

TEA, TEETH, AND A WEALTH OF HEALTH

The drinking of tea (*Camellia sinensis*) dates back nearly 5000 years to China, and is second only to water as a world beverage. There are presently over 3000 variations available with unique flavors and many health benefits. Tea can be savored like fine wines, enjoying the color, aroma, the palate, and the finish. You do not need a designated driver, the price will not be a major consideration, aging is not desirable, and there are no preservatives to cause headaches.

There are different types of tea. White and green teas are the least processed. Oolong and black tea are more fermented and have less antioxidants but are still very beneficial. White tea is light in color and slightly sweet. Green can vary from light to dark color with a wide variety of tastes and aromas. Both are considered the healthiest as they are richer in polyphenols (antioxidants) than black. All tea leaves have antioxidants which have been shown to lower cholesterol and cancer risks. Herbal tea is not really *tea* and does not provide the same benefits.

Worldwide, 75% of tea consumed is black and oolong tea. The remaining 25% is consumed as green and white tea, mainly in China, but the popularity is growing in other countries. Green tea is high in antioxidants, vitamin C, fluoride, and minerals, with about half the caffeine of black tea, and much less than coffee.

Tea and Teeth: Recent research suggests that tea may help fight bacteria that cause cavities and gum disease. All types of tea have been shown to kill or suppress growth of bacteria and to reduce the stickiness of plaque. People that rinse with tea have less plaque than those that rinse with water alone. The benefits of fluoride in prevention of cavities are well documented worldwide, with over 60 years of research involving millions of people. Tea leaves are a low but beneficial source of naturally occurring fluoride. Perhaps the combination of polyphenols and fluoride found in tea leads to the reduction and even reversal of early decay, as seen in many studies. Green and white teas have a very low potential to stain teeth.

Tea and Cancer: Tea has been shown to have polyphenols that can program cell death in many types of tumors, including oral cancer cells. Research shows some specific green tea components selectively kill only cancer cells, while others can stop the growth and invasion of cancer cells. It has been suggested that regular consumption of green tea could be beneficial in prevention of oral cancer, and other types of cancer.

The Chinese population has a very high consumption rate of green and white tea. Studies there show a low rate of gastro-intestinal cancer, and decreased lymph node metastasis of breast cancer. Animal studies have shown green tea compounds helped prevent, or aided in treatment of lung, prostate, bladder, and colon cancer, both by contact and absorption. More studies are needed but it looks favorable in reduction in many cancer types, in both smokers and non-smokers.

Generally, the lowest quality tea is found in the "tea bag" form (old, dry bits and pieces). *Stash* and *Bigelow* are in sealed bags and are not too bad for a quick, convenient cup. Bulk tea can be found locally at stores like *Mountain Valley*, or *Withey's*. It would be best to buy a screen tea-ball and try some bulk, full-leaf green tea, like Dragonwell, Gunpowder Green, Jade Ring, or Mao Feng. Do not let the water boil, fill half of the ball with tea, start with a 30 second dip and steep longer to adjust the strength and taste to your preference; usually 1-2 minutes. The same tea can be used throughout the day, which is what the Chinese often do. Enjoy a stronger, more uplifting cup in the morning and it will slowly become milder in taste and strength as you steep the tea longer through the day.