

## Super Immunity Booster Herbs Useful in Corona Pandemic

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### INTRODUCTION

In corona pandemic, it was found that the immune system of our body becomes less active. Due to this, there are higher chances of contamination with bacteria, fungi, protozoa, viruses and other disease causing microorganism. In recent study, it was found that the antibodies are not formed or if formed are very low in concentration in people who are contaminated with corona virus. Gradually the antigen-antibody reaction becomes no more effective. Poor diet contains low immunity rich supplements and it decreasing at moderate level. The herbals plants contain chemical constituents that are helpful in boosting our immune system. They can be readily grown in homes. They are very beneficial for mankind and are cost effective. Therefore, in order to increase the immunity power in people with good immunity there are various herbal plants available in the markets and they have wide variety of choices. The diet must be rich in the immunity supplements.

**Some of Herbal plants used to increase immunity are given below:**

**Medicinal uses of Curry leaves and Ashwagandha** - Curry leaves used in weight loss and help to maintain cholesterol levels. It can be used for treating an upset stomach and treating in diarrhea and is also used in diabetes, eye-sight, skin eruptions, hair growth, reduce stress and improve memory. Ashwagandha, all plants parts are used including the roots, bark, leaves, fruit and seeds are used to treat nervous disorders and leprosy, intestinal infections. It mainly acts on the reproductive and nervous system and it is used improve vitality and aid recovery after chronic illness. It is also used to treat nervous exhaustion, insomnia, swelling and other painful problems.

**Medicinal uses of Alovera and Bay leaves** - Help to boosts immune system and in lowering cholesterol and triglycerides. Aloe vera is used to improve digestive health and it is also used in heal burns.

Due to its soothing property, moisturizing and cooling properties, aloe vera is often used to treat burns, used to manufacture commercial products. Aloe gel typically it is used to make topical medications for skin conditions such as burns wounds, rashes, cold sores or dry skin. The United states pharmacopoeia (USP) describes aloe Vera preparations as a skin protectant as early as 1810-1820. Bay leaves are a rich source of Vitamin A, Vitamin C, Iron, Potassium, Calcium, Magnesium. They have been proven to be useful in the treatment of migraines. It contains enzymes that help to breakdown proteins and digest food faster,

helping to calm indigestion. The bark is someone used for cooking, although it is regarded as inferior to the cinnamon or cassia.

**Medicinal uses of Turmeric** - It is used in Ayurvedic medicine, where it is also known as haridra. Turmeric or curcumin to treat any disease. It is used in cooked vegetables with turmeric as one of its key ingredients. It is used mostly in Savory dishes, but also is used in some sweet dishes. It is used in chemical analysis as an indicator for acidity or alkalinity. It is also used in dyes, indicator and traditional use.

