Polyphenols of tea as powerhouse for healthcare because TEA is Tremendous Effective Antioxidant

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ABSTRACT

Tea contains antioxidants. Tea has less caffeine than coffee. Coffee usually has two to three times the caffeine of tea. An eight-ounce cup of coffee contains around 135 mg caffeine; tea contains only 30-40 mg per cup. Tea may reduce your risk of heart attack and stroke. Unwanted blood clots formed from cholesterol and blood platelets cause heart attack and stroke. Drinking tea may help keep your arteries smooth and clog-free, the same way a drain keeps your bathroom pipes clear. Tea protects your bones. It's not just the milk added to tea that builds strong bones. Tea gives you a sweet smile. Tea itself actually contains fluoride and tannins that may keep plaque at bay. Tea bolsters your immune defenses. Drinking tea may help your body's immune system fight off infection. Tea protects against cancer. Thank the polyphenols, the antioxidants found in tea, once again for their cancer-fighting effects. Tea helps keep you hydrated. Caffeinated beverages, including tea, used to be on the list of beverages that didn't contribute to our daily fluid needs. Since caffeine is a diuretic and makes us pee more, the thought was that caffeinated beverages couldn't contribute to our overall fluid requirement. Tea is calorie-free. Tea doesn't have any calories, unless you add sweetener or milk. If you're looking for a satisfying, calorie-free beverage, tea is a top choice. Tea increases your metabolism. Green tea has been shown to actually increase metabolic rate so that you can burn 70 to 80 additional calories by drinking just five cups of green tea per day.

Keywords: Polyphenols, Flavonoids, Epigallocatechin gallate, Catechins, L-theanine, Epicatechin, Epicatechin gallate, Gallicatechin

INTRODUCTION

Tea is an aromatic beverage commonly prepared by pouring hot or boiling water over cured leaves of the Camellia sinensis, an evergreen shrub native to Asia. After water, it is the most widely consumed drink in the world. There are many different types of tea; some teas, like Darjeeling and Chinese greens, have a cooling, slightly bitter and astringent flavour, while others have vastly different profiles that include sweet, nutty, floral or grassy notes.[1] Caffeine constitutes about 3% of tea's dry weight, translating to between 30 mg and 90 mg per 8-oz (250-ml) cup depending on type, brand and brewing method. A study found that the caffeine content of 1 g of black tea ranged from 22-28 mg, while the caffeine content of 1 g of green tea ranged from 11-20 mg, reflecting a significant difference.

Tea also contains small amounts of theobromine and theophylline, which are stimulants and xanthines similar to caffeine. Because of modern environmental pollution, fluoride and aluminium also sometimes occur in tea. Certain types of brick tea made from old leaves and stems have the highest levels.

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<th>Nutrient</th>
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<tr>
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Table-1: Nutrients and phytochemicals

Black and green teas contain no essential nutrients in significant content, with the exception of the
dietary mineral, manganese at 0.5 mg per cup or 26% of the Daily Value. Tea leaves contain diverse polyphenols, including flavonoids, epigallocatechin gallate (EGCG) and other catechins. It has been suggested that green and black tea may protect against cancer or other diseases such as obesity or Alzheimer's disease, but the compounds found in green tea have not been conclusively demonstrated to have any effect on human diseases. One human study demonstrated that regular consumption of black tea over four weeks had no beneficial effect in lowering blood cholesterol levels. The major flavonols in tea are: catechin (C), epicatechin (EC), epicatechin gallate (ECG), gallocatechin (GC), epigallocatechin (EGC), and epigallocatechin gallate (EGCG).\(^2\)

![Chemical structures of tea constituents](image)

**Figure-1: Phytoconstituents of Tea**


(a) **White tea** is derived from the *Camellia sinensis* plant and contains polyphenols, a phytonutrient that is thought to be responsible for the tea’s health benefits. Like black and green tea, white tea is also derived from *Camellia sinensis*. Thus, white tea shares many of the same chemical properties and health effects of tea. However, white tea contains the most antioxidants. The particular amount and ratio of the polyphenol compounds found in tea varies widely from one type of white tea to another, frequently overlapping with chemical compositions found in green tea. This is due both to the variation between strain of *Camellia sinensis*, as well as the preparation process itself. Currently there is no general accepted definition of *white tea* and very little international agreement. One source says that white tea is minimally processed tea (just drying, no fermentation or other procedures) Another says that "white tea is made from buds and young leaves, which are steamed or fired to inactivate polyphenol oxidase and then dried." It is harvested primarily in China, mostly in the Fujian province, but more recently it is grown in Eastern Nepal, Taiwan, Northern Thailand, Galle (Southern Sri Lanka) and India. White tea comes from the buds and leaves of the *Camellia sinensis* plant. The leaves and buds are allowed to wither and dry in natural sun. The name “white tea” derives from the fine silvery-white hairs on the unopened buds of the tea plant, which gives the plant a whitish appearance. The beverage itself is not white or colourless but pale yellow, light to the taste, and is free shaped.\(^3\)

