

Consumption of coffee is associated with reduced risk of death attributed to inflammatory and cardiovascular diseases in the Iowa Women's Health Study

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ABSTRACT

Background: Coffee is the major source of dietary antioxidants. The association between coffee consumption and risk of death from diseases associated with inflammatory or oxidative stress has not been studied.

Objective: We studied the relation of coffee drinking with total mortality and mortality attributed to cardiovascular disease, cancer, and other diseases with a major inflammatory component.

Design: A total of 41836 postmenopausal women aged 55-69 y at baseline were followed for 15 y. After exclusions for cardiovascular disease, cancer, diabetes, colitis, and liver cirrhosis at baseline, 27312 participants remained, resulting in 410235 person-years of follow-up and 4256 deaths. The major outcome measure was disease-specific mortality.

Results: In the fully adjusted model, similar to the relation of coffee intake to total mortality, the hazard ratio of death attributed to cardiovascular disease was 0.76 (95% CI: 0.64, 0.91) for consumption of 1-3 cups/d, 0.81 (95% CI: 0.66, 0.99) for 4-5 cups/d, and 0.87 (95% CI: 0.69, 1.09) for ≥ 6 cups/d. The hazard ratio for death from other inflammatory diseases was 0.72 (95% CI: 0.55, 0.93) for consumption of 1-3 cups/d, 0.67 (95% CI: 0.50, 0.90) for 4-5 cups/d, and 0.68 (95% CI: 0.49, 0.94) for ≥ 6 cups/d.

Conclusions: Consumption of coffee, a major source of dietary antioxidants, may inhibit inflammation and thereby reduce the risk of cardiovascular and other inflammatory diseases in postmenopausal women.