Unhealthy beverage consumption highest among economically-vulnerable households that rely on multiple food assistance programs

Research published in the Journal of Nutrition Education and Behavior compared beverage consumption in low-income households that utilize food assistance programs

Philadelphia, July 10, 2023 – A long-standing and contentiously debated question is the extent to which US federal food assistance programs contribute to or deter healthy beverage intake. Findings of a new study in the Journal of Nutrition Education and Behavior, published by Elsevier, show that while beverage intake patterns rarely differed between mothers and young children who participated only in the Supplementation Nutrition Program for Women, Infants, and Children (WIC), only the Supplemental Nutrition Assistance Program (SNAP), or neither program, those whose households participated in both programs consumed high amounts of sugar-sweetened beverages (SSBs). Bottled water intake, which is common among communities with high distrust of tap water and can be an economic burden for low-income families, was also common among mothers participating in WIC and SNAP.

While both WIC and SNAP aim to improve families’ food security, the programs operate quite differently. WIC benefits allow the purchase of specific foods and beverages and are only available to pregnant and breast-feeding women and children through age 4. Meanwhile, SNAP benefits are available to income-qualifying households and can be used on nearly all food and non-alcoholic beverages sold at authorized retailers.

Lead author Katherine W. Bauer, PhD, associate professor in the Department of Nutritional Sciences at the University of Michigan School of Public Health, says, “Few studies have acknowledged that families
with low income commonly participate in multiple food assistance programs. Parents are constantly navigating the different requirements of these programs and working to combine benefits in ways that most benefit their families. It is increasingly important to understand how programs work together to impact the health of adults and children.

Study data were obtained from an online survey of 493 mothers with young children who had given birth at the University of Michigan hospital in Ann Arbor, Michigan. These mothers were insured by Medicaid at the time of their child's birth, indicating low household income. Mothers completed questions about their household's current participation in WIC or SNAP, their past month's intake of SSBs, their child's beverage intake, bottled water intake, and several sociodemographic characteristics.

Study results showed mothers who did not participate in either WIC or SNAP drank SSBs 4.5 times/week compared to 8.7 times/week for mothers participating in both WIC and SNAP. Although regular soda intake was low among children aged 1 to 4, children from households participating in both WIC and SNAP consumed soda approximately 5 times more frequently than those from households not participating in either program. Mothers from households participating in both programs also drank bottled water more frequently. These differences were evident even after accounting for sociodemographic differences between low-income families that do or do not participate in WIC and/or SNAP.

Dr. Bauer explains, “Participating in multiple programs increases a household’s food-specific purchasing power. Parents may use their WIC benefits to buy healthy staple foods and save their SNAP benefits for the small luxuries they can now afford, such as SSBs or bottled water. By better understanding the dietary intake of families enrolled in multiple food assistance programs, we can think about strategies that work synergistically across programs to promote food security and improve diet quality, while maintaining personal choice for participants.”
Notes for editors
The article is "Federal Food Program Participation and Beverage Intake Among Families With Low Household Income," by Roya Firoozi, MS; Heidi M. Weeks, PhD; Elizabeth Ludwig-Borczy, MPH; Michelle Clayson, MS; Matt Zawistowski, PhD; Belinda Needham, PhD; and Katherine W. Bauer, PhD (https://doi.org/10.1016/j.jneb.2023.04.003). It appears in the Journal of Nutrition Education and Behavior, volume 55, issue 7 (July 2023), published by Elsevier.

The article is openly available at https://www.jneb.org/article/S1499-4046(23)00092-1/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 Katherine W. Bauer, PhD at kwbauer@umich.edu.

An audio podcast featuring an interview with Katherine W. Bauer, PhD, 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.

About the Journal of Nutrition Education and Behavior (JNEB)
The Journal of Nutrition Education and Behavior (JNEB), the official journal of the Society for Nutrition Education and Behavior (SNEB), is a refereed, scientific periodical that serves as a resource for all professionals with an interest in nutrition education and dietary/physical activity behaviors. The purpose of JNEB is to document and disseminate original research, emerging issues, and practices relevant to nutrition education and behavior worldwide and to promote healthy, sustainable food choices. It supports the society’s efforts to disseminate innovative nutrition education strategies, and communicate information on food, nutrition, and health issues to students, professionals, policy makers, targeted audiences, and the public.

The Journal of Nutrition Education and Behavior features articles that provide new insights and useful findings related to nutrition education research, practice, and policy. The content areas of JNEB reflect the diverse interests of health, nutrition, education, Cooperative Extension, and other professionals working in areas related to nutrition education and behavior. As the Society’s official journal, JNEB also includes occasional policy statements, issue perspectives, and member communications. www.jneb.org

About Elsevier
As a global leader in information and analytics, Elsevier helps researchers and healthcare professionals advance science and improve health outcomes for the benefit of society. We do this by facilitating insights and critical decision-making for customers across the global research and health ecosystems.

In everything we publish, we uphold the highest standards of quality and integrity. We bring that same rigor to our information analytics solutions for researchers, health professionals, institutions and funders.

Elsevier employs 8,700 people worldwide. We have supported the work of our research and health partners for more than 140 years. Growing from our roots in publishing, we offer knowledge and valuable analytics that help our users make breakthroughs and drive societal progress. Digital solutions such as ScienceDirect, Scopus, SciVal, ClinicalKey and Sherpath support strategic research management, R&D performance, clinical decision support, and health education. Researchers and healthcare professionals
rely on our over 2,800 digitized journals, including *The Lancet* and *Cell*; our over 46,000+ eBook titles; and our iconic reference works, such as *Gray’s Anatomy*. With the [Elsevier Foundation](https://www.elsevier.com/about-elsevier/elsevier-foundation) and our external [Inclusion & Diversity Advisory Board](https://www.elsevier.com/about-elsevier/inclusion-and-diversity), we work in partnership with diverse stakeholders to advance [inclusion and diversity](https://www.elsevier.com/about-elsevier/inclusion-and-diversity) in science, research and healthcare in developing countries and around the world.

Elsevier is part of [RELX](https://www.relx.com), a global provider of information-based analytics and decision tools for professional and business customers. [www.elsevier.com](http://www.elsevier.com)