Poor Diet Quality During Adolescence Is Linked to Serious Health Risks

Research published in the Journal of Nutrition Education and Behavior closely measured cardiometabolic risk factors over two years

Philadelphia, December 13, 2023 – Diet quality among adolescents in the United States is among the worst across all age groups, putting young people at risk for heart attack, stroke, and diabetes, among other cardiometabolic diseases later in life. The research brief shared in the Journal of Nutrition Education and Behavior, published by Elsevier, used the Healthy Eating Index-2015 and medical testing to assess a group of youth aged 10-16 years.

This study examined data from the Translational Investigation of Growth and Everyday Routine in Kids cohort. This study measured physical activity, sleep, and overall dietary guidelines for youth living in metropolitan areas of Louisiana, which are typically medically underserved and characterized by high poverty levels, food insecurity, obesity, and related diseases. Study participants provided a baseline data set with follow-up measures two years later.

Corresponding author Amanda E. Staiano, PhD, Pennington Biomedical Research Center, Louisiana State University, explained, “Examining the data related to diet quality may help identify targets for future interventions in families, homes, and communities. Effective and timely interventions focusing on adherence to dietary guidelines are necessary for improving diet quality and reducing health risks.”

Of the 342 eligible and enrolled adolescents, the final study sample included 192 participants with complete baseline and follow-up data. At baseline and follow-up, the adolescents were asked to wear an accelerometer for at least seven days and complete two 24-hour dietary recalls for their food and
beverage intake during research visits that included body composition, blood pressure, and clinical chemistry measurements and anthropometrics.

Considering overall eating patterns, the findings showed that adolescents with poor adherence to the 2015-2020 Dietary Guidelines for Americans and associated cardiometabolic risk factors continued these same patterns over the two years of the study, suggesting that the adverse effects of a poor-quality diet had already established the health risks these teenagers will face throughout life.

Caption: This study analyzed diet quality patterns of adolescents and their risk for cardiometabolic health issues (Credit: SILVIA/stock.adobe.com).

Dr. Staiano concluded, “This study found specific dietary quality patterns associated with adolescent cardiometabolic risk factors. Promotion of nutrition knowledge is necessary, but knowledge is not consistently linked with food consumption behavior. Identifying barriers to consuming a healthful diet and investigating effective strategies to overcome these barriers may curtail future health risks.”

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Notes for editors
The article is “Adolescent Diet Quality, Cardiometabolic Risk, and Adiposity: A Prospective Cohort,” by Kathy Hu; Alyssa M. Button, PhD; Claire M. Tate; Chelsea L. Kracht, PhD; Catherine M. Champagne, PhD, RDN; and Amanda E. Staiano, PhD (https://doi.org/10.1016/j.jneb.2023.10.003). It appears in the Journal of Nutrition Education and Behavior, volume 55, issue 12 (December 2023), published by Elsevier.

The article is openly available at https://www.jneb.org/article/S1499-4046(23)00525-0/fulltext.
Full text of the article is also available to credentialed journalists upon request; contact Eileen Leahy at +1 732 238 3628 or jnebmedia@elsevier.com to obtain a copy. To schedule an interview with the author(s), please contact Amanda E. Staiano, PhD, at amanda.staiano@pbrc.edu.

An audio podcast featuring an interview with Alyssa M. Button, PhD, and Kathy Hu and other information for journalists are available at https://www.jneb.org/content/media. Excerpts from the podcast may be reproduced by the media with permission from Eileen Leahy.

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