Tea in Health

Is it possible to heal your mind body and soul using tea? Recent research in the medical field suggests it is possible.

Research with Tea

Systematic review of associations between black tea consumption and health

Gardner EJ1, Ruxton CHS2, Leeds AR3 Abstract

This article was given to us by the Tea Council
http://www.tea4health.com/showabstract.php?search=&id=492

Objective: To review associations between consumption of black tea and adult health.
Design: Databases were searched for epidemiological, case control and clinical studies from

January 1990 until September 2004.

Results: Clear evidence was found for coronary heart disease, where black tea consumption was associated with risk reduction. Possible mechanisms relate to tea flavonoids, whose activity appears to be unaffected by the addition of milk. While experimental models suggest that flavonoids attenuate cancer risk, epidemiological studies often demonstrated no relationship. The best evidence was for colon-rectal cancer, where relationships with tea consumption were either inverse or neutral. Results for effects of tea on mood, cognitive performance, dental caries and bone health were not firm enough to form conclusions, although effects were generally positive, rather than negative. Many studies were limited by lack of standardization in tea preparation, low levels of intake and inadequate control of confounders.

Conclusions: For coronary heart disease, long-term consumption of black tea seemed to be protective at 3 to 4 cups per day. More evidence is needed before conclusions can be made with confidence about other health issues. There is no credible evidence that black tea consumption is harmful, indeed moderate caffeine intakes from tea or other sources may improve mental performance. Hydration seems to be satisfactory when the caffeine content of a single tea drink is less than 250mg. It is concluded that black tea, drunk with or without milk, can make an important contribution to a health-promoting diet.

Oolong tea increases plasma adiponectin levels and low-density lipoprotein particle size in patients with coronary artery disease

Research by Shimada K, Kawarabayashi T, Tanaka A, Fukuda D, Nakamura Y, Yoshiyama M, Takeuchi K, Sawaki T, Hosod, has shown that Oolong tea may have beneficial effects on the progression of atherosclerosis in patients with CAD. The research procedure follows: Background: Oolong tea has been studied for its effect on cardiovascular disease and obesity. Plasma adiponectin levels are reduced in obesity, in patients with type 2 diabetes mellitus and in coronary artery disease (CAD). Objective: To investigate prospectively, whether intake of Oolong tea influences plasma adiponectin levels, low-density lipoprotein (LDL) particle size, total cholesterol, high-density lipoprotein (HDL) cholesterol, LDL cholesterol, serum triglyceride and plasma glucose levels in patients with CAD. Methods: Twenty two patients in our study consumed Oolong tea (1000ml) or water for 1 month in our randomized cross-over study design. Results: There was a significant difference in plasma

adiponectin levels before and after 1 month intake of Oolong tea (ìg/ml versus ìg/ml,), and in plasma level LDL particle size (nm versus nm,). The water-consuming control group showed no changes (ìg/ml versus ìg/ml) in adiponectin levels or LDL particle sizes (nm versus nm). We also observed a significant difference in hemoglobin A1C levels (% versus %,) before and after intake of Oolong tea.

References

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http://www.teahealth.co.uk/th/newth/research/latestresearchdata.php?id=469

Green tea and tea polyphenols in cancer prevention

The cancer-preventive effects of green tea and its main constituent (-)-epigallocatechin gallate [(-)-EGCG] are widely supported by results from epidemiological, cell culture, animal and clinical studies in the recent decade. In vitro cell culture studies show that tea polyphenols potently induce apoptotic cell death and cell cycle arrest in tumor cells but not in their normal cell counterparts. Green tea polyphenols affect several signal transduction pathways, including growth factor-mediated, the mitogen-activated protein kinase (MAPK)-dependent, and ubiquitin/proteasome degradation pathways. Epidemiological studies have suggested that the consumption of green tea lowers the risk of cancer. Various animal studies have revealed that treatment by green tea inhibits tumor incidence and multiplicity in different organ sites such as skin, lung, liver, stomach, mammary gland and colon. Phase I and II clinical trials were carried out recently to explore the anticancer effects of green tea in patients with cancer. At this time, more mechanistic research, animal studies, and clinical trials are necessary to further evaluate the role of green tea in cancer prevention.

