COVID-19 in low-income communities: Changes in food acquisition, diet, and body weight

Research Brief – March 2025

Background

In the United States, obesity and poor diet disproportionately affect individuals with low income and communities of color.[1] During the Covid 19 pandemic, shelter in place orders and school closures disrupted household routines and access to nutritious food for many such families, and contributed to higher risk for COVID 19 and associated complications.[2] In order to reduce health disparities and support healthy eating, it is important to understand how changes in food acquisition behaviors affected dietary intake.

What We Evaluated

The Nutrition Policy Institute conducted a study that:

1. Describes changes during COVID 19 closures in how and where people acquired food, dietary intake and body weight.
2. Determines if these changes in food acquisition were associated with changes in diet and body weight.

Methods

- An online, self reported survey conducted on changes in food acquisition, diet and body weight from before COVID closures (prior to March 2020) to during pandemic closures (Jan Mar 2021).
- Multinomial logistic regressions assessed associations between changes in food acquisition, dietary intake, and weight.

Participants

- 1090 low income, SNAP Ed eligible parents
  - 84% female
  - 52%Latino/a
  - 45% with high school diploma or less

For More Information

- ✓ Read the full peer-reviewed research article
- ✓ Learn more about our CFHL evaluation research
- ✓ Contact us at EvaluateSNAPEd@ucanr.edu

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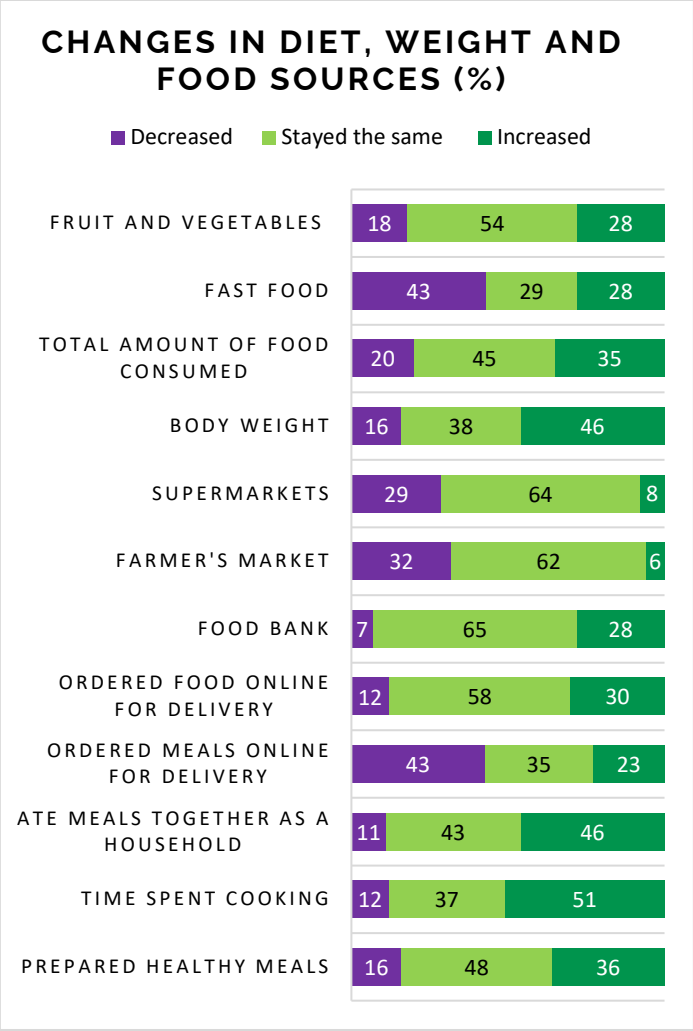
What We Found

- Dietary intake improved in some respects but, on average, overall intake and weight increased.
- Decreased supermarket and farmer's market use and in-store shopping were associated with worsened dietary intakes and, in some cases, increased weight.
- Increased food bank use was associated with increased salty snack food intake.
- Increased online food and meal ordering was associated with worsened dietary intakes and increased body weight.
- Increases in eating meals together, time spent cooking, and home preparation of healthy meals were associated with improved dietary intakes. Only increases in preparation of healthy meals were also associated with decreases in body weight.
- Increases in fruit and vegetable consumption were associated with weight loss
- Increases in sugary drinks, sweets, salty snacks and food overall were associated with weight gain.



Implications for CFHL Program Delivery and Future Research

These findings suggest that to protect health and avoid exacerbating health inequities that worsened during COVID-19 closures, nutrition programs/policies should aim to:

- Ensure access to supermarkets, grocery stores, and farmers markets. Design selection and marketing to encourage healthy choices.
- Ensure access to a selection of healthy foods in food pantries.
- Support healthy home cooking. This may involve not only education, but skills building, adequate cooking facilities and access to quality affordable healthy foods.
- Investigate and take action to reduce the potential negative impacts of online shopping and meal ordering. Online platforms should be designed to encourage healthy choices.

Suggested citation: Vasicsek R, Cortez S, Woodward-Lopez G. Research Brief: COVID-19 in low-income communities: Changes in food acquisition, diet, and body weight. Nutrition Policy Institute, University of California, Agriculture and Natural Resources. 05 March 2025.

1. Wang, Y., & Beydoun, M. A. (2007). The obesity epidemic in the United States—Gender, age, socioeconomic, racial/ethnic, and geographic characteristics: A systematic review and meta-regression analysis. Epidemiologic Reviews, 29(1), 6–28. https://doi.org/10.1093/epirev/mxm007
2. Van Dorn, A., Cooney, R. E., & Sabin, M. L. (2020). COVID-19 exacerbating inequalities in the US. The Lancet, 395(10232), 1243–1244. https://doi.org/10.1016/S0140-6736(20)30893-X

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