Impact of HomeStyles-2 Intervention on Fruit and Vegetable Intake and Cognitions of Adults Participating in SNAP-Education

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Abstract

Background: Although chronic disease risk is inversely associated with fruit and vegetable (F/V) intake, only 12% and 9% of adults eat enough F/V, respectively. Teaching adults strategies for increasing F/V intake and targeting F/V-related cognitions are effective components of nutrition interventions. SNAP-Education (SNAP-Ed) is a federally funded nutrition education that teaches SNAP-eligible families to make better food choices and utilizes such interventions.

Objective: To determine whether HomeStyles-2 (HS), a virtual nutrition education intervention delivered through SNAP-Ed for parents/caregivers of children ages 6 to 11 years, improves F/V intake and related cognitions of participants compared to a virtual attention control (AC).

Study Design, Settings, Participants: The study was a two-arm, cluster-randomized controlled trial. Participants were recruited and taught by SNAP-Ed nutrition educators who had been randomized to teach a six-lesson HS (N=102) or AC (N=64) SNAP-Ed curriculum.

Measurable Outcome/Analysis: Demographic characteristics were analyzed using descriptive statistics. F/V intake and related cognitions were collected at baseline, post-intervention, and long-term follow-up (1-2 years post-intervention).

Results

Descriptive statistics revealed that participants were 39.6 ± 7.9 years old, non-Hispanic (56.0%, n=94), had overweight/obesity (82.1%), and primarily female (96.3%, n=157) (Table 1). Approximately 23.6% of participants experienced food insecurity, roughly twice the state average (Table 2). Linear mixed models indicated there were no significant within or between group differences in F/V intake or cognitions from baseline to post-intervention or post-intervention to LTFU (Figures 1 & 2). There was no correlation between the HS intervention or the EDBH active control and F/V intake or related cognitions.

Conclusion

These results suggest the HS intervention did not improve participant intake of F/V or personal self-efficacy for engaging in healthy F/V consumption. Similarly, HS participants did not increase participant outcome expectations or self-efficacy for promoting healthy F/V consumption.

These results are likely a result of several uncontrollable factors. COVID required the adaptation of HS to a virtual format and changes in the SNAP-Ed contract caused recruitment to be cut short. Future research should include a larger sample size that adequately meets power.

References


1-104. doi:10.1007/s00126-006-0334-7