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# Significance of Tea as a Beverage in the Era of the COVID-19 Pandemic

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**Abstract:**

Tea is an aromatic beverage prepared by pouring hot water over cured leaves of *Camellia sinensis*, an evergreen shrub plant. In the expanding of covid-19 pandemic situation, there has been a lot of attention worldwide to boost up immunity system. And it is without any doubt the first major line of defence against the lethal virus. Besides many herbal remedies the tea is an excellent option for boosting immunity. Tea is one of the most popular beverages across the world. It is well known for its numerous healing properties. From very common cough and cold to cancer tea is the very potent herbal supplement to prevent many types of health hazards. Several studies indicate that tea is a great warrior against viruses and bacteria. In the current covid-19 situation the use of tea can be a very effective weapon to fight the monster virus. The mass awareness of using tea can play a major role to prevent the disease to some extent. The many useful chemical compounds make tea a unique and wonderful beverage in the world.

**Keywords:** *Tea, Immunity, Covid-19, Pandemic, Economic Beverages*

## Introduction

The use of tea begins since ancient times. Besides other uses the tea became one of the most popular beverages because of its teste and other unique features such as medicinal properties. Economically tea export is a major source of income of our country. There are many varieties and types available throughout the world, but Darjeeling tea is the most famous one because of its quality taste and flavour. It is proven fact that tea originated in China, for the first time as medicine and in later used as a beverage as early as 2737 BC (Yamanishi, 1995). Tea, scientifically known as *Camellia sinensis (L.) Kuntze or Thea sinensis F.*, which belongs to the family Theaceae. It is commonly a shrub or evergreen tree up to 16 meter in height (Aboulwafa *et al*, 2019).

## Key properties of Tea

There are numerous health benefits of consuming tea. Some are reported and some are yet to be discover. The tea is highly potential beverage because of its high content of bioactive compounds such as polyphenols. Polyphenols have been very useful antioxidant, antiviral, and anti-inflammatory activities as well as it can stimulate immune function (Serafini *et al*, 2011). So, in

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the covid-19 situation the tea beverage can be used effectively among mass population. It has also stress reliver properties very helpful to overcome fear caused by covid-19 among large population.

**Tea as a Super Immunity Booster**

Tea is a real time immunity booster. Because of its various existing valuable chemical compounds tea becomes one of the most important beverages throughout the world. The immune system is a crucial line of defense mechanism against all types microorganism as well as the toxins released by them. The defective immune system could lead to an immunocompromised situation. That condition may set anyone at high risk of a variety of infections caused by virus, bacteria, and fungi (Rahayu *et al*, 2018). Tea consumption may be a boon to such condition, where tea plays a major role to improve immunity response.

**Various Kinds of Tea**

There are numerous varieties available in various names and from different places and markets across the globe. Tea is one of the most popular beverages consumed by two-thirds of the world's population is made up from the processed tea leaf. Tea types mainly based on processing or harvested leaf stage are black tea (i.e. the fermented one), the green tea (i.e. the non-fermented tea) and oolong tea (i.e. the semi-fermented tea). These most important tea types may vary in such in condition that how tea is produced and processed according to the different kinds of standard processes of drying and fermentation that ultimately decide its chemical structure (Khan and Mukhtar, 2013).The teas are most frequently grouped into 5 main categories such as i) black tea, ii) green tea, iii) oolong tea, iv) yellow tea and v) white tea. All these varieties are instantly obtainable at any of the markets except yellow tea, which is rare. Various form of tea available such as they are either organic or regular i.e. not labelled as organic were available in various food stores. Teas are selling either as a form of tea bags or raw tea which can be used for brewing in individual cups.

Teas are differentiate via processing of individual types of teas such as (a) In case of black tea production leaves are completely oxidized, withered, and disrupted or macerated to stimulate oxidation in a result, catechins being converted to complex tannins; (b)In the preparation of green tea the leaves steamed on dry cooking in hot pans to avoid oxidation process ; (c) In the case of oolong tea production the withering of leaves under sun dry and warm winds with further oxidation typical amongst green and black teas; (d) In case of white tea production newly growth buds or young leaves, shrunken, untreated, baked dehydrated (Schwalfenberg, 2013). The variety such as blended or unblended and further details like processing variation such as conventional, cut, tear, curl (CTC) is found in many places. The Unblended teas are named further by their country of origin or the region of origin such as Assam tea, China tea, and the most famous one Darjeeling tea (Khanum *et al*, 2017).

