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Abstract Title: Sweetened beverages, coffee and tea in relation to depression among older US adults

Press Release Title: Hold the Diet Soda? Sweetened Drinks Linked to Depression, Coffee May Lower Risk

Objective: To prospectively evaluate consumptions of sweetened beverages, coffee and tea in relation to depression among older US adults.

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Background: Sweetened beverages, coffee and tea are commonly consumed worldwide and have important physical and mental health consequences.

Design/Methods: We prospectively evaluated consumptions of these beverages, in relation to depression among 263,925 older US adults. Beverage consumptions were assessed in 1995-1996, and 11,311 depression diagnoses since 2000 were self-reported in 2004-2006. Odds ratios (OR) and 95% confidence intervals (CI) were derived from multivariate logistic regressions.

Results: Drinking sweetened beverages was associated with higher depression risk, whereas coffee drinking was weakly related to lower risk. The OR and 95% CI comparing ≥4 cans/cups per day with none were 1.30 (1.17–1.44) for soft drinks, 1.38 (1.15-1.65) for fruit punches and 0.91 (0.84-0.98) for coffee (all P for trend < 0.0001). Further analysis seemed to suggest stronger associations with diet drinks than with regular. The ORs between extreme categories were 1.31 (1.16-1.47) for diet versus 1.22 (1.03-1.45) for regular soft drinks, 1.51 (1.18-1.92) for diet versus 1.08 (0.79-1.46) for regular fruit punches and 1.25 (1.10-1.41) for diet versus 0.94 (0.83-1.08) for regular iced tea. Consistently, constituent-based analyses showed higher depression risk with aspartame intake [ORs between extreme quintiles: 1.36 (1.29-1.44)], and lower risk with caffeine intake [corresponding OR 0.83 (0.78-0.89)].

Conclusions: This large prospective study suggests that frequent consumption of diet sweetened beverages may increase depression risk among older adults, whereas coffee consumption may lower the risk.

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