

# Improving the Nutritional Impact of Food Pantry Programs

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## Background

- Food pantries are encouraging healthier food choices and meal preparation.<sup>1</sup>
- Prior pantry outreach has utilized strategic food placement, recipe handouts, and food demonstrations to influence consumer choice.<sup>2,3</sup>
- However, food pantries have limited evidence on clients' recipe preferences, kitchen equipment access, and relative utility of food demonstrations.

## Objective

- To evaluate the effect of food demonstrations on shoppers' opinions and likelihood to cook a recipe.
- To build a collection of accessible, culturally sensitive recipes and survey the accessibility of kitchen equipment for food pantry shoppers.

## Methods

1. Setting: community-based food pantry in Dallas, Texas.
2. We delivered 11 food demonstrations over 4 months. Each demo provided a food sample, printed recipe, and a survey.
3. Recipes were chosen according to the pantry's surplus inventory, with the goal of reducing food waste and introducing shoppers to new recipes.
4. Clients reported their hedonic liking of sampled recipes and likelihood to recreate them. They also reported these measures for non-sampled recipes.
5. Using a visual graphic of 24 pieces of kitchen equipment, shoppers reported which items they owned.
6. Data was entered into Redcap and analyzed using Excel and Datab.

## Results

- We collected a total of 207 surveys; 163 were complete and included in analyses.\*\*
- Food demonstrations were positively received: shoppers often expressed surprise at the taste and simplicity of recipes. Non-demoed recipes were also well received.
- On recipe appeal: Sampled recipes garnered a mean rating of 4.61 on a 5-point Likert scale, versus 4.41 for non-sampled recipes..
- On likelihood to cook: Sampled recipes earned a mean rating of 4.48, versus 4.33 for non-sampled recipes.
- Wilcoxon signed rank tests showed a significant difference between sampled and non-sampled recipes for appeal ( $p < 0.001$ ) and likelihood to cook ( $p < 0.05$ ).
- Shoppers owned, on average, 75% of kitchen appliances. Notably, many lacked access to measuring spoons (43% ownership) and baking sheets (48% ownership).

## Discussion

- In this study, providing samples alongside recipes increased a recipe's appeal and self-reported likelihood to cook it at home.
- Consideration of kitchen equipment access is essential to promote recipe recreation at home.

## References

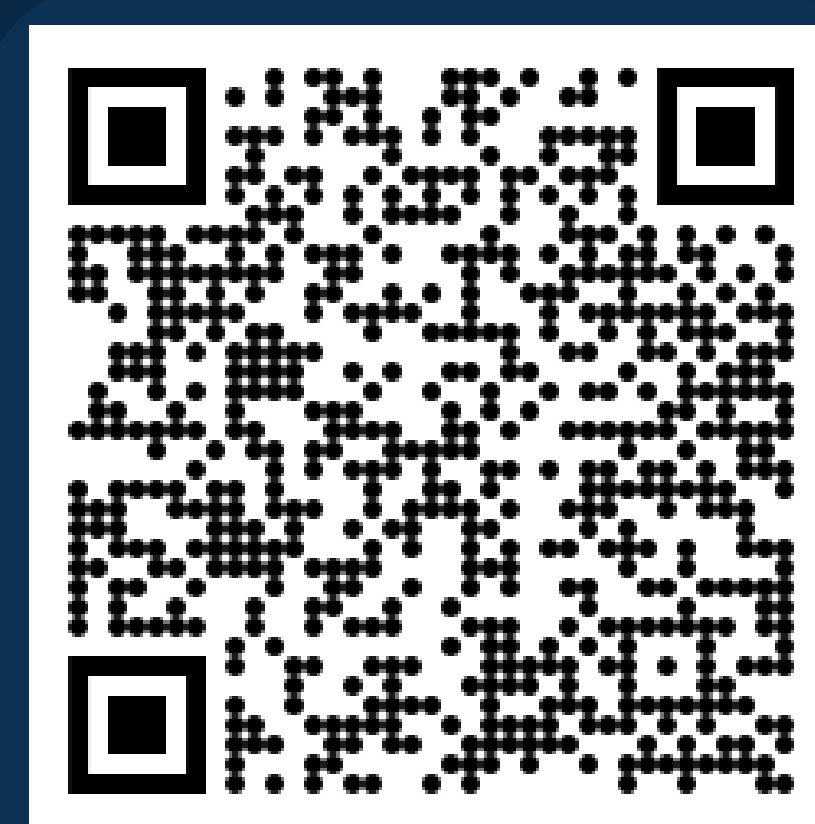
1. Wilson NLW, Just DR, Swigert J, Wansink B. Food pantry selection solutions: a randomized controlled trial in client-choice food pantries to nudge clients to targeted foods. *Journal of Public Health*. 2017;39(2):366-372. doi:10.1093/pubmed/fdw043
2. Texas | Feeding America. Accessed February 20, 2024. <https://www.feedingamerica.org/hunger-in-america/texas>
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\*These authors contributed equally to this work.

