Benefits of Tea Drinking

Tea drinking is believed to have started in China about 2,000 years ago. It is the most consumed beverage in the world after water and more than coffee, beer, wine, and sodas. It ranks fourth in the United States, with the average American drinking 155 cups a year. Of the tea used worldwide, 78% is black, (common in North America and Europe); 20% is green, (Asian countries prefer); and 2% is oolong, (common in China and Taiwan).

All teas are brewed from the dried leaves of the *Camellia sinensis* bush. There are four types, depending on the level of oxidation (the chemical reactions that result in the browning of tea leaves and the production of flavor and aroma compounds in teas): white (nonoxidized buds), green (nonoxidized leaves), oolong (partially oxidized leaves), and black (oxidized leaves). Tea’s manufacturing process is designed to either allow compounds in tea leaves (polyphenols) to be oxidized naturally or prevent them from being oxidized. Green tea is made by keeping the enzymes in the leaves from causing oxidation. The make-up of tea varies with climate, growing practices, and the variety and age of the leaves.

Tea leaves contain three main components that have effects on our body: xanthic bases (caffeine and theophylline), essential oils, and polyphenolic compounds. Caffeine acts mainly on the central nervous system. Some effects of caffeine are enhanced by a chemical called theophylline, which opens up blood vessels to increase blood flow. It also has a much stronger diuretic effect (losing water) than caffeine and helps relax the smooth muscles in the lungs. Essential oils, known for aiding digestion, evaporate from tea during extended brewing time. Green tea has a higher percentage of essential oils than black tea.

Current research suggest that drinking at least two cups of freshly brewed tea on a daily basis will reduce the risk of developing some chronic diseases. Larger doses, up to four cups of a tea beverage or an average of 500 mg tea polyphenols, may help lower the effects of diabetes and cardiovascular (heart) disease, especially for lowering blood sugar and lipids (fats/cholesterols). Evidence on the protective effects of tea in cancer, arthritis, neurodegenerative diseases, and osteoporosis are starting to come out but they are not conclusive at this time.
Nevertheless, based on important findings from large observational studies, including those in older adults, tea drinking may be safely added in the primary prevention of many chronic diseases. In most studies, green tea appears to be more protective than black tea, and, in both cases, consuming freshly brewed tea compared with concentrated doses of tea polyphenols remains a safer and cheaper preventive strategy.

**Potential Health Benefits**

All of the compounds in tea are believed to offer health benefits. Although most of the research has been conducted with green tea, the overwhelming majority of tea consumed in the United States and the world is black.

**Cancer**

Extracts of tea, especially green tea, and tea polyphenols have been shown to inhibit the formation and development of tumors at different organ sites in animals and in cells studied in the laboratory, including skin, lung, esophagus, stomach, liver, small intestine, pancreas, colon, bladder, prostate, and mammary glands. Tea and tea components have been shown to inhibit cancer-causing DNA (the carrier of our genetic information) damage in a number of studies.

While there's some evidence in animals that green tea reduces cancer, there are limited data in humans, so the National Cancer Institute doesn't recommend for or against using tea for cancer risk reduction. However, epidemiologic studies have shown green tea in large amounts over time is linked to reduced cancer risk.

**Cardiovascular Disease**

Epidemiological evidence suggests that tea consumption is associated with cardiovascular benefits. Catechins present in green tea have protective effects by acting as antioxidants, antihypertensives, anti-inflammatories, and lipid-lowering agents. Consuming large quantities of green tea (up to 10 cups per day) has been found to decrease serum concentrations of total cholesterol, LDL cholesterol, and triglycerides and increase HDL cholesterol concentrations. Consuming four cups per day resulted in no change in lipid levels.

The Boston-Area Health Study found that subjects who drank one or more cups of black tea per day had about one half the risk of a heart attack compared with those who did not drink tea. More recently, a large analysis of green and black tea consumption found that people who drank three or more cups of green or black tea per day had a 21% lower risk of stroke than those consuming less than one cup per day. However, the findings from clinical trials showed inconsistent results concerning green tea effects on lipid levels, blood pressure, and coronary artery disease.

