

# Exploring Potential Relationships Between Caffeine Intake, Mental Wellbeing, and Gastrointestinal Symptoms in College Students

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## **Purpose:**

Caffeine consumption is common among college students, with research suggesting the high prevalence of consumption to manage day-to-day life and fatigue, may also contribute to gastrointestinal symptoms. Two factors that can influence GI symptoms are diet and stress, both of which can be affected by caffeine intake. Because college represents a time of dietary, lifestyle, and stress changes, the objective of this study was to assess caffeine consumption and beliefs about caffeine in college students and the potential impact these may have on digestive health.

## **Methods:**

This cross-sectional survey was conducted at Winthrop University in Spring 2024. 103 students completed a survey assessing caffeine intake, stress levels, sleep habits, and gastrointestinal health. Data was collected using Qualtrics and analyzed using SPSS. Statistical significance was set at  $p < 0.05$ .

## **Results:**

The median age of participants was 21 years old, 76% of participants were female, and 52% lived on campus. 44% of participants reported being more likely to use caffeine to avoid eating more than they should, and 39% reported using caffeine to skip meals entirely. 58% of participants reported feeling jittery after caffeine consumption and 47% reported an irregular heartbeat and upset stomach after caffeine consumption. Interestingly, we observed a significant positive correlation between reports of feeling stressed after caffeine and being bothered by loose stools in the past week ( $p = 0.003$ ).

## **Conclusions:**

This study provides insights into how caffeine contributes to gastrointestinal and stress-related symptoms within this population. The findings suggest that while college students feel that caffeine may enhance their alertness and motivation, it may also lead to disordered eating patterns and physical discomfort. Future research should examine the relationship between caffeine intake and disordered eating habits in college students.