**Table 1: Plants with description**

Plant name	Botanical Name	Description	Biological Source
Curry leaves	<b>Taxonomical culture –</b> <b>Species:</b> - Murraya koeniggi spreng. <b>Family:-</b> Rutaceae <b>Genus:-</b> Murraya <b>Species:-</b> koeniggi	<b>Murraya koeniggi</b> , also known as golden karivepallai, karivepakee or kadipatta. It is immunity booster plant. It is mostly found in hot climates and is a native plant of India. The leaves of the curry tree are called curry leaves or sweet Neem leaves.	Curry leaf tree is a small strong smelling perennial shrub commonly found in forests. It is now widely found in all parts of India and also it is now cultivated and distributes throughout the world. The plant is used in Indian system of medicine to treat various ailments. This plant is known to be the richest source of carbazole alkaloids. Curry leaves display various biological activities such as anti-tumor, anti-oxidative, anti-inflammatory activities.
Ashwagandha	<b>Taxonomical culture –</b> <b>Kingdom:</b> - Plantae <b>Order:</b> - Solanales <b>Species:</b> - W.Somnifer. <b>Family:-</b> Solanaceae <b>Genus:-</b> Withania	<b>Withania somnifera</b> , also known as Indian ginseng, poison gooseberry or winter cherry. It is an annual evergreen shrub in the <i>Solanaceae</i> or nightshade family that grows in India, the Middle East, and parts of Africa.	It consists of the dried roots and stem bases of Withania Somnifera Dunal belong to family <i>Solanaceae</i> . The plant is particularly its root powder, mainly due to poor quality of the clinical research. It provides many medicinal benefits as a therapy and may cause effect if taken with prescription drugs. Reported side effect include injury, liver injury, skin burning, diarrhea, discoloration, thyrotoxins and increase testosterone levels.
Alovera	<b>Taxonomical culture –</b> <b>Kingdom:</b> - Plantae <b>Order:</b> - Asparagales <b>Species:</b> - W.Somnifer. <b>Family:-</b> Asphodelaceae <b>Genus:-</b> Aloe	<b>Alovera</b> , is an important and traditional medicinal plant belonging to family Lilaeeae. It is also known as Ghrit kumara, kumar Pathu and Indian Aloe. It is a shrubby or absorbent, perennial, xerophytic, succulent, pea green color plant. It grows mainly in the dry regions of Africa, Asia, and Europe of America. Aloevera is a rich source of antioxidants and vitamins that may help protect your skin. Aloevera have also been shown to neutralize the effects of ultraviolet (UV) radiation, repair your skin from existing UV damage and help prevent fine lines and wrinkles.	The biological source of aloe is dried latex of leaves of it. It is also known as curacao aloe, cape aloe and socetrine aloe. It belongs to the <i>liliaceae</i> family. Aloe is the dried juice collected by incision from the bases of the leaves of various species of Aloe.
Bay leaves	<b>Taxonomical culture –</b> <b>Kingdom:</b> - Plantae <b>Order:</b> - Laurales <b>Species:</b> - C. tamala <b>Family:-</b> Lauraceae <b>Genus:-</b> Cinnamomum	<b>Bay leaf</b> , also called as laurel leaf, leaf of sweet bay tree ( <i>Laurus nobilis</i> ), an evergreen of the family lauraceae, indigenous to countries bordering the Mediterranean. They are fixture in cooking. Bay leaves were used for flavoring by the ancient geek. The bay leaf is oval, smooth, 2.5-8 cm long. When fresh, the leaves are shiny and dark green on top with lighter undersides. When dried the bay leaf is matte olive green.	It is an aromatic leaf commonly used in cooking. It can be used whole or in dried or ground form. Bay laurel, fresh or dried bay leaves are used in cooking for their distinctive flavor and fragrance. The leaves should be removed from the cooked food before eating. Bay leaf, leaf of the sweet bay tree ( <i>laurus nobilis</i> ), an evergreen of the family Lauraceae, indigenous to countries bordering the Mediterranean.
Turmeric	<b>Taxonomical culture –</b> <b>Kingdom:</b> - Plantae <b>Order:</b> - Zingiberales <b>Species:</b> - C. longa <b>Family:-</b> Zingiberaceae <b>Genus:-</b> Curcuma	<b>Turmeric</b> is a flowering plant, <i>curcuma longa</i> of given family, Zingiberaceae. The roots are used in cooking. The rhizomes are used fresh or boiled in water and dried, after which they are ground into a deep orange yellow powder commonly used as a coloring and flavoring agent in many Asian cuisines, especially for curries, as well as for dyeing for using turmeric to treat any disease.	curcumin is the active ingredient of the dietary spice turmeric and is extracted from the rhizomes of <i>C. longa</i> , a plant in the Zingiberaceae family, which is native to tropical South Asia and is cultivated extensively in temperature regions. It is grown in larger scale in India, China, East Indies, Pakistan and Malaya.
Tulsi	<b>Taxonomical culture –</b> <b>Kingdom:</b> - Plantae <b>Species:-</b> O. tenuiflorum <b>Family:-</b> Lamiaceae <b>Genus:-</b> Ocium <b>Botanical name:-</b> Ocimum Sanctum	<b>Basil</b> , is most popularly known as Tulsi, has been used for thousands of years in Ayurveda for its diverse healing properties. The basil or tulsi plant has many medicinal properties. It has made important contribution to the field of science from ancient times as also to modern research due to its large number of medicinal properties.	It consists of fresh and dries leaves of <i>ocimum sanctum</i> belonging to family Lamiaceae. It is herbaceous much branched annual plant found throughout india, it is considered as sacred by hindus . the plant is commonly cultivated in garden. It is propagated by seeds
Giloy	<b>Taxonomical culture –</b> <b>Kingdom:</b> - Plantae <b>Species:</b> - T. cordifolia <b>Family:-</b> Menispermaceae	Giloy, also known as amrita or guduchi in hindi is an herb that helps boost immunity. It has heart shaped leaves that resemble betel leaves. Giloy is beneficial for diabetic patient as it is better in taste and helps in managing blood glucose levels.	It is perennial and climbing shrub with succulent stem and papery barks, has been widely distributed in various countries.

