### Black tea and health

Tea is one of the most ancient and popular beverages consumed around the world. **Black tea** is more **widely consumed** than green tea worldwide. India is the largest producer of black tea and hence it is necessary to focus attention on black tea with respect to its health promoting attributes.

### What is Black tea?

Black Tea is more oxidized than green tea The black tea making process involves and additional step of aeration of the cut, withering leaves for several hours which oxidises the flavonoids as well as darkening the leaves' colour.

#### Health benefits

Until recently, tea research has focused more on green tea. However, recent studies indicate the compounds contained in black tea - theaflavins and thearubigens – not only contribute to the dark color and distinctive flavor but they represent potential molecules with therapeutic implication.

Polyphenolic compounds present in black tea can protect cells and tissues from oxidative stress by scavenging free radicals. Synergistic interactions amongst black tea constituents play a major role in the beneficial effect of tea. Number of studies with black tea have demonstrated that plasma antioxidant capacity gets enhanced, ~1 h after consumption of moderate amounts of tea.

# Neurological disease

Reports suggest that Black tea could lower the incidence of Parkinsons disease, Theanine present in black tea increases alpha brain wave activity resulting in calmer state of mind and it also reduces stress.

### **Diabetes**

Tea consumption is said to be associated with reduced risk of type 2 diabetes It may blunt the spike in sugar level after the meal.

### Cardiovascular disease

Black tea is said to reduce the risk of heart problems by cutting levels of bad cholesterol and blood sugar. Studies have shown that there is risk reduction of coronary heart disease at intakes  $\geq 3$  cups tea per day.

### Cancer

Studies suggest that Tea polyphenolics inhibit tumor cell proliferation. In addition,

tea polyphenols may protect against damage caused by ultraviolet (UV) B radiation. Theaflavin and catechins modulate immune system function..

# Osteoporosis

Studies suggest that tea may positively influence bone mineral density (BMD) and that tea drinking may protect against osteoporosis in older women.

### Gastric ulcer

Tea does not cause acidity. Studies have revealed it reduces the incidence of ulcer, in experimental animals.

# **Anti HIV agent**

Theaflavins in tea are potent anti-HIV-1 compounds. They inhibit HIV-1 entry into target cells.

### Oral health

Random surveys have reported that black tea reduces the incidence of dental cavities. Polyphenols in tea inhibit bacterial growth and wards off mouth infections. Tea is a natural source of fluoride, therefore helping to promote healthy tooth enamel. Also, tannins present in black tea inhibit the growth of plaque-causing bacteria apart from inhibiting the action of salivary amylase, thus making their contribution in cavity prevention.

#### Immune defense

By making tea a common part of your everyday food intake you can build up your immunity. Tea won't keep you complete safe from getting sick but it can help.

### Anti aging

Being a very high source of antioxidants, black tea is said to slow down aging process and age induced diseases.