

Household Food Security and the Impact of School Meal Programs on Added Sugar Intake Among Youth

Somya Gupta, The University of Mississippi¹
Yunhee Chang, The University of Mississippi²

Despite enhancements in school meal standards due to the 2010 Healthy Hunger-Free Kids Act (HHFKA), the impact of participation in school meal programs on the overall diet quality of children and adolescents remains unclear (Palazzolo et al., 2025). This study examines the influence of school meal program participation on the dietary quality of school-aged children and adolescents, focusing specifically on added sugar intake beyond school settings and the impact of household food insecurity. Utilizing 2-day food intake data from recent cycles of the National Health and Nutrition Examination Survey (NHANES), we investigated the relationship between school meal consumption and added sugar intake in meals consumed outside of school.

Results indicate that foods consumed by children and adolescents outside of school had higher added sugar content than those consumed in school ($p < .001$) and were more likely to exceed the recommended added sugar limits as a percentage of total energy ($p < .001$). There is no significant evidence showing greater compensatory sugar intakes from away-from-school meals among participants in school meal programs or those from food-insecure households.

The elevated intake of added sugars in meals outside of school appears not to be associated with improved school meal standards or the food insecurity of families. These findings suggest that to effectively promote healthier eating habits among youth, school meal initiatives should be integrated with policies and programs that enhance the community food environment.

References

Palazzolo, M., Hu, Z., Ailawadi, K., & Pattabhiramaiah, A. (2025). Groceries or school cafeterias: How households respond to school nutrition mandates. *Journal of Marketing Research*, (online first). <https://doi.org/10.1177/00222437241291481>

¹ Somya Gupta (sgupta4@go.olemiss.edu), Graduate Student, Department of Nutrition and Hospitality Management

² Yunhee Chang (chang@olemiss.edu), Professor, Department of Nutrition and Hospitality Management