\*\* Note on complete surveys: We received 163 surveys that had either the appeal or likelihood to cook questions answered. Since responses were paired between sampled and non-sampled recipes, only the surveys that had at least one complete pair were included in analyses. Out of the 163 surveys, 160 had a complete pair for appeal, and 156 had a complete pair for cook. Most people answered all four questions, but there were 3 people who answered cook and not appeal, and 7 people who answered appeal and not cook, creating the different n for each subset of analysis.

Live food demonstrations with samples increased a recipe's appeal and people's intention to cook it.

Food pantry shoppers are motivated to cook simple, nutritious recipes.



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## Figures & Tables

Figure 1. Language distribution of shoppers surveyed.

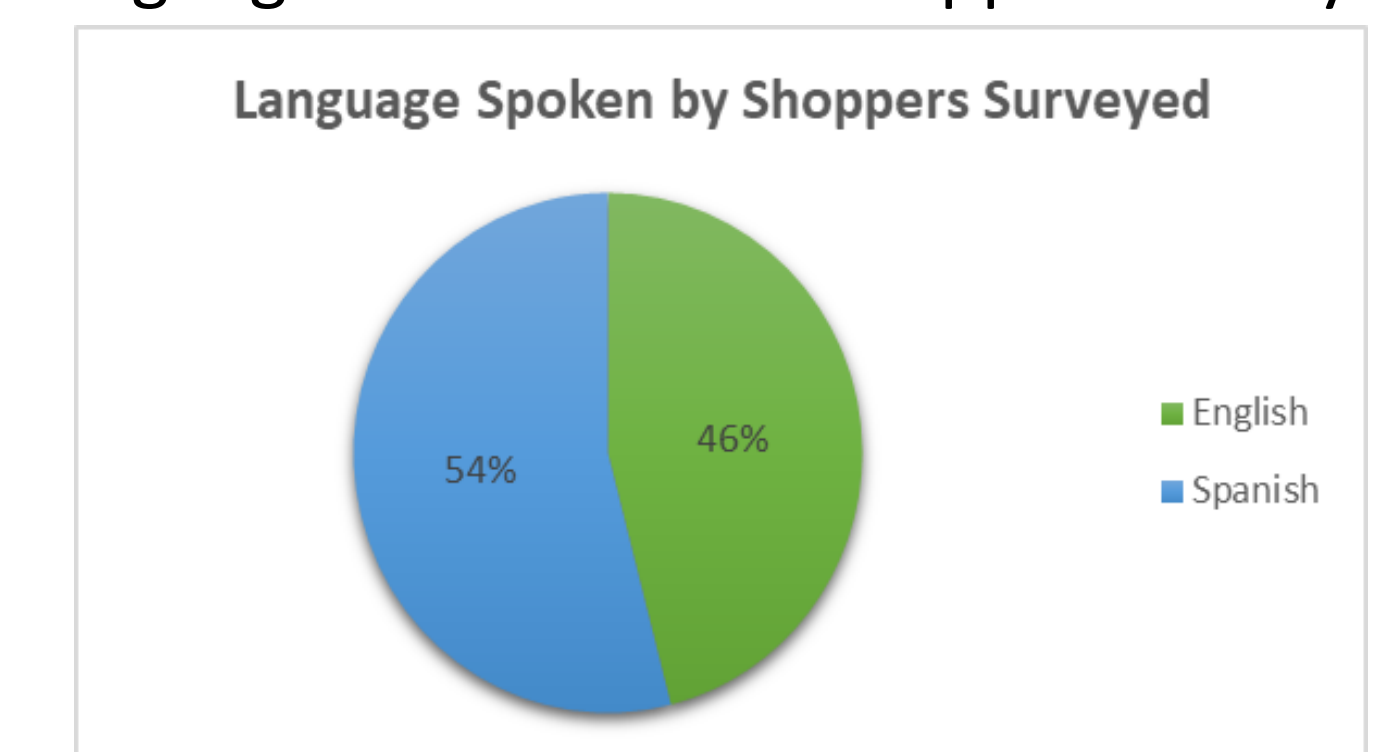


Figure 2. Shoppers' ratings of recipe appeal.

