

A Community-Health System Partnership to Implement a Food Prescription Program

Background

Individuals with food insecurity often make tradeoff decisions between buying food and other basic needs, leading to lower quality dietary intake. We partnered with the YMCA and The Produce Box Co. to implement Fresh Food Rx, a produce delivery and health coaching program based on the Behavior Change Wheel framework and outcomes from our previous food prescription program.

Methods

Our prospective mixed-methods, matched cohort study enrolled 120 participants, over 50% of whom were over 60 years old. Each participant received home-delivered weekly produce boxes, health coaching sessions, and educational events for one year. The intervention cohort was matched with SNAP-enrolled individuals. We collected data on food security and fruit and vegetable intake at baseline and 6 months from 112 intervention and 92 comparison participants. Pre- to post-intervention changes in outcomes were compared using individual fixed effects regression models. We evaluated health outcomes, fruit and vegetable intake, food security, depression, and quality of life for both the intervention and matched cohorts.

Results

Nearly 30% of the intervention cohort was aged 65 and older, 59% were non-Hispanic Black, and 9% were Hispanic. Among the intervention cohort, the prevalence of low and very low food security decreased from 58.9% at baseline to 46.4% after 6 months, a change of 12.5 percentage points. The corresponding change in the comparison cohort was a decrease of 7.6 percentage points. The regression-adjusted change associated with the intervention (-4.9%; 95% CI, -19.5% to 9.8%) was not statistically significant ($p=0.51$). Daily intake of fruits and vegetables, excluding fries, increased from 2.27 cups at baseline to 2.58 cups at 6 months in the intervention cohort, representing an increase of 13.5% ($p=0.002$). The comparison cohort experienced no change in intake.

Conclusion

The intervention was associated with a significant increase in daily fruit and vegetable intake. However, food insecurity did not decrease significantly, possibly due to factors such as the amount of produce provided, rising food costs, and decreasing SNAP benefits during the intervention period.