The base process for manufacturing white tea is as follows:
Fresh tea leaf → withering → drying (air drying, solar drying or mechanical drying) → white tea
White tea belongs to the group of tea that does not require panning, rolling or shaking. However, the selection of raw material in white tea manufacture is extremely stringent; only the plucking of young tea leaves with much fine hair can produce good-quality white tea of a high pekoe value.\(^4\)
White Tea Benefits: When it comes to cancer prevention, white tea may have an advantage over green. Researchers at the Linus Pauling Institute in 2000 tested four kinds of white tea on rats to assess their benefits for colon cancer protection. Because of white tea’s higher content of some polyphenols, the scientists found it was better than green at mitigating harm done to DNA -- a type of cell damage that can be a precursor to cancer. However, the researchers cautioned that additional studies would be needed to confirm the same benefits in humans. Tea has been used as medicine for centuries. Now modern science is discovering what people in China and throughout the world have long known: tea is good for you. While green and black tea are very healthy, white tea is the least processed tea and has the highest antioxidant levels. It may be the supreme Drink of Health.[5]

1. White Tea Antioxidants: Antioxidants are nutrients that protect the body from damage by free radicals. Free radicals are nasty things that go around wreaking havoc on your body, damaging DNA and accelerating aging. Antioxidants scoop them up and neutralize them. White tea is loaded with these protective nutrients.

2. Cancer Prevention: White tea may have profound power against cancer-causing cells and against many different types of cancer, such as colon, prostate, and stomach cancers. Flavonoids, a class of antioxidants, inhibit the growth of cancer cells and prevent the development of new ones. In some cases, white tea has been found to work as well as prescription drugs, but without the side effects.

3. Lower Blood Pressure: Studies show that white tea can thin the blood and improve artery function. It helps lower high blood pressure and maintains a healthy one. By promoting strong and healthy blood vessels, white tea guards against the ravages of stroke.

4. Lower Cholesterol: Catechins, another group of antioxidants, have been found to reduce cholesterol, and white tea is teeming with them. Cholesterol is a special type of fat and is necessary for health. There is good cholesterol and bad cholesterol, and white tea increases the good while decreasing the bad. This helps prevent hardening of the arteries and blockage of blood flow.

5. Heart Protection: By thinning the blood, lowering blood pressure, and reducing cholesterol, white tea protects the heart and the entire circulatory system. Researchers have also discovered that people who drink 2 or more cups of tea a day are almost 50% less likely to die after suffering a heart attack. White tea is truly a remarkable heart tonic. Stronger Bones: Studies have found that people who drank tea regularly had greater bone density and strength than non-drinkers. White tea may also have beneficial effects for sufferers of arthritis and osteoporosis.

6. Antibacterial & Antiviral: White tea is a natural killer of bacteria and viruses. The antioxidants so abundant in white tea tone the entire immune system, providing protection against a variety of invaders and a wide range of diseases. Its helps guard against the common cold and flu, and can ease the symptoms of HIV.

7. Healthy Teeth and Gums: White tea contains small amounts of fluoride and other nutrients which
keeps the teeth strong and healthy. It also kills the bacteria which cause plaque, tooth decay and bad breath.

8. Healthy Skin: Free radicals from staying out in the sun too long, stress, and a poor diet can damage the skin and cause it to prematurely age. By scavenging these free radicals, white tea protects the skin and helps to reverse some of the damage. Drinking white tea promotes healthy and radiant skin.

9. Other Health Benefits: White tea has many other benefits to offer. It may reduce blood sugar and help prevent and alleviate the symptoms of diabetes. It reduces stress and increases energy. White tea may or may not aid in weight-loss. Studies suggest tea may increase metabolism and encourage the body to burn more fat, but a balanced diet and regular exercise are more likely to produce results. Still, adding white tea to your weight-loss plan can't hurt.

