

Was a short-term COVID-relief fruit and vegetable subsidy program associated with changes in grocery purchases?

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Background

Emerging evidence suggests that food insecurity increased during the COVID-19 pandemic⁽¹⁾. Fruit and vegetable (FV) benefits providing financial resources for FV purchases may alleviate food and nutrition insecurity and improve diet quality⁽²⁾. This study aimed to assess the impact of Healthy Helping (HH), a FV benefit program, on participants' grocery purchases.

Methods

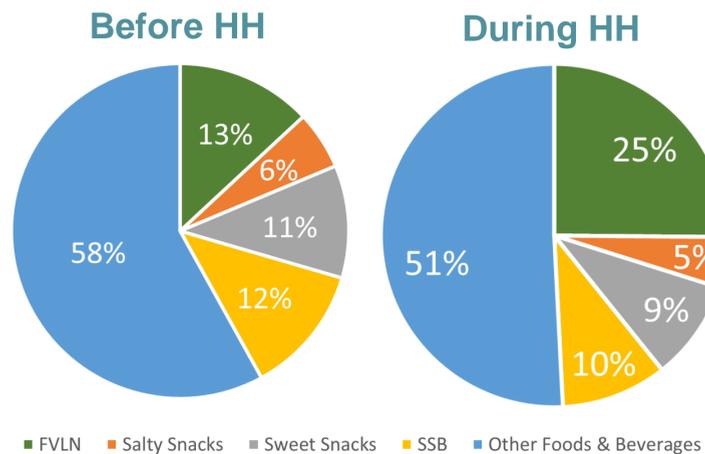
HH provided \$40/month to ~32,000 eligible SNAP participants for a rolling three-month period (between June-Dec 2020). Funds were linked to customer loyalty cards at a grocery chain with 496 stores in North Carolina, where they could be used to buy FV without added sugar, added sodium or added fat. The analyses used transaction data from Oct 2019-Dec 2020. Using overlap weighting (a propensity score-based method) and a Difference-in-Differences approach to address confounding, monthly purchases by HH participants before and during HH were compared to those of non-HH SNAP shoppers. Change in monthly spending on fruit, vegetables, legumes, and nuts (FVLN) was assessed using linear mixed-effects models with random intercepts for store and shopper ID.

Results

Preliminary results show that HH enrollment was associated with an increase in FVLN spending of \$26.77 (95% CI: 26.36, 27.19) per month, which translated to an additional 237 oz (233, 241) of FVLN per month during the program (about +1.5 servings/day). HH participants appear to have shifted a greater share of their overall grocery shopping to this supermarket chain during HH, as spending on foods & beverages rose by \$58.23 (56.39, 60.07), compared to non-HH shoppers. Share of spending on FVLN rose 11.6% points among HH participants, while the relative share of dollars spent on unhealthy products (sugar-sweetened beverages (SSBs), salty & sweet snacks) declined.

How did Healthy Helping participants' grocery purchases change during the program?

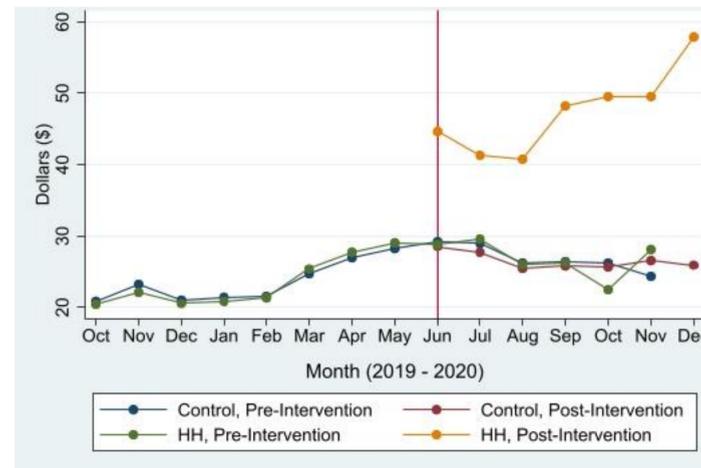
% of All Food & Beverage Spending



The charts reflect the mean weighted percentage (unadjusted) of all dollars spent on foods & beverages by category, before and during HH among participants

Share of dollars spent on FVLN rose from 13% to 25%

Mean FVLN Spending (\$)



The graph displays mean unadjusted FVLN spending (\$) per month by HH participation before & during HH, with overlap weights.

Mean spending on FVLN during HH was \$50.94 among participants vs \$26.01 among non-participants

Implications

Results suggest that the short-term FV benefits successfully increased FVLN purchases, although on average, participants did not utilize the full benefit. HH households spent \$58 more per month at this chain during HH, relative to non-HH shoppers, of which nearly half was spent on FVLN and ~\$9 was used for SSBs, salty & sweet snacks, resulting in a substantial increase in share of total spending on FVLN and a relative decrease in spending on less healthy product types.

Future research should explore factors associated with non-use of program funds to increase uptake and bolster food and nutrition security for low-income households, and further assess the effect of FV benefits on diet quality

Acknowledgements

Funding for this work came from the NC DHHS from their CARES Act allocation via a grant to Reinvestment Partners. Additional support came from the Carolina Population Center pilot grant (NIH P2C HD050924), building off earlier work funded by NC TraCS CTSA (UL1TR002489) with the Center for Health Equity Research at UNC. We thank the participating supermarket chain for sharing the transaction data, Amy Lo for research assistance, and Emily Duffy and Alex Ross for their helpful comments.

References

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