Tea for Your Health

Tea and Health Scientific Research

Following is a small sample of the hundreds of scientific studies published in recent years about the health benefits of tea.

September 2006

Lower Mortality Among Japanese Green Tea Drinkers

A study in the Sept. 13th *Journal of the American Medical Association* found lower mortality rates among green tea drinkers. The study, by the Tohoku University School of Public Policy in Japan, followed 40,530 Japanese adults ages 40 to 79 years with no history of stroke, coronary heart disease or cancer at baseline in 1994. Participants were followed for up to 11 years for death from all causes and for up to seven years for death from a specific cause. Participants who consumed five or more cups of tea per day had a 16 percent lower risk of mortality from all causes and a 26 percent lower risk of death due to cardiovascular disease than participants who consumed less than one cup of tea per day.

July 2006

Black Tea Determined to Have a Positive Effect on Health

In "Black tea – helpful or harmful? A review of the evidence" published in the July 19th *European Journal of Clinical Nutrition* researchers examined relevant epidemiological and clinical studies published between 1990 and 2004. They concluded that black tea generally had a positive effect on health, and consumption of more than three cups of black tea a day was associated with risk reductions for coronary heart disease. As well, they found that a daily intake of one to six cups of tea led to improved antioxidant status.

March 2006

Tea a Top Beverage Choice For a Healthy Diet

According to The Daily Healthy Beverage Guidelines, published in the March 2006 issue of the *Journal of American Clinical Nutrition*, tea is one of the best beverage choices for a healthy diet. Developed by a panel of nutrition experts, the Guidelines are intended to help consumers make smart decisions about beverage consumption based on the relative health and nutritional benefits and risks of various types of beverages. Under the guidelines, unsweetened tea is rated second only to water as a beverage choice and individuals can drink up to eight servings of tea a day as part of a healthy diet.

December 2005

Tea Consumption May Reduce Ovarian Cancer Risk

A major Swedish population study, published in *Archives of Internal Medicine*, found that women who drank tea were far less likely to develop ovarian cancer than those who did not consume tea. Researchers examined the correlation between drinking tea and the risk of ovarian cancer in 61,057 women aged 40 to 76, who were participants in the population-based Swedish Mammography Cohort. During the 15 years of follow up, researchers found a 46 percent lower risk of ovarian cancer among the women who drank two or more cups of tea daily compared to those who drank none. Researchers also found that each additional cup of tea consumed per day was associated with an additional 18 percent lower risk of ovarian cancer.

Green Tea May Improve the Lives of Chronic Leukaemia Patients

Patients with chronic leukaemia experienced an improvement in their condition after taking the green tea extract epigallocatechin gallate, in a small study by researchers at the Mayo Clinic. In the study, published in the December issue of the journal *Leukemia Research*, three out of a group of four patients experienced an improvement in their condition after taking the extract. In an earlier study published in 2004 in the journal *Blood,* the Mayo research team found that in test-tube experiments the green tea extract killed leukaemia cells from patients by interrupting the communication signal the cells require to survive.

March 2005

Green Tea Consumption Effective at Improving Overall Antioxidative Status

Green tea, consumed as part of a balanced controlled diet, can improve the overall antioxidative status and protect against oxidative damage in humans, according to a study published in the March issue of the *Journal of Nutritional Biochemistry*. Researchers measured the effect of the adding two cups of green tea to a controlled diet in a group of healthy volunteers compared to a similar group who followed the same diet but without green tea. After 42 days, the group consuming green tea had a significant increase in their plasma total antioxidant activity, significant decreases in plasma peroxides levels and induced DNA oxidative damage in lymphocytes, as well as a moderate although significant decrease in LDL cholesterol compared to the control group.

July 2004

Habitual Tea Consumption Reduces the Risk of Developing Hypertension

A study published in the July 26th issue of *Archives of Internal Medicine* found that habitual consumption of moderate strength green or oolong tea for one year reduced the risk of developing hypertension. The authors of the study examined the effect of drinking tea on the risk of developing hypertension in 1507 subjects without a history of hypertension. They found that the risk of developing hypertension decreased by 46 percent for the 600 subjects in the study who consumer 120 ml or more of tea per day for at least a year.

October 2003

Black Tea Consumption Improves Indicators of Heart Health

Consuming five servings of black tea per day reduced "bad" LDL cholesterol by 11.1 percent and total cholesterol by 6.5 percent in mildly hypercholesterolemic adults, in a research study published in a supplement to the October issue of the *Journal of Nutrition.*
Researchers at the United States Department of Agriculture Beltsville Human Nutrition Research Center studied the effect of five six-ounce servings per day of either black tea, a caffeine-free placebo or caffeinated placebo beverage in 15 mildly hypercholesterolemic adults for three weeks. Researchers examined participants' lipid profiles, including total cholesterol, LDL cholesterol, as well as two emerging biomarkers for cardiovascular health Apolipoprotein B (ApoB) and Lipoprotein(a) [Lp(a)]. In addition to cholesterol improvements, researchers found that in the group who consumed black tea, levels of ApoB decreased by 5 percent and levels of Lp(a) fell by 16.4 percent.

Green Tea Reduces Oxidative Damage that Could Lead to Cancer

In a study published in a supplement to the October issue of the *Journal of Nutrition*, scientists at the Arizona College of Public Health, University of Arizona and Arizona Cancer Center found that drinking four eight-ounce servings of green tea a day decreased the risk of DNA damage caused by smoking. For the study, 143 heavy smokers consumed four eight-ounce servings per day of either decaffeinated green tea, decaffeinated black tea or water for four months. Levels of 8-OHdG, an indicator of oxidative DNA damage, dropped by a significant 31 percent after four months for those in the green tea group, but not in the other two groups. Oxidative DNA damage is implicated as a contributor to cancer development as well as cardiovascular disease. Smokers were selected as participants due to the high levels of oxidative DNA damage cigarette smoking causes, making changes in those levels easy to detect. Researchers believe that the process of decaffeination affects black tea much more than green tea, and the black tea may have been weakened because many of the flavonoids had been removed.

May 2002

Tea May Help Prevent Ischemic Heart Disease

An increased intake of tea and flavonoids may contribute to the primary prevention of ischemic heart disease, concluded Dutch researchers following a longitudinal study of 4807 Dutch citizens. In the study, researchers followed the participants, men and women aged 55 years and older with no history of myocardial infraction, for 5.6 years. The diet of participants was assessed at the beginning of the study with a validated semiquantitative food-frequency questionnaire. At the end of the study, results of which were published in the May issue of the *American Journal of Clinical Nutrition*, 146 myocardial infractions occurred, of which 30 were fatal. Among the tea drinkers with a daily intake of more than 375 ml of tea the relative risk of incident myocardial infraction was lower than in non-tea drinkers. The inverse association with tea drinking was stronger for fatal events than for nonfatal events.

July 2001

Tea Reverses Endothelial Vasomotor Dysfunction in Patients with Coronary Artery Disease

According to a study published in the July issue of the journal *Circulation*, both long and short-term tea consumption reverses endothelial vasomotor dysfunction in patients with coronary disease. In the randomized control study, researchers had 66 patients with proven coronary artery disease consume either black tea or water. Researchers examined the short-term effects two hours after patients consumed 450 ml of tea or water, and the long-term effects of patients consuming 900 ml of either tea or water daily for four weeks. They found that both short-term and long-term tea consumption improved endothelium-dependent flow-mediated dilation of the brachial artery, while water consumption had no effect.

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