In 2006, the FDA rejected a petition from tea makers to allow tea labels to claim that green tea reduces the risk of heart disease. However, in its rejection letter, the agency stated that it had “determined that the evidence is supportive, but not conclusive, for this claim.”
Herbal teas

Many herbal teas have been shown to have positive health benefits, brewed herbal teas generally have milder effects than an herbal extract or concentrated powder or capsule that is used in studies. Therefore, the effect of a brewed herbal tea versus the more concentrated herbal supplement may not be the same.

Hibiscus Tea

Hibiscus tea has a tart flavor and red color, and is in many fruity herbal tea blends. Test-tube studies have shown that hibiscus, rich in flavonoids, has antioxidant properties, and animal studies have suggested hibiscus may help lower cholesterol and blood pressure (in part by helping to relax blood vessels).

Chamomile Tea

Chamomile is a best-selling herbal ingredient in herb tea bags. People believe the folklore that chamomile tea helps one relax and promotes sleep, but human studies showing such benefits are limited.

Mint Tea

Mint is the second top-selling herbal ingredient in herb tea bags. Peppermint is commonly found in herbal teas to promote digestive health. The relieving effects of peppermint on indigestion were similar or better than conventional therapies. Peppermint oil may also help adults and children with irritable bowel syndrome.

Elderberry Tea

Elderberries are high in flavonoids, which gives them their blue-purple color and strong antioxidant and immune-enhancing properties. The research on the immune benefits of elderberry against influenza, however, is based on elderberry extract and not the tea. So it is unclear how much tea it would take to get the same benefits.

What to do…

People should tell their health care providers what herbs and herbal teas they are using as some can affect positively or negatively the effects of certain medications. Some herbs act as anti-clogging agents, so these should be reported if you are planning surgery.

Be aware that in ready-to-drink bottled and canned tea, the catechins (antioxidants) are less active in the body due to heat processing and storage. They also contain citric acid which damages tooth enamel and added sugars or artificial sweeteners.

Information on Tea from articles in Today’s Dietitian magazine.
Cooking With Tea

Green tea is showing up in products ranging from cocktails to cookies. It gives food a savory or meaty flavor, known as umami. One company makes slow-simmered stocks and broths from meat, fish, bones, and vegetables, and tea-infused broths for drinking. Joanna Pruess, a New York City food writer and coauthor of The Tea Cookbook, uses green tea in a variety of recipes.

Add some freshly brewed green tea into fruit juices, smoothies, and vegetable soups. Compared to sugar-sweetened, calorie-laden drinks like sodas and fruit drinks, green or black teas are the better choices. They both provide zero calories, contribute needed fluids, and boost your intake of health-promoting phytochemicals.

Citrus Mint Iced Tea

**Ingredients**

- 6 Green tea bags
- 1/2 cup fresh mint leaves
- 3 oranges
- 3 lemons
- 3 limes
- 6 cups boiling water
- 1/4 cup granulated sugar
- 1 handful ice cubes

**Preparation**

In large measuring cup or teapot, place tea bags, mint leaves and orange, lemon and lime slices; cover with boiling water and steep for 10 minutes. Strain into large pitcher; add sugar and stir until dissolved. Serve over ice.

Raspberry Iced Tea

**Ingredients**

- 4 tea bags (such as Darjeeling or orange pekoe)
- 2 cups raspberries fresh or thawed
- 1/2 cup granulated sugar

**Preparation**

In large heatproof measure or bowl, steep tea in 8 cups boiling water for 4 minutes. Discard bags. Meanwhile, in large saucepan, bring raspberries, sugar and 1 cup water to boil. Reduce heat to medium-low; simmer, stirring, until raspberries break up. Add to tea; let cool to room temperature, about 30 minutes. Refrigerate until cold, about 2 hours. Strain into pitcher, pressing solids only gently so beverage remains clear. Serve with ice cubes.

Consumer-centered access for long-term care information, referrals and assessments. For information, call 382-8481, #9, ext.304