Review of Health Benefits: By now you can see that white tea has a great range of effects on the body and a tremendous number of benefits to your health. Its supreme power is in preventing disease and disorder.

White tea protects against cancer, heart disease, and stroke, the leading causes of death in the industrial world, as well as numerous other conditions. It eases the symptoms of illness and promotes recovery. White tea strengthens the circulatory and immune systems as well as bones and teeth, and builds healthy skin. It is a superb tonic and one of Nature’s great gifts. So it is necessary to encourage you to add it to your life for your good health!

Tea Drinking Considerations: Both green tea and white tea have less caffeine than black tea or coffee. White tea contains the least, with 30-55 milligrams per cup, compared to 35-70 for green tea. A study published in “Molecular Nutrition and Food Research” in 2007 found that adding lemon or soy or rice milk to green tea significantly boosted the body’s absorption of its antioxidants. The National Cancer Institute advises that hot brewed tea has greater concentrations of polyphenols than iced or bottled varieties. Talk to your doctor before adding green or white tea to your diet because they may interfere with some medications.

(b) Green tea is made from Camellia sinensis leaves that have undergone minimal oxidation during processing. Green tea originated in China, but its production has spread to many countries in Asia. Several varieties of green tea exist, which differ substantially due to

Figure-3: Various types of tea

Growing conditions, horticulture, production processing, and time of harvest.

Steeping is the process of making a cup of tea; it is also referred to as brewing. In general, two grams of tea per 100 ml of water, or about one teaspoon of green tea per five-ounce (150 ml) cup, should be used. Green tea steeping time and temperature varies with different tea. The hottest steeping temperatures are 81-87°C (178-189°F) water and the longest steeping times two to three minutes. The coolest brewing temperatures are 61-69°C (142-156°F) and the shortest times about 30 seconds. In general, lower-quality green teas are steeped hotter and longer, whereas higher-quality teas are steeped cooler and shorter. Steeping green tea too hot or too long will result in a bitter, astringent brew, regardless of the initial quality, because it will result in the release of an excessive amount of tannins. High-quality green teas can be and usually are steeped multiple times; two or three steeping is typical. The steeping technique also plays a very important role in avoiding the tea developing an overcooked taste. The container in which the tea is steeped or teapot should also be warmed beforehand so that the tea does not immediately cool down. It is common practice for tea leaf to be left in the cup or pot and for hot water to be added as the tea is drunk until the flavor degrades.\[8\]

![Figure-4: Green tea](image)


**Green Tea Benefits:**

1. **Green tea contains various bioactive compounds that can improve health:** Green tea is more than just green liquid. Many of the bioactive compounds in the tea leaves do make it into the final drink, which contains large amounts of important nutrients. It is loaded with polyphenols like flavonoids and catechins, which function as powerful antioxidants. These substances can reduce the formation of free radicals in the body, protecting cells and molecules from damage. These free radicals are known to play a role in aging and all sorts of diseases. One of the more powerful compounds in green tea is the antioxidant Epigallocatechin Gallate (EGCG), which has been studied to treat various diseases and may be one of the main reasons green tea has such powerful medicinal properties. Green tea also has small amounts of minerals that are important for health. Try to choose a higher quality brand of green tea, because some of the lower quality brands can contain excessive levels of fluoride. That being said, even if you choose a lower quality brand, the benefits still far outweigh any risk.

2. **Compounds in green tea can improve brain function and makes anyone smarter:** Green tea does more than just keep you awake, it can also make you smarter. The key active ingredient is caffeine, which is a known stimulant. It doesn’t contain as much as coffee, but enough to produce a response without causing the “jittery” effects associated with too much caffeine. What caffeine does in the brain is to block an inhibitory neurotransmitter called Adenosine. This way, it actually increases the firing of neurons and the concentration of neurotransmitters like dopamine and norepinephrine. Caffeine has been intensively studied before and consistently leads to improvements in various aspects of brain function, including improved mood, vigilance, reaction time and memory. However… green tea contains more than just caffeine. It also has the amino acid L-Theanine, which is able to cross the blood-brain barrier. L-Theanine increases the activity of the inhibitory neurotransmitter GABA, which has anti-
anxiety effects. It also increases dopamine and the production of alpha waves in the brain. Studies show that caffeine and L-Theanine can have synergistic effects. The combination of the two is particularly potent at improving brain function. Because of the L-Theanine and the smaller dose of caffeine, green tea can give you a much milder and different kind of “buzz” than coffee. Many people report having more stable energy and being much more productive when they drink green tea, compared to coffee.