References
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Antioxidants of the Beverage Tea in Promotion of Human Health

Research conducted in recent years reveals that both black and green tea has very similar beneficial attributes in lowering the risk of human diseases, including several types of cancer and heart diseases. Evidence is so overwhelming that the Chemoprevention Branch the National Cancer Institute has initiated a plan for developing tea compounds as cancer chemo-preventive agents in human trials. This research was preformed by Siddiqui, IA; Afaq, F; Adhami, VM; Ahmad, N; and Mukhtar, H, at the Uinversity of Wisconsin, Department of Dermatology.

References
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http://www.teahealth.co.uk/th/newth/research/latestresearchdata.php?id=467

Green and Black Teas Inhibit Atherosclerosis by Lipid, Antioxidant, and Fibrinolytic Mechanisms

Research preformed by Vinson, JA; Teufel, K; and Wu, N, of the University Of Scranton, Dept of Chemistry, on Green and Black Teas Inhibit Atheroscierosis by Lipid, Antioxidant, and Fibrinolytic Mechanisms confirmed human intervention and epidemiology studies and providing mechanisms for tea benefits. Both teas were equally effective in inhibiting atherosclerosis with the lower dose decreasing it 26-46% and the high dose decreasing it 48-63%. Atherosclerosis was inhibited by three mechanisms: hypolipemic, antioxidant, and antifibrinolytic.

There was a significant correlation between atherosclerosis and the three mechanisms. In the norm animals, teas also caused some improvement in plasma low density Lipoprotein (LDL). LDL/high density Lipoprotein lipid peroxides, and fibrinogen. Isolated lower density lipoprotein oxidizability was also reduced in all groups.

References

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Protective Effect of Green Tea against Prostate Cancer: A Case-control Study in Southeast China

Research preformed by Jian, L; Xie, LP; Lee, AH; and Binns, CW at Curtin University of Technology the School of Public health, in Perth, WA, Australia suggested that green tea is a protective against prostate cancer. The risk of prostate cancer for tea consumption was assessed using multivariate logistic regression adjusting for age, locality, education, income, body mass index, physical activity, alcohol consumption, tobacco smoking, total fat intake, marital status, age at marriage, number of children, history of vasectomy and family history of prostate cancer. Among the cases, 55.4% were tea drinkers compared to 79.9% for the controls. Almost all the tea consumed was green. The prostate cancer risk declined with increasing frequency, duration and quantity of green tea consumption. The adjusted odds ratio, relative to non-tea drinkers, were 0.28 for tea drinking, 0.12 for drinking tea over 40 years, 0.09 for those consuming more than 1.5 kg of tea leaves yearly, and 0.27 for those drinking more than 3 cups of tea daily.

References

Given by the Tea Council
http://www.teahealth.co.uk/th/newth/research/latestresearchdata.php?id=459

Black Tea Increases Coronary Flow Velocity Reserve in Healthy Male Subjects

Research preformed by Hirata, K; Shimada, K; Watanabe, H; Otsuka, R; Tokai, K; Yoshiyama, M; Homma, S, and Yoshikawa, J at Columbia University, College of Physicians & Surgeons, Department of Medicine, Division of Cardiology, New York, New York, USA confirmed that acute black tea consumption improves coronary vessel function, as determined by the coronary flow velocity reserve. The research included a double-blind crossover study of 10 healthy male volunteers conducted to compare the effects of black tea and caffeine on coronary circulation. The coronary flow velocity of the left anterior descending coronary artery was measured at baseline and at hyperemia during adenosine triphosphate infusion by transthoracic Doppler echocardiography (TTDE) to determine the coronary flow velocity reserve (CFVR). Two-way analysis of variance showed a significant effect and interaction in CVFR before and after beverage consumption in group black tea. CFVR significantly increased after beverage consumption in black tea. The CFVR ratio of group black tea was larger than that of group caffeine.

References

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