	<p><b>Genus:-</b> Tinospora <b>Botanical name:-</b> Tinospora cordifolia</p>		
Mint	<p><b>Taxonomical culture – Kingdom:-</b> Plantae <b>Species:-</b> Mentha spicata <b>Family:-</b> Lamiaceae <b>Genus:-</b> Mentha</p>	Mint or mentha belongs to the Lamiaceae family which contains around 15 to 20 plant species including peppermint and spearmint. It is a popular herb that people can use fresh or dried in many dishes and infusions, manufacturers of toothpaste, gum, candy and beauty products often use mint oil.	It is obtained from fresh and dried leaves of mentha spicata family is lamiaceae.
Fenugreek	<p><b>Taxonomical culture – Kingdom:-</b> Plantae <b>Species:-</b> T.foenum-graecum <b>Family:-</b> Fabaceae <b>Genus:-</b> Trigonella <b>Botanical name:-</b> Trigonella foenum-graecum</p>	It is an annual plant in the family fabaceae, with leaves consisting of three small obovate to oblong leaflets. It is cultivated worldwide as a semiarid crop. Its seed and leaves are common ingredients in dishes from the Indian sub continent and have been used as a culinary ingredient since ancient time.	Methi consist of dried ripe seeds of Trigonella foenum-graecum. The plant grows wild in Northern India and is cultivated as a crop throughout India. It is also cultivated in Southern and Eastern Europe, Pakistan, France and Egypt.
Neem	<p><b>Taxonomical culture – Kingdom:-</b> Plantae <b>Species:-</b> A. indica <b>Family:-</b> Meliaceae <b>Genus:-</b> Azadirachta <b>Botanical name:-</b> Azadirachta indica</p>	Azadirachta indica ,commonly known as neem family Maliaceae. It is one of two species in the genus azadirachta, and is native to the Indian subcontinent and most of the countries in Africa. It is typically grown in tropical and in semi-tropical regions. Neem trees also grow on islands in Southern region. Its fruits and seeds are the source of neem oil.	It consists of almost all the part of the plant which are used as drug of Azadirachta indica and family is the Meliaceae. India is native of Azadirachta but it is also cultivated in Nepal, Pakistan, Bangladesh and Sri Lanka. Neem is fast growing tree that can reach a height of 15-20 m.

**Medicinal uses of Tulsi and Giloy-** It is used in ayurvedic medicine, where it is also known as haridra. turmeric or curcumin to treat ant disease used in cooked vegetables with turmeric as on its key ingredients. It is mostly used in savory dishes, but also is used in some sweet dishes. It is use in chemical analysis as an indicator for acidity and alkalinity. It is used in dyes. Giloy rich in nutrients, giloy is used to manufacture many herbal, ayurvedic and modern medicines. The stem of giloy is considered highly effective because of its high nutritional content and the alkaloids found in it's per ayurveda, giloy can be consumed in the form of a decoction powder or even juice.

