

What
are the

Health Benefits of Green Tea?

—Medical News Today



Green tea, native to China and India, has been consumed and hailed for its health benefits for centuries globally, but has only recently gained popularity in the United States.

Tea is the most consumed beverage in the world behind water. However, 78 percent of the tea consumed worldwide is black and [only about 20 percent is green](#).

All types of tea, except herbal tea, are brewed from the dried leaves of the *Camellia sinensis* bush. The level of oxidation of the leaves determines the type of tea.

Green tea is made from unoxidized leaves and is one of the **less processed** types of tea. It therefore contains the **most** [antioxidants](#) and **beneficial polyphenols**.

Fast Facts on Green Tea

Here are some key points about green tea. More detail and supporting information is in the main article.

- green tea has been used in traditional Indian and Chinese medicine
- there are many different types of green tea available
- green tea may help prevent a range of ailments including cancer
- more research is needed to prove many of the health claims surrounding green tea





Green tea health benefits

Green tea is becoming increasingly popular in the U.S. Listed below are the possible health benefits associated with green tea. Green tea was used in traditional Chinese and Indian medicine to control bleeding and heal wounds, aid digestion, improve heart and [mental health](#), and regulate body temperature.

Recent studies have shown green tea can potentially have positive effects on everything from weight loss to liver disorders, [type 2 diabetes](#), and [Alzheimer's disease](#).

It is important to note that more evidence is required before these possible health benefit links are proved definitive.

1 Green Tea and Cancer Prevention

According to the National Cancer Institute, the polyphenols in tea have been shown to decrease [tumor](#) growth in laboratory and animal studies and may protect against damage caused by ultraviolet UVB radiation.

In countries where green tea consumption is high, cancer rates tend to be lower, but it is impossible to know for sure whether it is the green tea that prevents cancer in these particular populations or other lifestyle factors.

Some studies have also shown the positive impacts of green tea on the following types of cancer:

- breast
- bladder
- ovarian
- colorectal (bowel)
- esophageal (throat)
- lung
- prostate
- skin
- stomach

Researchers believe that it is the high level of polyphenols in tea that helps kill cancerous cells and stop them from growing. However, the exact mechanisms by which tea interacts with cancerous cells is unknown.

However, other studies have not found that tea can reduce cancer risk. The amount of tea required for cancer-preventive effects also varies widely in studies—from 2-10 cups per day.

In 2005, the [Food and Drug Administration \(FDA\)](#) stated, “there is no credible evidence to support qualified health claims for green tea consumption and a reduced risk of gastric, lung, colon/rectal, esophageal, pancreatic, ovarian, and combined cancers.”



2 Green Tea Heart Benefits

to all causes, including cardiovascular disease.

The study followed over 40,000 Japanese participants between the ages of 40 and 79 for 11 years, starting in 1994.

The participants who drank at least 5 cups of green tea per day had a significantly lower risk of dying (especially from cardiovascular disease) than those who drank less than one cup of tea per day.

3 Green Tea and Lower Cholesterol

An [analysis of published studies in 2011](#) found that consuming green tea, either as a beverage or in capsule form, was linked to significant but modest reductions in total and LDL or “bad” [cholesterol](#).



A 2006 study published in the [Journal of the American Medical Association](#) concluded that green tea consumption is associated with [reduced mortality](#) due

4 Stroke Risk and Green Tea

Drinking green tea or [coffee](#) on a regular basis is associated with a reduced risk of [stroke](#), according to a study published in the journal [Stroke: Journal of the American Heart Association](#).

The lead author of the study, Dr. Yoshihiro Kokubo, Ph.D., said, “This is the first large-scale study to examine the combined effects of both green tea and coffee on stroke risks. You may make a small but positive lifestyle change to help lower the risk of stroke by adding daily green tea to your diet.”





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Green Tea for Type 2 Diabetes

Studies concerning the relationship between green tea and [diabetes](#) have been inconsistent. Some have shown a lower risk of developing type 2 diabetes for green tea drinkers than for those who consumed no tea, while other studies have found no association between tea consumption and diabetes at all.

6 Green Tea and Weight Loss

Green tea may promote a small, non-significant weight loss in overweight and obese adults; however, since weight loss in the studies was so minimal, it is unlikely that green tea is clinically important for weight loss.



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Green Tea and Inflammatory Skin Diseases

A 2007 study concluded that green tea could hold promise as a [new treatment for skin disorders](#) such as [psoriasis](#) and [dandruff](#). Researchers studied an animal model for inflammatory skin diseases, often characterized by patches of dry, red, flaky skin caused by the [inflammation](#) and overproduction of skin cells. Those treated with green tea showed slower growth of skin cells and the presence of a gene that regulates the cells' life cycles.



8 Working memory and the effects of green tea

Research published in the journal [Psychopharmacology](#) suggests that green tea can enhance our brain's cognitive functions, particularly the working memory.

The research team said their findings suggest that green tea could be promising in the treatment of cognitive impairments associated with neuropsychiatric disorders, such as [dementia](#).

9 Green Tea and Alzheimer's

In a study published in 2011, researchers [tested the effect of a component of green tea](#), CAGTE (or "colon available" green tea extract), after it had been digested, to see how it affected a key protein in Alzheimer's disease.

The Alzheimer's Society commented that "this study adds to previous research that suggests green tea might help to reduce the risk of Alzheimer's disease. However, the researchers used a far higher dose of the active green tea chemical than would ever be found in the human body. More research is needed to see whether green tea is protective at a much lower dose, and to understand the mechanism involved."

Other studies have found that green tea might be helpful in preventing dental cavities, [stress](#), chronic [fatigue](#), treating skin conditions, and improving [arthritis](#) by reducing inflammation.

Further research is needed to firm up these theories.



Nutritional Breakdown of Green Tea

Unsweetened brewed green tea is a zero calorie beverage. The caffeine contained in a cup of tea can vary according to the length of infusing time and the amount of tea infused. In general, green tea contains a relatively small amount of **caffeine** (approximately 20–45 milligrams per 8 ounce cup), compared with black tea, which contains about 50 milligrams and coffee with 95 milligrams per cup.

Green tea is considered one of the world's healthiest drinks and contains one of the highest amounts of **antioxidants** of any tea. Natural chemicals called **polyphenols** in tea are what are thought to provide its **anti-inflammatory** and **anti-carcinogenic** effects. Green tea is approximately 20–45 percent polyphenols by weight, of which 60–80 percent are **catechins** such as **EGCG**. Catechins are antioxidants that are said to help prevent cell damage.

Types of Green Tea

Green tea is available bottled and sweetened with sugar or an artificial sweetener, in single tea bags, loose-leaf, and in instant-powder.

Green tea is available in many types, including:

- bottled and sweetened with sugar or an artificial sweetener
- in single tea bags
- as loose-leaf
- in instant-powder
- green tea supplements, which are sold in capsule form or liquid extracts

According to 2010 research presented at the [American Chemical Society](#), bottled teas are not equivalent to brewed teas as some 16 ounce bottled teas can contain fewer polyphenols than one cup of brewed tea.

