herbs at a glance

Green Tea

This fact sheet provides basic information about green tea—common names, what the science says, potential side effects and cautions, and resources for more information.

Common Names—green tea, Chinese tea, Japanese tea

Latin Name—Camellia sinensis

All types of tea (green, black, and oolong) are produced from the *Camellia sinensis* plant using different methods. Fresh leaves from the plant are steamed to produce green tea. Green tea and green tea extracts, such as its component EGCG, have traditionally been used to prevent and treat a variety of cancers, including breast, stomach, and skin cancers, and for mental alertness, weight loss, lowering cholesterol levels, and protecting skin from sun damage.

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 supports studies to learn more about the components in green tea and their effects on conditions such as cancer, diabetes, and heart disease



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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. The problems do 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 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 all your health care providers about any complementary health practices you use. Give them a full picture of what you do to manage your health. This will help ensure coordinated and safe care. For tips about talking with your health care providers about complementary and alternative medicine, see NCCAM's Time to Talk campaign at nccam.nih.gov/timetotalk/.

Sources

Green tea. Natural Medicines Comprehensive Database Web site. Accessed at www.naturaldatabase.com on July 8, 2009.

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National Cancer Institute. Tea and Cancer Prevention. Strengths and Limits of the Evidence. National Cancer Institute Web site. Accessed at www.cancer.gov/cancertopics/factsheet/prevention/tea on June 3, 2010.

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

For More Information

Visit the NCCAM Web site at nccam.nih.gov and view Using Dietary Supplements Wisely (nccam.nih.gov/health/supplements/wiseuse.htm).

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

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Web site: www.ncbi.nlm.nih.gov/sites/entrez

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/960.html

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