Abstract Title: Greater Consumption of Coffee is Associated with Reduced Odds of Multiple Sclerosis

Press Release Title: Can Coffee Reduce Your Risk of MS?

Objective: We sought to determine if coffee consumption is associated with MS risk

Author(s): Ellen Mowry, Anna K. Hedstrom, Milena A. Gianfrancesco, Xiaorong Shao, Catherine A. Schaefer, Lisa Barcellos, Tomas Olsson, Lars Alfredsson

Background: Previous studies on caffeine consumption and MS risk have been inconclusive. Caffeine intake has been associated with reduced odds of Parkinson’s and Alzheimer’s diseases and thus may be neuroprotective.

Design/Methods: Using two population-based case-control studies (a Swedish study of 1,629 incident cases and 2,807 controls, and a Kaiser Permanente Northern California (United States) study of 584 prevalent cases and 581 controls), the association of coffee consumption prior to disease onset with the odds of MS was evaluated in multivariate unconditional logistic regression models, adjusted for potential confounding factors, including (but not limited to) age, sex, smoking, body mass index and sun exposure habits.

Results: In the Swedish cohort, coffee consumption was associated with reduced odds of MS compared to subjects who reported no coffee consumption. Consuming at least 6 cups of coffee daily during the index year was associated with an adjusted odds ratio (OR) for MS of 0.67 (95% CI 0.47-0.95). The corresponding ORs for those who reported high coffee consumption 5 or 10 years before the index year were 0.70 (95% CI 0.50-0.99) and 0.72 (95% CI 0.48-1.06). In the Kaiser Permanente Northern California study, among those who consumed 4 our more cups of coffee daily prior to the index year, the OR for MS was also 0.67 (95% CI 0.47-0.95).

Conclusions: High coffee consumption is associated with reduced odds of MS. Caffeine has neuroprotective properties and seems to suppress the production of proinflammatory cytokines, which may be mechanisms that explain the observed association.

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