

Coffee, caffeine, and risk of depression among women.

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BACKGROUND: Caffeine is the world's most widely used central nervous system stimulant, with approximately 80% consumed in the form of coffee. However, studies that analyze prospectively the relationship between coffee or caffeine consumption and depression risk are scarce.

METHODS: A total of 50,739 US women (mean age, 63 years) free of depressive symptoms at baseline (in 1996) were prospectively followed up through June 1, 2006. Consumption of caffeine was measured from validated questionnaires completed from May 1, 1980, through April 1, 2004, and computed as cumulative mean consumption with a 2-year latency period applied. Clinical depression was defined as self-reported physician-diagnosed depression and antidepressant use. Relative risks of clinical depression were estimated using Cox proportional hazards regression models.

RESULTS: During 10 years of follow-up (1996-2006), 2607 incident cases of depression were identified. Compared with women consuming 1 or less cup of caffeinated coffee per week, the multivariate relative risk of depression was 0.85 (95% confidence interval, 0.75-0.95) for those consuming 2 to 3 cups per day and 0.80 (0.64-0.99; P for trend<.001) for those consuming 4 cups per day or more. Multivariate relative risk of depression was 0.80 (95% confidence interval, 0.68-0.95; P for trend=.02) for women in the highest (≥ 550 mg/d) vs lowest (<100 mg/d) of the 5 caffeine consumption categories. Decaffeinated coffee was not associated with depression risk.

CONCLUSIONS: In this large longitudinal study, we found that depression risk decreases with increasing caffeinated coffee consumption. Further investigations are needed to confirm this finding and to determine whether usual caffeinated coffee consumption can contribute to depression prevention.

Major Subject Heading(s)	Minor Subject Heading(s)	CAS Registry / EC Numbers
Coffee	Adult Aged Caffeine [administration & dosage] Central Nervous System Stimulants [administration & dosage] Depression [etiology] Depressive Disorder [etiology] Female Follow-Up Studies Humans Middle Aged Prospective Studies Risk	0 (Central Nervous System Stimulants) 0 (Coffee) 58-08-2 (Caffeine)

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