3. **Green tea increases fat burning and improves physical performance:** If you look at the ingredients list for any fat burning supplement, chances are that green tea will be on there. This is because green tea has been shown to increase fat burning and boost the metabolic rate, in human controlled trials. In one study in 10 healthy men, green tea increased energy expenditure by 4%. Another study showed that fat oxidation was increased by 17%, indicating that green tea may selectively increase the burning of fat. However, I’d like to point out that some studies on green tea don’t show any increase in metabolism, so the effects may depend on the individual. Caffeine itself has also been shown to improve physical performance by mobilizing fatty acids from the fat tissues and making them available for use as energy. In two separate review studies, caffeine has been shown to increase physical performance by 11-12%, on average.

4. **Antioxidants in green tea may lower risk of various types of cancer:** Cancer is caused by uncontrolled growth of cells. It is one of the world’s leading causes of death. It is well known that oxidative damage contributes to the development of cancer and that antioxidants can have a protective effect. Green tea is an excellent source of powerful antioxidants, so it makes perfect sense that it could reduce your risk of cancer, which it appears to do:  
   - **Breast cancer:** A meta-analysis of observational studies found that women who drank the most green tea had a 22% lower risk of developing breast cancer, the most common cancer in women.  
   - **Prostate cancer:** One study found that men drinking green tea had a 48% lower risk of developing prostate cancer, which is the most common cancer in men.  
   - **Colorectal cancer:** A study of 69,710 Chinese women found that green tea drinkers had a 57% lower risk of colorectal cancer.  
   - Multiple other observational studies show that green tea drinkers are significantly less likely to get various types of cancer. It is important to keep in mind that it may be a bad idea to put milk in your tea, because it can reduce the antioxidant value.

5. **Green tea may protect brain in old age, lowering the risk of Alzheimer’s and Parkinson’s disease:** Not only can green tea improve brain function in the short term; it may also protect your brain in old age. Alzheimer’s disease is the most common neurodegenerative disease in humans and a leading cause of dementia. Parkinson’s disease is the second most common neurodegenerative disease and involves the death of dopamine producing neurons in the brain. Multiple studies show that the catechin compounds in green tea can have various protective effects on neurons in test tubes and animal models, potentially lowering the risk of Alzheimer’s and Parkinson’s.

6. **Green tea can kill bacteria, which improves dental health and lowers the risk of infection:** The catechins in green tea have other biological effects as well. Some studies show that they can kill bacteria and inhibit viruses like the influenza virus, potentially lowering your risk of infections. *Streptococcus mutans* is the primary harmful bacteria in the mouth. It causes plaque formation and is a leading contributor to cavities and tooth decay. Studies show that the catechins in green tea can inhibit the growth of streptococcus mutans. Green tea consumption is associated with improved dental health and a lower risk of caries. Another awesome benefit of green tea... multiple studies show that it can reduce bad breath. Tea catechins are strong antibacterial and antiviral agents which make them effective for treating everything from influenza to cancer. In some studies green tea has been shown to inhibit the spread of many diseases.

7. **Green tea may lower the risk of type II diabetes:** Type II diabetes is a disease that has reached epidemic proportions in the past few decades and now afflicts about 300 million people worldwide. This disease involves having elevated blood sugar levels in the context of insulin resistance or an inability to produce insulin. Studies show that green tea can improve insulin sensitivity and reduce blood sugar levels. One study in Japanese individuals found that those who drank the most green tea had a 42% lower risk of developing type II diabetes. According to a review of 7 studies with a total of 286,701 individuals, green tea drinkers had an 18% lower risk of becoming diabetic.

8. **Green tea may reduce the risk of cardiovascular disease:** Cardiovascular diseases, including heart disease and stroke, are the biggest causes of death in the world. Studies show that green tea can improve some of the main risk factors for these diseases. This includes total cholesterol,
LDL cholesterol and triglycerides. Green tea also dramatically increases the antioxidant capability of the blood, which protects the LDL cholesterol particles from oxidation, which is one part of the pathway towards heart disease. Given the beneficial effects on risk factors, it is not surprising to see that green tea drinkers have up to a 31% lower risk of cardiovascular disease.

