

Journal of
**Nutrition Education
and Behavior**
Advancing Research, Practice & Policy

**NEWS RELEASE
FOR IMMEDIATE RELEASE**

 **PODCAST INTERVIEW**
www.ineb.org/content/podcast

Media contact:

Eileen Leahy
Elsevier
+1 732 238 3628
inebmedia@elsevier.com

Increasing prosperity linked to unhealthy eating patterns in Kenyan youth

Research published in the Journal of Nutrition Education and Behavior examines changes in preadolescent eating patterns as Kenya's economic status improves

Philadelphia, May 9, 2023 – The increase in obesity in lower-middle-income countries (LMIC) is largely thought to be affected by lifestyle transition away from traditional diets toward unhealthy Western dietary patterns that follow economic development. This [study](#) in the [Journal of Nutrition Education and Behavior](#), published by Elsevier, collected data on eating and physical activity behaviors from families in two socioeconomically-different communities in Nairobi, Kenya. Researchers found that increasing prosperity is linked to unhealthy eating patterns in Kenyan preadolescents.

"Dietary habits of people in Kenya are changing from traditional staple foods toward refined grains, especially in urban environments," says lead author Noora Kanerva, PhD, Department of Food and Nutrition, University of Helsinki, Helsinki, Finland. "Signs of lifestyle transition can also be seen in physical activity where rural children were more active and engaged significantly less in playing screen games."

This in-depth study collected sociodemographic data from 149 households using questionnaires that asked about level of education, household living conditions, and ownership of assets in the house. Preadolescents' height and weight were measured and information about their diet was collected using a seven-day food frequency questionnaire with cultural-specific foods as well as locally available packaged foods such as pizza, noodles, pancakes, etc. Study participants also wore accelerometers to measure physical activity.



Caption: Availability of snacks and fast food has increased dramatically since 1990 when supermarkets began replacing local markets in Kenya (Credit: wazkkii/stock.adobe.com).

Three dietary patterns emerged from the data: snacks, fast food and meat; dairy and plant protein; and vegetables and refined grains. Consumption of food often deemed unhealthy such as snacks and fast food was more frequent among preadolescents whose families were wealthier. The largest difference was seen for sodas and juices (including both sweetened and unsweetened), consumed eight times more often among preadolescents in the highest wealth index compared with the lowest. Moderate-to-vigorous physical activity was not associated with any dietary pattern.

“Based on our observation, the dietary habits of preadolescents living in the urban environment of Nairobi, Kenya—which was upgraded to an LMIC less than 10 years ago—do not yet resemble high-income countries in which preadolescents from less wealthy families would have unhealthier diets compared with preadolescents from wealthier families,” explains Dr. Kanerva. “As LMIC are still in an early phase of their lifestyle transition, the expansion of obesity to epidemic proportions may be prevented if the correct actions are known and taken shortly.”

Researchers suggest that interventions promoting healthy lifestyles could be conducted using peer counselors and lay health educators known as Community Health Volunteers (CHV). In Kenya, the naturally occurring social network of CHVs is indigenous to the community and offers culturally relevant and effective social support. CHVs belong to community health units responsible for making weekly home visits to households within designated geographical areas. Additionally, the widespread coverage of mobile phone networks in Kenya makes Mobile Health interventions, currently being used for family planning and infectious disease management, feasible.

Notes for editors

The article is "Wealth and Sedentary Time Are Associated With Dietary Patterns Among Preadolescents in Nairobi City, Kenya," by Noora Kanerva, PhD; Lucy Joy Wachira, PhD; Noora Uusi-Ranta, MS; Esther L. Anono, BS; Hanna M. Walsh; Maijaliisa Erkkola, PhD; Sophie Ochola, PhD; Nils Swindell, PhD; Jatta Salmela, PhD; Henna Vepsäläinen, PhD; Gareth Stratton, PhD; Vincent Onywera, PhD; and Mikael Fogelholm, PhD. (<https://doi.org/10.1016/j.jneb.2023.02.001>). It appears in the *Journal of Nutrition Education and Behavior*, volume 55, issue 5 (May 2023), published by [Elsevier](#).

The article is openly available at [https://www.jneb.org/article/S1499-4046\(23\)00026-X/fulltext](https://www.jneb.org/article/S1499-4046(23)00026-X/fulltext).

Full text of the article is also available to credentialed journalists upon request; contact Eileen Leahy at +1 732 238 3628 or jnebmmedia@elsevier.com to obtain a copy. To schedule an interview with the author(s), please contact Noora Kanerva, PhD, at noora.kanerva@helsinki.fi.

An audio podcast featuring an interview with Dr. Kanerva 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](#) and our external

[Inclusion & Diversity Advisory Board](#), we work in partnership with diverse stakeholders to advance [inclusion and diversity](#) in science, research and healthcare in developing countries and around the world.

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