



PERK UP WITH TEA

Recent studies have associated two compounds in tea, L-theanine and caffeine, with cognitive health benefits. The amino acid L-theanine, in particular, has been shown to directly affect areas of the brain that control attention and the ability to solve complex problems. Other studies have shown that **drinking tea may improve mental clarity, mood and work performance.**

- A recent human study examined the effect of L-theanine on attention-related task performance; the results suggest L-theanine, in synergy with caffeine, plays a role in attentional processing.
- **Consuming black tea improved attention** and self-reported alertness, according to a study from the Netherlands. In this placebo-controlled human study designed to measure attention, task performance and alertness, subjects drinking tea were more accurate on an attention task and also felt more alert than subjects drinking a placebo.

Two other studies show **benefits for tiredness**, self-reported work performance, **mood and creative problem solving.**



The LEGENDARY HEALTH BENEFITS of TEA

BREWED TO PERFECTION

For Soothing Hot Tea:

- Bring fresh, cold, filtered water to a full boil in a teapot
- Use one teaspoonful of loose tea or one tea bag per cup (five to eight ounces) of water
- Pour the boiling water over the tea
- Steep for three to five minutes
- If you prefer your tea less strong, add more water after the initial steeping period

For Refreshing Iced Tea:

- For small quantities, proceed as for hot tea and pour over ice
- For large quantities, prepare a concentrate as follows*:
 - Bring one quart of fresh, cold, filtered water to a full boil in a teapot
 - Remove from heat and add 8-10 tea bags per quart of tea desired
 - Steep for three to five minutes and pour over ice cubes or into additional cold water
 - To serve, pour into tall glass filled with ice, garnish and sweeten as desired

**Note: This recipe uses 50 percent more tea than is used to make hot tea to allow for dilution by ice.*

BROUGHT TO YOU BY:



DID YOU KNOW...

Tea is the second most popular beverage in the world next to water?

Tea was discovered by accident nearly 5,000 years ago?

Tea contains naturally occurring plant compounds that may be good for your health?

The USA is the 3rd largest importer of tea in the world after Russia and Pakistan?



Tea is an ancient beverage loved by people around the world. Green tea is popular in Asian countries while black tea is the brew of choice in the US and Western Europe. That said, Green tea, once nearly impossible to find in conventional US supermarkets, is now widely available. Whether enjoyed hot or iced, tea's popularity continues to grow.

All teas come from the *Camellia sinensis* plant. The way the fresh tea leaves are processed and their length of contact with oxygen determine the resulting type of tea. Green and white teas are not oxidized; white teas are made from the youngest leaves which are quickly fired or steamed after plucking and then dried; green teas are mechanically rolled after firing or steaming prior to drying; oolong teas are partially oxidized resulting in a light green to amber brew and black teas are fully oxidized leading to a darker colored liquid.

According to legend, the custom of drinking tea began around 2737 BC, when tea leaves accidentally blew into a pot of boiling water belonging to Chinese Emperor Shen Nung. After drinking the brew, the emperor was pleasantly surprised by its flavor and restorative properties. Today, scientists are finding that early perception of tea's healthfulness may have merit. Studies conducted with both black and green tea have yielded exciting results suggesting that natural compounds in tea may help to maintain good health.

Herbal teas do not come from *Camellia sinensis*, but are infusions of leaves, roots, bark and seeds or flowers of other plants. They lack many of the unique characteristics of tea and are not linked with the research on the potential health benefits of traditional teas.



DRINK TO YOUR HEALTH

Like eating fruits, vegetables and other plant-based foods, **regular tea consumption has been shown to have significant health benefits.** The major bioactive compounds in tea, called flavonoids, are present in fruits and vegetables, but are found in especially high concentrations in tea (both decaffeinated and regular). “The many bioactive compounds in tea appear to impact virtually every cell in the body to help improve health outcomes, which is why the consensus ... is that drinking at least a cup of green, black, white or oolong tea a day can contribute significantly to the promotion of

public health,” says Jeffrey Blumberg, PhD, Professor of Nutrition Science and Policy at Tufts University. Tea flavonoids have been linked with **cardiovascular health, cancer prevention, weight management, metabolism and other health benefits.** While tea is not to be considered a substitute for fruits and vegetables, it can be a valuable addition to a healthy, well-balanced diet. In fact, research studies show that tea drinkers tend to have lower risk for cardiovascular disease, certain cancers and many other chronic diseases.