9. Green tea can help to lose weight and lower the risk of becoming obese: Given that green tea can boost the metabolic rate in the short term, it makes sense that it could help you lose weight. Several studies show that green tea leads to decreases in body fat, especially in the abdominal area. One of these studies was a randomized controlled trial in 240 men and women that went on for 12 weeks. In this study, the green tea group had significant decreases in body fat percentage, body weight, waist circumference and abdominal fat. However, some studies don’t show statistically significant increases in weight loss with green tea, so this needs to be taken with a grain of salt.

10. Green tea may decrease the risk of dying and help anyone live longer: Of course, we all have to die eventually. That is inevitable. However, given that green tea drinkers are at a lower risk of cardiovascular disease and cancer, it makes sense that it could help you live longer. In a study of 40,530 Japanese adults, those who drank the most green tea (5 or more cups per day) were significantly less likely to die during an 11 year period:
   - Death of all causes: 23% lower in women, 12% lower in men.
   - Death from heart disease: 31% lower in women, 22% lower in men.
   - Death from stroke: 42% lower in women, 35% lower in men.
   Another study in 14,001 elderly Japanese individuals aged 65-84 years found that those who drank the most green tea were 76% less likely to die during the 6 year study period.

11. Green tea helps to reduce depression: L-Theanine is an amino acid naturally found in tea leaves. It is this substance that is thought to provide a relaxing and tranquilizing effect and be a great benefit to tea drinkers.

12. Green tea as a natural doctor for skincare: Green tea can apparently also help with wrinkles and the signs of aging; this is because of their antioxidant and anti-inflammatory activities. Both animal and human studies have demonstrated that green tea applied topically can reduce sun damage.

Take Home Message
If you want to buy quality organic green tea (or green tea extract), then there is an excellent selection with thousands of customer reviews on Amazon. In order to feel better, lose weight and lower your risk of chronic diseases, then you might want to consider making green tea a regular part of your life.[9-12]

Figure-5: Black tea

(c) Black tea is a type of tea that is more oxidized than oolong, green and white teas. Black tea is generally stronger in flavor than the less oxidized teas. All four types are made from leaves of the shrub (or small tree) Camellia sinensis. Two principal varieties of the species are used – the small-leaved Chinese variety plant (C. sinensis subsp. sinensis), used for most other types of teas, and the large-leaved Assamese plant (C. sinensis subsp. assamica), which was traditionally mainly used for black tea, although in recent years some green and white have been produced.[13-17]
Below are 11 health benefits of having a cup or two of black tea on a regular basis, though it should be noted that it is recommended that black tea should be consumed without any additives like milk or sugar to truly harness its benefits.

**Black tea benefits:**

1. **Oral Health:** Studies funded by the Tea Trade Health Research Association suggests that black tea reduces plaque formation as well as restricts bacteria growth that promotes the formation of cavities and tooth decays. Polyphenols found in black tea kill and surpass cavity-causing bacteria as well as hinder the growth of bacterial enzymes that form the sticky-like material that binds plaque to our teeth.

2. **A Better Heart:** As identified by Arab L. et al. in their 2009 research paper called “Green and black tea consumption and risk of stroke: a meta-analysis”, it is seen that regardless of people’s country of origin, individuals who consume 3 or more cups of tea had a 21% lower risk of a stroke than people who consume less than 1 cup of green or black tea per day.

3. **Antioxidants:** Black tea contains polyphenols, which are also antioxidants that help block DNA damage associated with tobacco or other toxic chemicals. These antioxidants are different from those obtained from fruits and vegetables and therefore as a regular part of our diet they can provide additional benefits towards a healthy lifestyle.

4. **Cancer Prevention:** Though a lot more research is required to confidently suggest cancer prevention techniques, some research over the years suggests that antioxidants like polyphenol and catechins in tea may help prevent some types of cancer. It has been suggested that women who drink black tea regularly have a lower chance of ovarian cancer than their counterparts.

5. **Healthy Bones:** It has also been suggested that regular tea drinkers have stronger bones and lower probability of developing arthritis due to the phytochemicals found in tea.

6. **Lower Risk of Diabetes:** Based on a research study conducted of elderly people living in the Mediterranean islands it was discovered that people that had been consuming black tea on a long-term basis on a moderate level (i.e 1-2 cups a day) had a 70% lower chance of having or developing type 2 diabetes.

