

Engaging New Audiences Through the Healthy Food Fast - Using your Multi-Cooker Program

Tara Dunker¹, MS, RD, Hannah Guenther¹, MS, Ann Fenton¹, MS, Brenda Aufdenkamp¹, MS, Brittany Spieker¹, MS, RD, Tammie Ostdiek¹, MS, Kayla Hinrichs¹, MS, Donnia Behrends², MS, RD, Lisa Franzen-Castle², PhD, RD

¹University of Nebraska-Lincoln Extension; ²Nutrition and Health Sciences Department, University of Nebraska-Lincoln

Abstract

Objective: Provide an overview of Healthy Food Fast: Using your Multi-Cooker (HFF) as an effective one-time program for adults to increase knowledge and intentions for eating healthier, home-prepared meals.

Theory/Research: Home cooking levels have steadily declined, leading to shifts in family meal frequency and form (Holm & Lund, 2019). Americans have decreased time spent on food preparation and increased reliance on convenience and takeout meals (Wang & Beydoun, 2007). However, research shows many households still view family meals as a priority (Smith et al. 2013).

Target Audience: Adults (19+ years) wanting to improve food preparation knowledge and skills, specifically on multi-cookers.

Program Description: HFF incorporates hands-on lessons and recipes to familiarize attendees with multi-cookers. Settings primarily included community organizations and centers, libraries, healthcare, faith-based organizations, and worksites. From 2019-2020, **45 one-time sessions were conducted** (93% in-person; 3% virtually).

Evaluation Methods: Surveys (post-pre format) were conducted immediately post-program either in-person or online and included demographic, food preparation self-efficacy, and food safety questions. Significant differences were detected at p<0.05 level based on two-related samples Wilcoxon Signed Ranks Test using SPSS.

Results: **Survey respondents (n=466; 42% return rate) were mostly female (95%) and ranged from 19 to 70 plus years (56% in 50–69-year-old range). Prior multi-cooker experience included: no experience using one (54%); using one <5 times (24%); and using one ≥5 (22%).** Respondents reported significant (p<0.001), positive increases across all food preparation self-efficacy/multi-cooker specific questions and 75% of food safety questions. Post-program, 75% planned to cook meals at home in their multi-cooker 1-5 times per week. Themes from open-ended comments were feeling less intimidated/scared, excited to experiment, enjoyed their experience, learned new ideas and/or healthy meal ideas/recipes, and improved multi-cooker operating knowledge.

Conclusion(s): HFF introduced attendees to the multi-cooker in a casual learning environment that was associated with improved self-efficacy. These one-time lessons have been effective at introducing adult community members to Extension who may not have been involved in programming previously.

Extension is a Division of the Institute of Agriculture and Natural Resources at the University of Nebraska-Lincoln cooperating with the Counties and the U.S. Department of Agriculture. University of Nebraska-Lincoln Extension educational programs abide with the non-discrimination policies of the University of Nebraska-Lincoln and the United States Department of Agriculture.

Table 1. Post-Pre Multi-Cooker Specific Questions (M±SD; n[%])	Before	After
I understand how to use the functions and programs on the multi-cooker. (M±SD)	1.99 ± 1.16a	4.28 ± 0.76b
Strongly Disagree to Disagree	316 (68.7%)	7 (1.6%)
Neither agree nor disagree	90 (19.6%)	57 (12.4%)
Agree to Strongly Agree	54 (11.7%)	394 (86%)
I am confident in how to properly operate and use my multi-cooker to prepare a meal. (M±SD)	1.99 ± 1.24a	4.18 ± 0.85b
Strongly Disagree to Disagree	322 (70.3%)	16 (3.5%)
Neither agree nor disagree	72 (15.7%)	66 (14.5%)
Agree to Strongly Agree	64 (14%)	373 (82%)
I know how to clean the multi-cooker and additional parts after each use. (M±SD)	2.20 ± 1.41a	4.60 ± 0.73b
Strongly Disagree to Disagree	282 (62.2%)	8 (1.7%)
Neither agree nor disagree	69 (15.2%)	24 (5.3%)
Agree to Strongly Agree	102 (22.6%)	424 (93%)
I understand multi-cooker safety precautions including how to safely remove the lid and the recommendations to not use for deep frying and pressure canning. (M±SD)	2.35 ± 1.49a	4.59 ± 0.75b
Strongly Disagree to Disagree	272 (59.5%)	10 (2.2%)
Neither agree nor disagree	59 (12.9%)	25 (5.5%)
Agree to Strongly Agree	126 (27.6%)	423 (92.3%)