	N	Mean	Median	Stdev
Demoed	160	4.61	5	0.78
Non-demoed	160	4.41	4.5	0.78

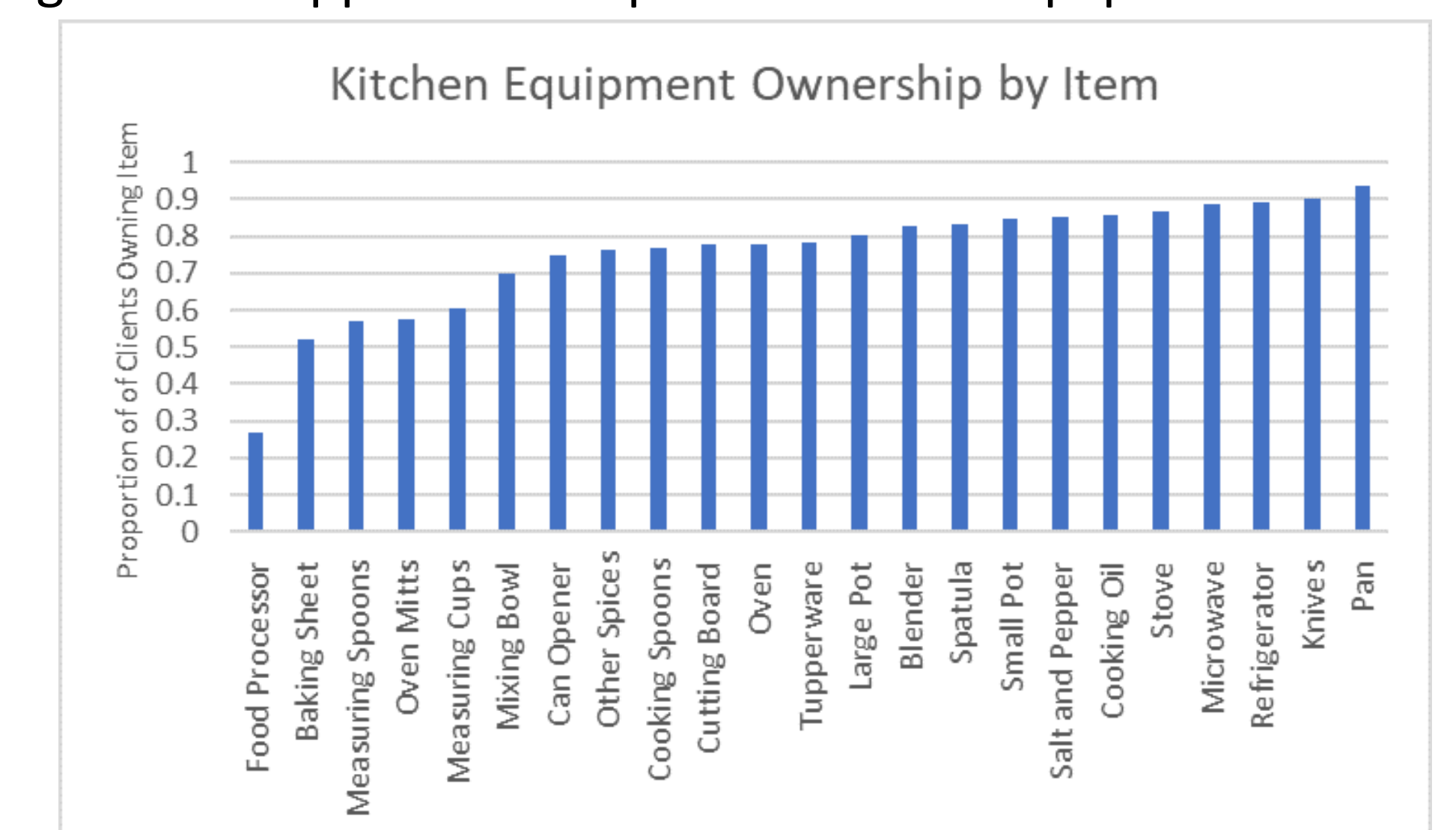
Figure 3. Shoppers' self-reported likelihood to cook a recipe.

