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ORIGINAL RESEARCH COMMUNICATION

Caffeinated beverage intake and the risk of heart disease mortality in the elderly: a prospective analysis[1,2]

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Background: Motivated by the possibility that caffeine could ameliorate the effect of postprandial hypotension on a high risk of coronary events and mortality in aging, we hypothesized that caffeinated beverage consumption decreases the risk of cardiovascular disease (CVD) mortality in the elderly.

Objective: The objective of the study was to use prospective cohort study data to test whether the consumption of caffeinated beverages exhibits this protective effect.

Design: Cox regression analyses were conducted for 426 CVD deaths that occurred during an 8.8-y follow-up in the prospective first National Health and Nutrition Examination Survey Epidemiologic Follow-up Study. The analysis involved 6594 participants aged 32–86 y with no history of CVD at baseline.

Results: Participants aged ≥65 y with higher caffeinated beverage intake exhibited lower relative risk of CVD and heart disease mortality than did participants with lower caffeinated beverage intake. It was a dose-response protective effect: the relative risk (95% CI) for heart disease mortality was 1.00 (referent), 0.77 (0.54, 1.10), 0.68 (0.49, 0.94), and 0.47 (0.32, 0.69) for <0.5, 0.5–2, 2–4, and ≥4 servings/d, respectively (*P* for trend = 0.003). A similar protective effect was found for caffeine intake in mg/d. The protective effective was found only in participants who were not severely hypertensive. No significant protective effect was found in participants aged <65 y or in cerebrovascular disease mortality for those aged ≥65 y.

Conclusion: Habitual intake of caffeinated beverages provided protection against the risk of heart disease mortality among elderly participants in this prospective epidemiologic analysis.

Key Words: Aging • beverages • caffeine • cardiovascular disease • coffee • heart disease • mortality risk

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