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Letter to the Editor

Can Dietary Acid Load in Obese Adolescents Interfere with Cardiometabolic Risk, Psychological Resilience and Sleep Quality?

Pereira NRM et al. Can Dietary Acid Load Affect Obese Adolescents' Cardiometabolic Risk, Resilience, and Sleep?

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Dear Editor,
Recently, Bozbulut et al. (1) published an article entitled "The Effect of Dietary Acid Load on Cardiometabolic Risk, Psychological Resilience and Sleep Quality in Adolescents with Obesity". This study addressed the effects of dietary acid load on cardiometabolic risk factors, psychological resilience and sleep quality in adolescents with obesity. This is a highly relevant study, and the authors deserve recognition for their scientific contribution to such a current and interdisciplinary topic. The results showed that a high dietary acid load is associated with greater cardiometabolic risk, insulin resistance, lower psychological resilience and worse sleep quality. To assess dietary acid load, the researchers used a three-day food record, a widely accepted methodology for estimating food consumption. Sleep quality, in turn, was measured by the Pittsburgh Sleep Quality Questionnaire (PSQI), recognized for its accuracy and validity. Although food records are generally consistent, their use among adolescents may encounter challenges, such as underreporting or inaccuracies (2). Furthermore, we emphasize that lifestyle aspects in this age group, such as increased screen time and irregular eating patterns, can impair the circadian rhythm and, consequently, sleep quality. Given the close relationship between sleep quality, mental health, and metabolic risks, we suggest the inclusion of tools to assess chronotype, classifying adolescents as morning, intermediate, or evening types (3). The evening chronotype has been linked to lower sleep quality, poor dietary behaviors, and higher risk of cardiometabolic conditions (4).
Additionally, we recommend the use of actigraphy as an objective method for evaluating sleep parameters. Research indicates that self-reported sleep duration and actigraphy-measured sleep duration can differ by an average of about one hour (5).
Finally, we recommend the use of complementary tools that allow a more specific assessment of circadian preferences and dietary patterns in adolescents. Such approaches could enrich the study findings, deepening the understanding of the interactions between dietary acid load, metabolic risks, mental health and sleep quality in adolescents with obesity. These efforts are crucial to support more effective interventions to promote the physical and psychological health of this population.

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All authors declare that there are no conflicts of interest.

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