

Green Tea

This fact sheet provides basic information about green tea—common names, uses, potential side effects, and resources for more information. All types of tea (green, black, and oolong) are produced from the *Camellia sinensis* plant using different methods. Fresh leaves from the *Camellia sinensis* plant are steamed to produce green tea.

Common Names—green tea, Chinese tea, Japanese tea

Latin Name—*Camellia sinensis*

What It Is Used For

- Green tea and green tea extracts, such as its component EGCG, have been used to prevent and treat a variety of cancers, including breast, stomach, and skin cancers.
- Green tea and green tea extracts have also been used for improving mental alertness, aiding in weight loss, lowering cholesterol levels, and protecting skin from sun damage.

How It Is Used

Green tea is usually brewed and drunk as a beverage. Green tea extracts can be taken in capsules and are sometimes used in skin products.

What the Science Says

- Laboratory studies suggest that green tea may help protect against or slow the growth of certain cancers, but studies in people have shown mixed results.
- Some evidence suggests that the use of green tea preparations improves mental alertness, most likely because of its caffeine content. There are not enough reliable data to determine whether green tea can aid in weight loss, lower blood cholesterol levels, or protect the skin from sun damage.
- NCCAM is supporting studies to learn more about the components in green tea and their effects on conditions such as cancer, diabetes, and heart disease.

Side Effects and Cautions

- Green tea is safe for most adults when used in moderate amounts.
- There have been some case reports of liver problems in people taking concentrated green tea extracts. This problem does not seem to be connected with green tea infusions or beverages. Although these cases are very rare and the evidence is not definitive, experts suggest that

concentrated green tea extracts be taken with food, and that people should discontinue use and consult a health care practitioner if they have a liver disorder or develop symptoms of liver trouble, such as abdominal pain, dark urine, or jaundice.

- Green tea and green tea extracts contain caffeine. Caffeine can cause insomnia, anxiety, irritability, upset stomach, nausea, diarrhea, or frequent urination in some people.
- Green tea contains small amounts of vitamin K, which can make anticoagulant drugs, such as warfarin, less effective.
- Tell your health care providers about any complementary and alternative practices you use. Give them a full picture of what you do to manage your health. This will help ensure coordinated and safe care.

Sources

Sarma DN, Barrett ML, Chavez ML, et al. Safety of green tea extracts: a systematic review by the US Pharmacopeia. *Drug Safety*. 2008;31(6):469-484.

National Cancer Institute. *Tea and Cancer Prevention*. National Cancer Institute Web site. Accessed at <http://www.cancer.gov/newscenter/pressreleases/tea> on July 11, 2007.

Green tea. Natural Medicines Comprehensive Database Web site. Accessed at <http://www.naturaldatabase.com> on July 3, 2007.

Green tea (*Camellia sinensis*). Natural Standard Database Web site. Accessed at <http://www.naturalstandard.com> on July 3, 2007.

For More Information

Visit the NCCAM Web site at nccam.nih.gov and view:

- *What's in the Bottle? An Introduction to Dietary Supplements* at nccam.nih.gov/health/bottle/
- *Herbal Supplements: Consider Safety, Too* at nccam.nih.gov/health/supplement-safety/

NCCAM Clearinghouse

Toll-free in the U.S.: 1-888-644-6226

TTY (for deaf and hard-of-hearing callers): 1-866-464-3615

E-mail: info@nccam.nih.gov

CAM on PubMed

Web site: nccam.nih.gov/camonpubmed/

NIH Office of Dietary Supplements

Web site: www.ods.od.nih.gov

NIH National Library of Medicine's MedlinePlus

Green Tea Listing: www.nlm.nih.gov/medlineplus/druginfo/natural/patient-green_tea.html

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