	N	Mean	Median	Stdev
Demo	156	4.48	5	0.83
Non-demoed	156	4.33	4.5	0.85

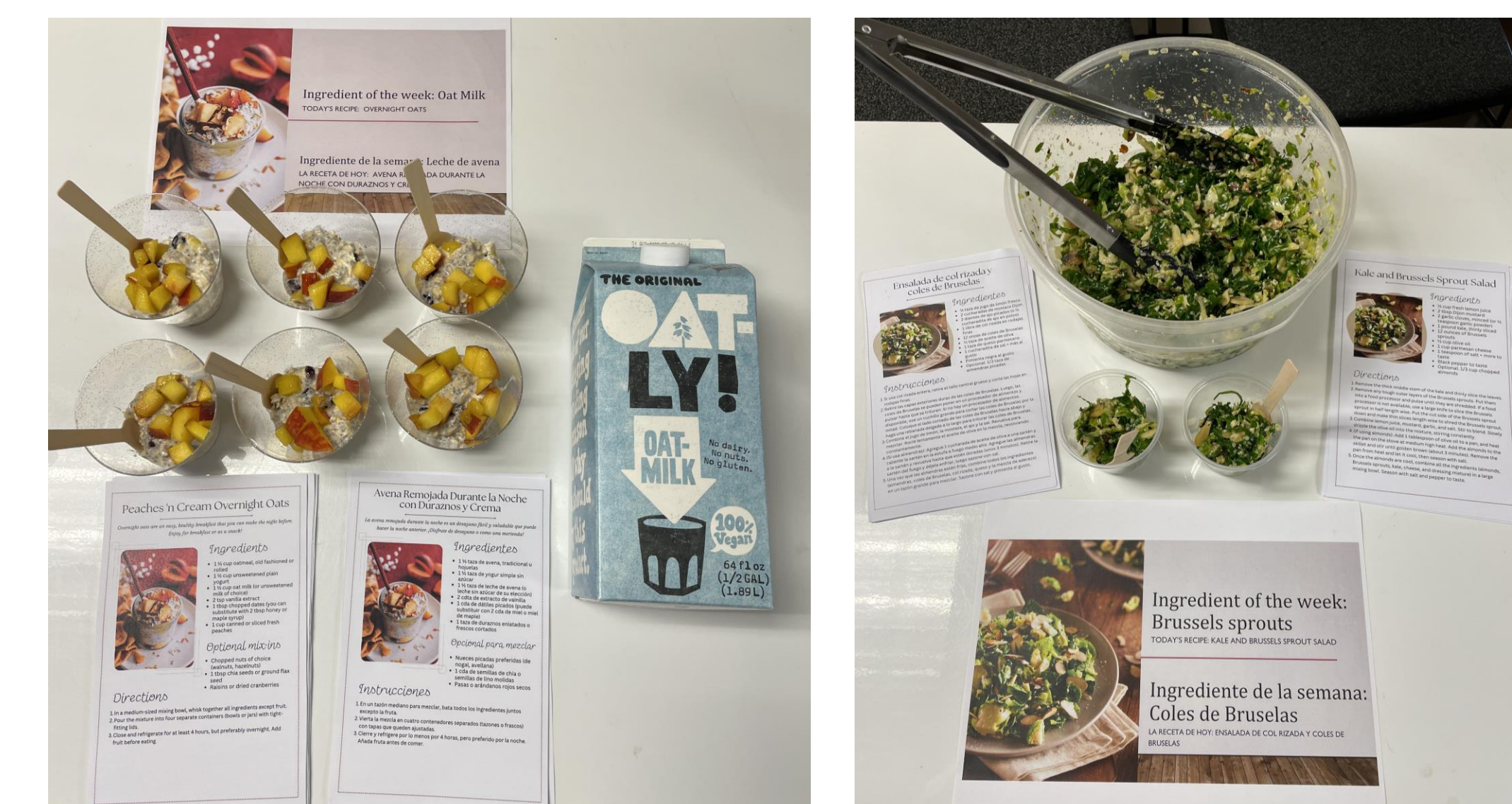
Figure 4. Wilcoxon tests of appeal and likelihood to cook (non-demo minus demo).

	W	z	p	r
Appeal	948	-3.66	<0.001	0.29
Cook	1075	-2.5	0.013	0.2

Figure 5. Shoppers' self-reported kitchen equipment.



Figures 6 and 7. Photos of food demonstrations.



## Acknowledgements

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