Chambers (continued)

**Background:** Food insecurity is a prevalent issue in families with low income and is associated with poor consumption of fruits and vegetables (FV). These families face many barriers to meeting FV recommendations including decreased access, limited culinary skills, and time. Meal kits may offer an innovative solution to overcoming these barriers.

**Objective:** To evaluate the impact of a healthy meal kit intervention on food security status and FV intake.

**Study Design, Settings, Participants:** Main preparers of food (N=110) in a household with at least one child were recruited from rural, suburban, and urban communities to participate in a six-week meal kit intervention. Meal kits included three meals per week with the ingredients to feed four people, recipes, and indirect nutrition education. Demographic data were collected at baseline. Food security (FS) status and self-reported food intake were collected at baseline, post-intervention, and at six-month long-term follow-up (LTFU) using the USDA 18-item Household FS Survey Module and short Healthy Eating Index (sHEI) Screener, respectively.

**Measurable Outcome/Analysis:** Demographic data were analyzed using descriptive statistics. FS scores/statutes and FV intake were compared using paired t-tests.

**Results:** Participants were on average 44.0±12.4 YO and primarily female (92.5%). Most (96.2%) fell below 200% of the 2021 federal poverty line and faced food insecurity (62.4%). FS scale scores significantly improved from baseline (4.8±4.0) to posttest (3.3±3.6, p<0.001). For those who completed LTFU (N=85), FS scale scores weren’t significantly different from posttest (3.4±3.7) to LTFU (3.0±3.2, p=0.05). Fruit intake significantly improved from baseline to post by 0.45±1.42 servings/day (p<0.001), and vegetable intake significantly improved from baseline to post by 0.27±1.32 servings/day (p<0.05). There was no change in FV intake from post to LTFU.

**Conclusion:** Overall FS scores and FV intake significantly improved from baseline to post with no significant changes at LTFU. Results suggest that a healthy meal kit program can improve FS scores and FV intake as well as promote sustained FV consumption and FS in families with low income.

**Funding:** Walmart Foundation

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**Evaluating Barriers Perceived by Participants from Various Communities Enrolled in a Healthy Meal Kit Intervention**

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**Background:** Families with low income face many barriers to eating healthfully. Affordable meal kit (MK) programs can address barriers such as time and cost by simplifying meal preparation. Research is needed to determine whether MK usage affects the perception of barriers to utilizing the service.

**Objective:** To examine how participating in a MK intervention affects barriers identified by participants at baseline.

**Study Design, Settings, Participants:** Families with ≥1 child, residing in rural (N=39), suburban (N=29), and two urban (N=42) communities received ingredients and instructions to prepare three meals/week during a six-week study at no cost. Participants completed a demographic survey at baseline and a consumer choice survey (CCS) at baseline and post.

**Measurable Outcome/Analysis:** Demographic data were analyzed using descriptive statistics and barriers indicated in the CCS were compared from baseline to post using the crosstab analysis. Significance was determined using the Wilcoxon Signed Rank Test.

**Results:** Participants (N=110) were primarily female (91.8%) and non-Hispanic (95.5%). Most participants had heard of a MK prior to the intervention (76.1%), thought about purchasing a MK (72.3%) but hadn’t previously purchased a MK (84.1%). The average household (4.4±1.7) had a gross income <$50,000 (95.4%). Participants (58.7%) indicated that cost was less of a barrier to using a MK after completing the intervention (p<0.001). Similarly, participants indicated that not knowing enough about MKs (46.8%), limited options (45.0%), and time commitment (41.5%) were less of a barrier to MK usage (p<0.001). Participants indicated no change in barriers related to comfort shopping in person, concerns about quality/freshness, the safety of ingredients, healthfulness of the food, home delivery, portion, cooking enjoyment, and taste preference.

**Conclusion:** Participants perceived several factors as less of a barrier to trying or using a MK at post-intervention, with no change in other barriers. More research is needed to understand how participation influenced some barriers to using MK, such as cost, and determine potential modifications to MK to address unchanged barriers.

**Funding:** Walmart Foundation

**Exploring COVID-19 Related Beliefs and Dietary Behavior Among University Students**

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**Background:** The COVID-19 pandemic caused immense physical disruptions in the U.S. The Health Belief Model is a valuable framework to understand COVID-19 risk involving individuals’ perceptions of benefits, barriers, and self-efficacy. Preventive health behaviors entail fruit and vegetable consumption for immune benefits, hand-washing, and wearing indoor masks.

**Objective:** The purpose of this survey research is to examine COVID-19 related beliefs and self-reported fruit and vegetable consumption among college students.

**Study Design, Setting, Participants:** A cross-sectional survey based on the Health Belief Model was administered to a convenience sample of 304 undergraduate students at Montclair State University.

*Continued on page 19*