THE CANCER-FIGHTING POWER OF TEA

More than 3,000 published studies exist that evaluate the role that tea and tea compounds, such as epigallocatechin gallate (EGCG), may play in various types of cancer. The research suggests that **tea may help reduce cancer risk** in a number of different ways.

- Reducing free radical and DNA damage
- Inhibiting uncontrolled cell growth (cell proliferation) by promoting programmed cell death (apoptosis)
- Boosting the immune system to help fend off the development and promotion of cancer cells

Preliminary research suggests **tea may provide protection against various types of cancers**, including digestive, skin, lung, prostate, breast and ovarian cancers, but more evidence is needed before any definitive conclusions can be made.

While the majority of clinical and human population studies on tea and cancer are related to green tea and green tea extract, emerging research suggests that black teas provide similar benefits.

- A population-based study from Sweden found that women who drank two or more cups of green or black tea per day had a **46 percent reduced risk of ovarian cancer** compared with non-tea drinkers.
- Researchers found that tea drinkers had approximately a **42 percent reduced risk of colon cancer** compared with non-tea drinkers. Men who drank more than 1.5 cups of tea per day were found to have a **70 percent lower colon cancer risk.**
- According to a study conducted by the University of Arizona, participants who drank iced black tea and citrus peel had a **42 percent reduced risk of skin cancer.**

TAKE TEA TO HEART

According to the CDC, approximately 600,000 people die of heart disease in the US every year, making it the cause of one in every four deaths. There are many ways to help prevent the disease, including maintaining a healthy diet and regular exercise.

For years, research has suggested that **tea drinking is associated with improved cardiovascular health.** Research has associated tea drinking with a **reduced risk for hypertension, stroke and hardening of the arteries.** Other studies have shown that tea may help support healthy blood flow and circulation by improving blood vessel function and helping to control blood clotting. Recent clinical and population studies have reinforced evidence of tea’s heart health benefits.

- A new study of 19 normotensive and 19 hypertensive individuals found that **black tea was able to reduce blood pressure.** In the hypertensive patients, black tea appeared to counteract the negative effects of a high-fat meal on blood pressure and arterial blood flow.
- In a 10-year prospective study of more than 74,000 subjects, an inverse relationship was found between tea drinking and risk of stroke. Those who consumed four or more cups of tea per day had a **21 percent reduced risk of stroke compared to those who did not drink tea.**



THE SKINNY ON TEA AND WEIGHT

Obesity is a major public health concern in the US, and few strategies provide long-term success. Several studies suggest **drinking calorie-free tea may aid weight management**, helping people meet fluid requirements without the added calories of some other drink options.

Preliminary research suggests that **tea flavonoids may help increase metabolism and fat oxidation and improve blood sugar control.** Tea catechins (a type of flavonoid) may also provide modest shifts in metabolism that may promote weight loss and maintenance.

- In a meta-analysis of six tea research studies, 24-hour energy expenditure increased by 4.7 percent or 102 calories over 24 hours with a catechin-caffeine mixture. Fat oxidation increased during the same period, revealing that **tea may aid weight loss.**
- Japanese researchers found that in a 12-week, double-blind and placebo-controlled study, green tea catechins led to a reduction in body fat, blood pressure and LDL cholesterol compared to the control group. The authors suggest **green tea catechins may help prevent obesity and reduce risk for cardiovascular disease.**

THE NATURALLY “HALF-CAFF” BEVERAGE

Caffeine is a natural component of tea and is generally considered safe when consumed in moderation. Tea contains less than half the caffeine of an equal-sized serving of coffee, but enough to provide the cognitive benefits. Actual caffeine levels are dependent upon specific blends and strength of the tea brew.

AVERAGE MILLIGRAMS OF CAFFEINE PER STANDARD BEVERAGE SERVING

