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Coffee Drinking Is Dose-Dependently Related to the Risk of Acute Coronary Events in Middle-Aged Men¹

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ABSTRACT:

Heavy coffee consumption has been associated with increased coronary heart disease (CHD) risk although many studies have not observed any relation. We studied the effect of coffee consumption, assessed with a 4-d food record, on the incidence of nonfatal acute myocardial infarction or coronary death in a cohort of 1971 men who were 42 to 60 y old and free of symptomatic CHD at baseline in 1984–1989. During a mean follow-up of 14 y, 269 participants experienced an acute coronary event. After adjustment for age, smoking, exercise ischemia, diabetes, income, and serum insulin concentration, the rate ratios (95% CIs) in daily nondrinkers and light (375 mL or less), moderate (reference level), and heavy (814 mL or more) drinkers were 0.84 (0.41–1.72), 1.22 (0.90–1.64), 1.00, and 1.43 (1.06–1.94) ... the brewing method (boiling vs. filtering) (had no) impact on the risk estimates for coffee intake. In conclusion, heavy coffee consumption increases the short-term risk of acute myocardial infarction or coronary death, independent of the brewing method or currently recognized risk factors for CHD.

BACKGROUND

In the past 40 y, a suspected association between coffee drinking and coronary heart disease (CHD) was extensively studied but the evidence remains equivocal. A study of 45,589 men followed up for 2 y concluded that caffeinated coffee, as currently consumed by men in the United States, causes no substantial increase in the risk of CHD (1). Likewise, there was no evidence of a positive association between coffee consumption and 10-y incidence of CHD in a cohort of 85,747 middle-aged U.S. women (2). Two earlier U.S. studies, however, indicated that men drinking 5 or more cups of coffee daily had a 2-fold risk of myocardial infarction (3) or CHD (4); the risk was 3-fold among those drinking 10 cups or more (3) compared with nondrinkers.

We examined the dose-response relationship of the consumption of caffeine-containing coffee with the incidence of acute myocardial infarction or death from CHD in a cohort of middle-aged eastern Finnish men initially free from symptomatic CHD.