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**Cultivation of tea:**

The yield and potentiality of any crop is dependent on climatic factors, known as weather. Climate regulates where a crop is full-fledged and the probable harvest; the real yields gained vary on the predominant weather. When nutrients are not limiting the important weather variables such as sunshine, temperature, moisture content of the air and accessibility of the soil water (Carr and Stephens, 1992). The requirement for tea production is the moderately hot and humid climate. Climate influences total crop production, distribution, and the quality of the tea. Hence, before starting cultivation of tea in a new area, the first point of consideration is the suitability of the climate. As tea grows best on well-drained fertile acid soil on high lands it is one of the most valuable point of consideration. Along with adequate rainfall during winter, early spring is essential for high yield of the crop. In general, the suitable temperature varies between 13°C and 28-32°C is advantageous for production of tea. As day length influences growth and dormancy in tea bushes it is also be considered. Tea plants grows very well on high land as well as properly drained soils having a decent depth, acidic pH in the range of 4.5 to 5.5 and in the soil where more than 2% organic matter is present (Tocklai, 2020).

**Tea production worldwide scenario:**

Tea is one of the most popular beverages around the world. India is a major tea exporting country among the world. India produces around 31% of the production among the world. Tea promotes 1% of the GDP of the country (Sharma *et al*, 2019). In the production and export share among the global tea production it is mainly among the top six tea producing countries. From various exporting data shows that China leads other tea producing countries in production of tea by producing about 36.28 % of the total tea production of the world. China is closely followed by India about 22.61 % of the overall tea production among the world. Next is Kenya with 9.15 % share in total tea production (Chaudhry and Negi, 2017). In a study was based on 24 years agricultural period-cycle data from 1990–1991 to 2012–2013 (Dastagiri, 2017) shows the overall exports of tea from India. The top destinations in which the Indian tea exports are moved these are the developed countries including Australia (18.7%), Russia (17.3%), and the United States (15.9%). And thus, make tea a major economic plant. Tea, which is produce in the form of green tea approximately 20% of produced tea and in the form of black tea, approximately 78% of the total production. It is the most extensively consumed beverage in the world, second only to water consumption (Zhong *et al*, 2015). Green tea is produced from the fresh leaves of *Camellia sinensis* and has performed an important medicinal as well as dietary position all over the world, predominantly in overpopulated Asian countries. Green tea holds a diversity of effective combinations such as vitamins, antioxidants, carbohydrates, protein, minerals, and polyphenols. And thus, very beneficial to the inhibition of diabetes. The most notorious properties of green tea

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on human health are mainly because of the presence of catechins, which is nothing but the kind of flavonoid-like polyphenols (Xu *et al*, 2020).

**Consciousness Drive**

Although almost all the population relies on tea as a good beverage, some of the population never consume tea because of various unknown myth and negative advertisements. Mass media campaign is very necessary to popular tea because of its awesome properties as immunity booster. People from every steps of the society can do something to aware people about the benefits of tea consumption.

**Excessive tea Consumption is not Recommended:**

Extreme use of anything may be dangerous for human health. Likewise, excessive tea consumption is not at all recommended for consumption. Unnecessary consumption of green tea can convey negative results, as these polyphenols inside the system will make them unstable, which me lead to autoxidative reactions and thus create various health hazards. The studies from scientific experiments recommend that only optimal uses of green tea alone may be beneficial, but if take excess in amount, which could have an adverse effect on human health (Prasanth *et al*, 2019).

**Conclusion**

Tea is a natures boon to the humankind. A moderate consumption of tea is awesome health benefits to human health. Among the beverages tea is the top most consumed beverage across the globe aside from water, and is extremely valued due to its various awesome properties. Proper awareness, scientific study, choosing ability to the good quality of tea can be a gamechanger to this covid-19 like pandemic situations.

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