digestive aid, treating gas, stomach cramps, constipation and heart burn. It is also a boon for the immune system offering anti-bacterial antifungal and antioxidant power, the latter of which help protect against damage to DNA and consequently conditions like cancer and heart diseases (Lindsay Herman, 2020).

## 2.6 LEMON

Foods that are high in vitamin c and other antioxidants may help strengthen the immune system against the germs that cause the common cold and the flu (Megan Ware, 2019)



**Fig No 7: Black Pepper**



**Fig No 8: Black Cumin**



**Fig No 9: Betel Leaves**

## 2.7 TURMERIC

This bright yellow bitter spice has also been used for years as an inflammatory in treating osteoarthritis and rheumatoid arthritis. Research trusted source shows that the high concentrations of curcumin which gives turmeric its distinctive colour can help decrease exercise induced muscle damage. Curcumin has promise as an immune booster and an antiviral (**James Schend, 2020**).

## 2.8 BLACK PEPPER

Black pepper is one of the oldest and best known spices in the world and is rightly called “king of spices”. In Ayurveda pepper is used in the treatment of epileptic fits and to bring about sleep. It stimulates the taste buds causing reflex stimulation of gastric secretions, thus improving digestion and treating gastrointestinal upsets and flatulence. It also calms nausea and raises body temperature making it valuable for treating fever and chills (**Denys J. Charles, 2013**)

## 2.9 BLACK CUMIN

The Prophet Muhammad reportedly recommended black cumin as a cure all to his associates in Arabia 1400 years ago. It remains one of the most famous medicinal herbs in the Muslim world (**James A. Duke et al., 2002**). The usage of black cumin in culinary preparation especially in Arab countries is very much appreciated. It is used to relieve more than 25 different diseases.

## 2.10 BETEL LEAVES

Betel leaf widely helps in treating issues related to cough and cold. It is an excellent cure for those suffering from chest lung congestion and asthma (**Soumya Binu, 2020**)

## 2.11 ORGANIC COUNTRY SUGAR

Antioxidants and minerals like selenium and zinc are found in considerable portions in jaggery. This allows in stopping free radical damage along with constructing resistance in opposition to various infections (**Asiya Naaz, 2020**)

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## METHODOLOGY FOR PREPARING IMMUNITY HERBAL DRINK

### INGREDIENTS NEEDED

S.No	Particulars	Quantity
01	Water	01 litre
02	Tulsi Leaves	100 g
03	Neem Leaves	05 g
04	Ginger	50 g
05	Garlic	20 g
06	Cardamom	05 g
07	Lemon	02 Nos
08	Turmeric	03 g
09	Black Pepper	05 g
10	Black Cumin	15 g
11	Betel Leaves (Medium sized leaves)	02 Nos
12	Organic Country sugar	30 g

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### PROCEDURE

1. Prefer using a mud pot for preparing the immunity drink
2. Fill the pot with 1 litre of water
3. Boil the water
4. Wash the ingredients except country sugar thoroughly in running water
5. After washing smash all the ingredients with the help of a traditional pounder or mixer
6. Transfer it in to the pot and close the pot with a lid
7. Let it steam for 20 minutes vigoursly
8. Make sure that 1 litre of water is reduced to half litre
9. Once when you feel the smell of the extract comes out remove the pot from the stove and allow it to get warm
10. After that sieve the drink using a stainless steel stainer
11. At the time of serving add juice of half lemon and country sugar
12. Mix it and serve it warm

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### CONCLUSION:

As the proverb indicates “prevention is better than cure”, it is need of the hour to create an awareness that certain types of herbal preparation can be even taken often to keep the diseases away.

### AUTHORS CONTRIBUTION:

All the authors have equally contributed to the review. Corrections were carried out and revised. The final draft was prepared by the corresponding author. The corresponding author thanks Mrs.M.Vadivel Devi and Mrs.SintiaJulifor taking photographs and collecting necessary data for this review.

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