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 and food safety questions. Significant differences were detected at p<0.05 level based on two-related samples Wilcoxon Signed Ranks Test using SPSS.

Table 1. Post-Pre Multi-Cooker Specific Questions (M±SD; n[%]) Before After

<table>
<thead>
<tr>
<th>Question</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>I understand how to use the functions and programs on the multi-cooker.</td>
<td>1.99 ± 1.16a</td>
<td>4.18 ± 0.85b</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>316 (68.7%)</td>
<td>438 (90.2%)</td>
</tr>
<tr>
<td>Neither agree or disagree</td>
<td>90 (19.6%)</td>
<td>394 (80.6%)</td>
</tr>
<tr>
<td>Agree to Strongly Agree</td>
<td>54 (11.7%)</td>
<td>12 (2.4%)</td>
</tr>
<tr>
<td>I am confident in how to properly operate and use my multi-cooker to prepare a meal.</td>
<td>1.99 ± 1.24a</td>
<td>4.18 ± 0.85b</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>322 (70.3%)</td>
<td>66 (14.5%)</td>
</tr>
<tr>
<td>Neither agree or disagree</td>
<td>72 (15.7%)</td>
<td>66 (14.5%)</td>
</tr>
<tr>
<td>Agree to Strongly Agree</td>
<td>64 (14%)</td>
<td>373 (82%)</td>
</tr>
<tr>
<td>I know how to clean the multi-cooker and additional parts after each use.</td>
<td>2.20 ± 1.41a</td>
<td>4.60 ± 0.73b</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>282 (62.2%)</td>
<td>8 (1.7%)</td>
</tr>
<tr>
<td>Neither agree or disagree</td>
<td>69 (15.2%)</td>
<td>24 (5.3%)</td>
</tr>
<tr>
<td>Agree to Strongly Agree</td>
<td>102 (22.6%)</td>
<td>424 (93%)</td>
</tr>
<tr>
<td>I understand multi-cooker safety precautions including how to safely remove the lid and recommendations to not use for deep frying and pressure cooking.</td>
<td>2.35 ± 1.49a</td>
<td>4.59 ± 0.75b</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>272 (59.5%)</td>
<td>10 (2.2%)</td>
</tr>
<tr>
<td>Neither agree or disagree</td>
<td>59 (12.9%)</td>
<td>25 (5.5%)</td>
</tr>
<tr>
<td>Agree to Strongly Agree</td>
<td>126 (27.6%)</td>
<td>423 (92.3%)</td>
</tr>
</tbody>
</table>

Table 2. Post-Pre Food Safety Questions (M±SD; n[%]) Before After

<table>
<thead>
<tr>
<th>Question</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you wash/sanitize your hands before and after handling food? (M±SD)</td>
<td>4.31 ± 1.16a</td>
<td>4.78 ± 0.63b</td>
</tr>
<tr>
<td>Very Often to Always</td>
<td>340 (74.6%)</td>
<td>429 (94.3%)</td>
</tr>
<tr>
<td>Sometimes</td>
<td>370 (81.7%)</td>
<td>432 (96.6%)</td>
</tr>
<tr>
<td>Never to Rare</td>
<td>2.81 ± 1.52a</td>
<td>4.11 ± 1.14b</td>
</tr>
<tr>
<td>Very Often to Always</td>
<td>197 (44.1%)</td>
<td>41 (9.2%)</td>
</tr>
<tr>
<td>Sometimes</td>
<td>89 (19.9%)</td>
<td>70 (15.7%)</td>
</tr>
<tr>
<td>Never to Rare</td>
<td>161 (36%)</td>
<td>334 (75.1%)</td>
</tr>
</tbody>
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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 agreement 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 cooking.

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 multi-cooker in a casual learning environment that encouraged improved self-efficacy.

References:

Qualitative Results

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