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Sugar craving and stress levels during different phases of menstrual cycle among university students
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Abstract

Introduction: The menstrual cycle in women is often associated with appetite control, mood, and behavioural changes due to hormonal imbalance. However, levels of sugar craving and stress during pre- and post-menstrual periods have not been thoroughly studied. This cross-sectional study aimed to compare levels of stress and sugar cravings during different phases of menstrual cycle among university students. Methods: Participants aged 19–25 years were assessed for sugar craving and stress during pre- and post-menstrual periods. They were requested to fill out the Sugar Craving Assessment Tool (SCAT) and Perceived Stress Scale (PSS-10) questionnaires on the first day of menses (the pre-menses phase) by recalling how they felt throughout the past seven days. The participants completed the same set of questionnaires again two days after their menses ended (post-menses phase) by recalling how they felt within the previous two days. Results: Ninety-three students participated in the study. Pre-menstrual SCAT score (40.0 ± 19.6) was higher than post-menstrual SCAT score (32.1 ± 19.4), $t(91)=4.82$, $p<0.001$. Mean PSS-10 score was also higher before menstruation (22.8 ± 6.2) than after menstruation (17.5 ± 6.1), $t(91)=6.26$, $p<0.001$. There was no significant difference in mean sugar craving scores of different stress categories, either during pre-menses [$F(2,90)=1.39$, $p=0.256$] or post-menses [$F(2,90)=0.89$, $p=0.415$]. Conclusion: The findings indicate that levels of sugar craving and stress were higher during pre-menstrual phase compared to post-menstrual phase in young adults. However, whether sugar cravings are linked to stress during the menstrual cycle is inconclusive and requires further investigation. © (2023). All Rights Reserved.

Author Keywords

menstrual cycle; post-menses; pre-menses; stress; sugar cravings

Index Keywords

adult, article, controlled study, cross-sectional study, female, human, human experiment, major clinical study, menstrual cycle, menstruation, Perceived Stress Scale, physiological stress, questionnaire, sweet craving, university student, young adult

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