

Breakfast Habits Are Associated with Mood, Sleep Quality, and Daily Food Intake in Healthy Adults (OR08-02-19)

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Objectives: Optimal eating patterns and sleep quality are key components to achieving a healthy lifestyle. Although increasing evidence illustrates associations between daily food intake and sleep quality, limited data exist with respect to whether specific eating occasions, such as breakfast consumption, are related to sleep and mood. Thus, the purpose of this study was to identify novel associations between breakfast habits, daily intake, sleep quality, and well-being in young, healthy adults.

Methods: Sixty-six healthy, young adults (age: 25.0 ± 0.6 y; BMI: 24.7 ± 0.9 kg/m²) completed the following cross-sectional study. Demographic and breakfast habits were assessed through a lifestyle questionnaire. Sleep quality was assessed via 7 day actigraphy and sleep diaries. Daily food intake was estimated using 3-day dietary recalls. Retrospective breakfast groups were identified based on whether the participant consumes breakfast 7 days/week or skips breakfast at least 1 day/week.

Results: Breakfast frequency was positively correlated with perceived waking alertness ($r = 0.283$; $P < 0.03$) and negatively correlated with daily energy intake ($r = -0.339$; $P < 0.01$) and daily fat intake, (-0.383 ; $P < 0.003$). Further, breakfast frequency and tended to be positively correlated with perceived sleep quality ($r = 0.219$; $P = 0.078$) and perceived waking mood ($r = 0.233$; $P = 0.06$). Measured sleep duration, latency, and efficiency were not associated with breakfast frequency. When comparing differences between breakfast groups, those that habitually consume breakfast exhibit better perceived sleep quality, mood upon waking, and alertness upon waking compared to those that skip breakfast (all, $P < 0.05$). In addition, daily energy intake was lower in breakfast consumers vs. those who skip breakfast (2058 ± 416 vs. 2396 ± 777 kcals, respectively; $P < 0.05$). Daily carbohydrate intake also tended to be lower in the breakfast consumers vs. those who skip breakfast ($P = 0.09$). No differences in measured sleep outcomes were detected between the groups.

Conclusions: Collectively, these findings suggest that breakfast consumption is associated with mood, sleep health, and eating habits in young, healthy adults. Long-term experimental trials are needed to assess a causal role of breakfast on sleep health, mood, and dietary patterns.

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