

## Green Tea And The 'Asian Paradox'

ScienceDaily (Jun. 6, 2006) — There is a lower incidence of cardiovascular disease and cancer in Asia where people smoke heavily, which may be accounted for by high consumption of tea, particularly green tea, according to a review article published by a Yale School of Medicine researcher.

"We do not yet have a full explanation for the 'Asian paradox,' which refers to the very low incidence of both heart disease and cancer in Asia, even though consumption of cigarettes is greater than in most other countries," said Bauer Sumpio, M.D., professor and Chief of Vascular Surgery in the Department of Surgery. "But we now have some theories."

Sumpio, the lead author of the review in the *Journal of the American College of Surgeons*, said he and his colleagues reviewed more than 100 experimental and clinical studies about green tea in writing the article.

He said one theory is that the average 1.2 liters of green tea consumed daily by many people in Asia offers the anti-oxidant protective effects of the polyphenolic EGCG. EGCG may prevent LDL oxidation, which has been shown to play a key role in the pathophysiology of arteriosclerosis. EGCG also reduces the amount of platelet aggregation, regulates lipids, and promotes proliferation and migration of smooth muscle cells, which are all factors in reducing cardiovascular disease, he said.

Sumpio said other reports show that EGCG prevents growth of certain tumors. Tea, according to studies, also can improve gastrointestinal function, alcohol metabolism, kidney, liver and pancreatic function, protect skin and eyes and alleviate arthritis. Tea has been used in managing and preventing allergies, diabetes, bacterial and viral infections, cavities, reduce or cure diseases with an inflammatory component and improve neurologic and psychological health.

"More studies are necessary to fully elucidate and better understand green tea's method of action, particularly at the cellular level," Sumpio said. "The evidence is strong that green tea consumption is a useful dietary habit to lower the risk for, as well as treat, a number of chronic diseases. Certainly, however, smoking cessation is the best way to prevent cardiovascular disease and cancer."

Reference: *Journal of the American College of Surgeons* 202: 813-825 (May 2006)

*Adapted from materials provided by [Yale University](#).*