7. **Stress Relief:** We all are aware and well experienced about the calming and relaxing benefits of black tea. Not only does it help slow you down after a long day, studies show that the amino acid L-Theanine found in black tea can help you relax and concentrate better. Black tea has also been shown to reduce levels of the stress hormone cortisol when consumed in moderate amounts on a regular basis. Theanine also known as L-γ-glutamylethylamide and N^2-ethyl-L-glutamine, is an amino acid analogue of the proteinogenic amino acids L-glutamate and L-glutamine and is found primarily in particular plant and fungal species. It was discovered as a constituent of green tea in 1949 and in 1950 was isolated from gyokuro leaves, which have high theanine content. Appearance of the name "theanine" without a prefix is understood to imply the L-enantiomer, which is the form found in fresh teas and in some, but not all dietary supplements. The opposite D-enantiomer has far less studied pharmacologic properties, but is present in racemic chemical preparations, and substantially in some studied theanine supplements. As an analogue of glutamate and glutamine, the theanine in common preparations (teas, enantiomer supplements, etc.) is absorbed in the small intestine after oral ingestion; its hydrolysis is to L-glutamate and ethylamine and...
occurs both in the intestine and liver. It can also cross the blood–brain barrier intact, and register pharmacological effects directly.

8. Better Immune System: Black tea contains alkylamine antigens that help boost our immune response. In addition it also contains tannins that have the ability to fight viruses and hence keep us protected from influenza, stomach flu and other such commonly found viruses in our everyday lives.

9. Healthy Digestive Tract: In addition to improving your immune system, tannins also have a therapeutic effect on gastric and intestinal illnesses and also help decrease digestive activity.

10. Increased Energy: Unlike other drinks that have relatively higher caffeine content, the low amounts found in tea can help enhance blood flow to the brain without over-stimulating the heart. It also stimulates the metabolism and respiratory system, as well as the heart and the kidneys.

11. Happiness Factor: If a perfect cup of tea makes you smile and lets your heart indulge a little, then what could possibly be the harm?

CONCLUSION

Both white and green teas come from the same tea plant, *Camellia sinensis*. White tea leaves are harvested at a younger age than green tea leaves. White tea is considered rare and is usually more expensive than green, as it can only be handpicked during a few days of early spring and has to be handled with such care. Green tea involves slightly more processing compared to white tea. White tea is steamed rapidly and then dried. While green tea is partially fermented. First it's steamed, fired and then rolled. Black tea on the other hand is fully fermented. Because white and green teas are treated gently and not overly processed, they retain most of their beneficial antioxidants. Green tea is considered rich in antioxidants. However since white tea is less processed, it retains a higher amount of antioxidants, compared to green. White tea contains the same types of antioxidants as green tea, but in greater quantity.

These antioxidants are found to have many health promoting properties including boosting cardiovascular health, helping to lower cholesterol, reducing the risk of cancer and enhancing weight loss. The caffeine component of green tea has been shown to have a positive effect on green tea's ability to help with weight loss – so choosing green over white in this instance maybe more beneficial as green tea contains slightly more caffeine. Green tea contains around 20g of caffeine, compared to white that has around 15g. In comparison, black tea contains around 45mg. White tea also tastes different to green, having a smoother, gentler, almost sweet taste. Green tea is definitely an extremely healthy addition to the diet. I think the reason more people recommend green tea over white is that it has been studied extensively; it's more common plus it's easier and cheaper to buy. However, considering white tea contains more antioxidants and less caffeine, white tea would be an even healthier choice. A tip when buying white or green tea: choose organic as the tea plant readily absorbs fluoride from pesticides.

It is said that coffee is harmful to health, unlike tea. But it's important to know why tea is beneficial to health. Black tea, for that matter, has many health benefits. Black tea (just like green tea) is plucked from a plant called *Camellia sinensis*. The leaves of black tea are steeped such that it can give a dark colour when used as a beverage. Also, the leaves are mature dry and processed such that it has a dark colour. Black tea has extremely low caffeine content, which is great for circulation. Fluoride is another content of black tea and thus allows oral and bone health. Black tea, contains flavonoids which are also found in apples. Unlike green tea, black tea, once processed eliminates all antioxidants existing in it. Black tea not only helps to fight bacteria but also strengthens the immune system. As one knows, drinking tea hydrates the body, thus a cup of black tea helps moisturise the skin. Black tea also balances the hormone levels, which fends off stress. Not only does black tea have anti-inflammatory qualities, it also keeps a check on the digestive tracts functioning. It can help reduce stroke risks as it balances the cholesterol level.
REFERENCES