**Medicinal uses of Mint-** Inhibits the release of histamines that causes allergies and hay

fever. Helps to prevent cancer. Natural stimulant, relieves from fatigue depression. Improves oral health, promotes digestion. It has help in boosting immunity.

**Medicinal uses of Fenugreek and neem-** Fenugreek is used as a herb, spice and vegetable. Stolon is the chemical responsible for the distinctive maple syrup smell of fenugreek also use un traditional medicine, fenugreek can increase the risk for serious medical side effects, for its culinary use in safe. Neem leaf is used for leprosy, eye disorders, bloody nose, intestinal worms, stomach upset, loss of appetite, skin ulcers, disease of heart and blood vessels, fever, diabetes.



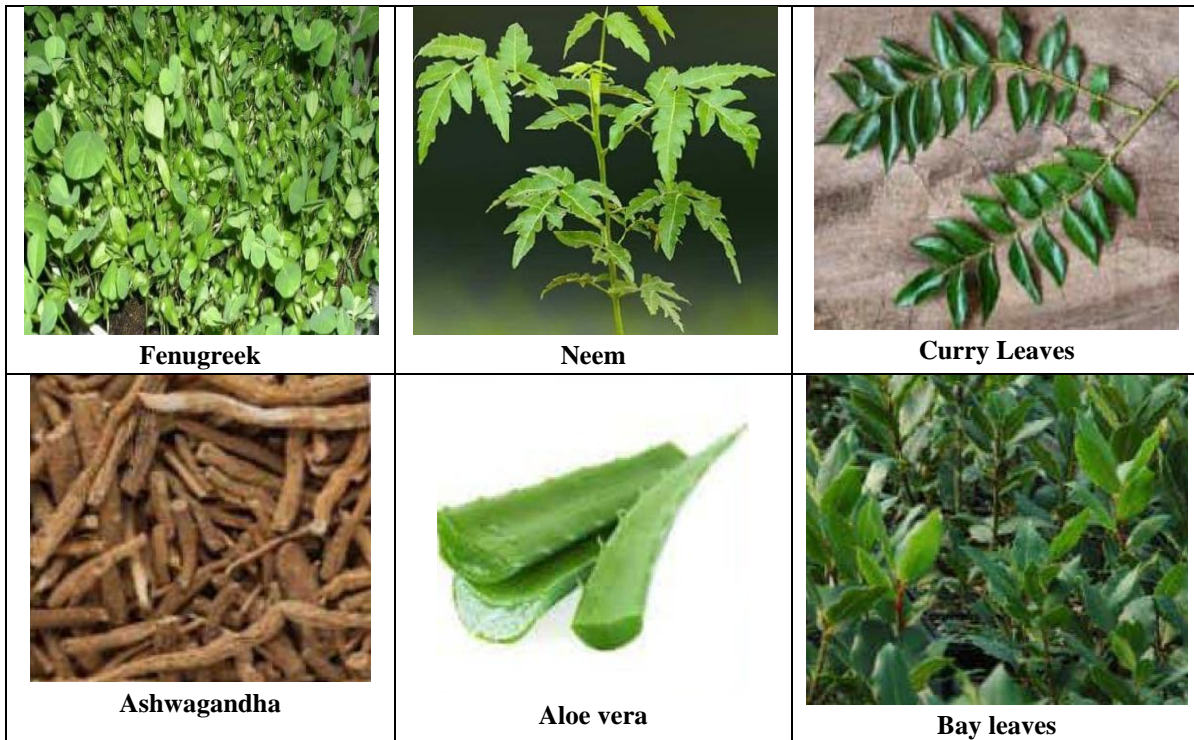
Tulsi



Giloy



Mint



**Figure 1: Images of Herbs**

### CONCLUSION

All above herbs very useful in the treatment of various disease and also take part in increase the immunity of humans and animals. All herbs have various medicinal properties, in current corona pandemic very helpful and daily consumption of these herbs very beneficial in improve immunity and protect from diseases, so they are called super immunity booster.

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