Coffee May Reduce Prostate Cancer Risk

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May 23, 2011 — Regular coffee consumption is associated with a striking decrease in fatal or metastatic prostate cancer, according to an [analysis of long-term data](#) from the Health Professionals Follow-up Study.

Kathryn M. Wilson, ScD, with the Department of Epidemiology at the Harvard School of Public Health, Boston, Massachusetts, and colleagues led the new study, reported online May 17 in the *Journal of the National Cancer Institute*.

According to the researchers, coffee contains "diverse biologically active compounds that include caffeine, minerals, and phytochemicals." They add that many studies suggest that long-term coffee drinking may be linked to improved glucose metabolism and insulin secretion.

Using data from the prospective Health Professionals Follow-up Study, the researchers analyzed information from 47,911 men who reported intake of regular and decaffeinated coffee first in 1986 and were observed every 4 years thereafter.

From 1986 to 2006, there were 5035 of the 47,911 men who had developed prostate cancer; of those, 642 patients had so-called lethal prostate cancers, defined as fatal or metastatic. The study participants overall consumed an average of 1.9 cups of coffee per day.

Among men drinking at least 6 cups per day, the adjusted risk for overall prostate cancer was 18% lower vs that in nondrinkers (relative risk [RR], 0.82; 95% confidence interval [CI], 0.68 - 0.98; *P* linear trend = .10).

Notably, the risk was decreased by approximately 60% in this group vs nondrinkers (RR, 0.40; 95% CI, 0.22 - 0.75; *P* trend = .03) when only lethal forms of prostate cancer were considered.

The researchers also found that coffee consumption did not appear to be associated with a decreased risk for nonadvanced or low-grade cancers and only slightly correlated with a reduced risk for high-grade cancer.

However, both caffeinated and decaffeinated coffee appeared to decrease the risk for lethal prostate cancer. For each cup, the risk declined by approximately 6% for regular coffee (RR, 0.94; 95% CI, 0.88 - 1.01; *P* = .08) and by roughly 9% for decaffeinated coffee (RR, 0.91; 95% CI, 0.83 - 1.00; *P* = .05).

Men drinking at least 6 cups a day had an age-adjusted incidence of only 425 prostate cancers per 100,000 person-years vs 529 in those not consuming coffee. Likewise, the incidence of lethal

prostate cancers was 34 vs 79 per 100,000 person-years in those drinking at least 6 cups vs nondrinkers, respectively.

"It is premature to recommend that men increase coffee intake to reduce advanced prostate cancer risk based on this single study," Dr. Wilson and colleagues conclude. "In addition, the effects of coffee consumption on other aspects of health must be considered in making consumption recommendations," they add. "However, our findings are potentially important, given the lack of identified modifiable risk factors for advanced prostate cancer."

According to the researchers, coffee may provide as much as half of total antioxidant intake in many settings. Compounds in coffee that may affect cancer risk could include chlorogenic acids, which inhibit glucose absorption; quinides, the roasting products of chlorogenic acids; and lignans, phytoestrogens with potent antioxidant activity that may benefit glucose.

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