Table 2. Post-Pre Food Safety Questions (M±SD; n[%])	Before	After
Do you wash/sanitize your hands before and after handling food? (M±SD)	4.31 ± 1.16a	4.78 ± 0.63b
Never to Rarely	45 (9.9%)	8 (1.8%)
Sometimes	38 (8.4%)	7 (1.6%)
Very Often to Always	370 (81.7%)	432 (96.6%)
Do you take precautions to prevent cross-contaminating foods? (M±SD)	4.06 ± 1.30a	4.70 ± 0.81b
Never to Rarely	68 (15.1%)	18 (4.1%)
Sometimes	43 (9.5%)	7 (1.6%)
Very Often to Always	340 (75.4%)	419 (94.3%)
Do you use a food thermometer to check the final temperature of cooked meats? (M±SD)	2.81 ± 1.52a	4.11 ± 1.14b
Never to Rarely	197 (44.1%)	41 (9.2%)
Sometimes	89 (19.9%)	70 (15.7%)
Very Often to Always	161 (36%)	334 (75.1%)

Qualitative Results

- “I was very happy to learn how to use my multi-cooker and am excited about getting started.”
- “Enjoyed this learning experience and now feel more at ease to venture into the world of multi-cooking.”
- “The presentation was great, recipes were healthy and delicious, and most importantly, the class reduced my anxiety about using my multi-cooker!”
- “I have taken two of your multi-cooker classes. The first one gave me more confidence, and the second class I attended for the new recipes and fun.”

Post-Pre Survey Results

Multi-Cooker Questions (Table 1). Survey respondents reported significant (p<0.001), positive increases across all areas. Percent increase in agree to strongly agree responses were:

- 74% understanding how to use the functions of the multi-cooker.
- 68% confidence regarding how to properly operate and use the multi-cooker to prepare a meal.
- 70% knowing how to clean the multi-cooker and additional parts after use.
- 65% understanding the multi-cooker safety precautions, including how to safely remove the lid and recommendations to not use for deep frying and pressure canning.

Food Safety Questions (Table 2). Survey respondents reported significant (p<0.001), positive increases across areas below. Percent increase in very often to always responses were:

- 15% intention to wash/sanitize hands before and after handling food.
- 19% intention to take precautions to prevent cross-contaminating foods.
- 39% intention to use a food thermometer to check the final temperature of cooked meats.

Conclusions

With the rise in popularity of the multi-cooker, a team of Extension food, nutrition, and health professionals recognized an opportunity for relevant and engaging adult programming. HFF introduced attendees to the various functions of their multicooker in a casual learning environment that encouraged improved self-efficacy.

- References:**
- Holm, L., Lund, T.B. (2019). Are family meals declining? The example of Denmark. Context: The Effects of Environment on Product Design and Evaluation, 227-240. <https://doi.org/10.1016/B978-0-12-814495-4.00011-8>
 - Smith, L., Ng, S., Popkin, B. (2013). Trends in US home food preparation and consumption: Analysis of national nutrition surveys and time use studies from 1965-1966 to 2007-2008. Nutrition Journal, 12(1), 45. <http://dx.doi.org/10.1186/1475-2891-12-45>
 - Wang, Y., Beydoun, M. (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. <http://dx.doi.org/10.1093/epirev/mxm007>

Funding: No funding disclosures to report.