

# The East Harlem Food Voucher Study: An Intervention to Increase Food Security Among Foreign-Born Residents Who Are Food Insecure

Adam Wohlman, Christina Nieves, Nana Bonah, Stephanie Arbelaez, Luis Narvaez, Krystle Rodriguez, Steven Rodriguez, Nilsa Torres

Bureau of Harlem Neighborhood Health, Center for Health Equity and Community Wellness, New York City Department of Health and Mental Hygiene

## BACKGROUND

Despite local access to resources like food pantries and free meal programs, approximately 22% of East Harlem residents remain food insecure. Previous research on food insecurity has highlighted the complex nature of food insecurity, and findings suggest that individuals and families who have low incomes but who do not participate in the Supplemental Nutrition Assistance Program (SNAP) due to citizenship and/or documentation status are particularly vulnerable to food insecurity. In partnership with Meals for Good, a local non-profit that works to alleviate food insecurity in NYC, the Bureau of Harlem Neighborhood Health evaluated the effect of grocery store voucher distribution on food insecurity for East Harlem families who are foreign-born, at risk for food insecurity, and who do not participate in SNAP.

## METHODS

### Intervention and Eligibility

Participants received Meals for Good grocery store vouchers bi-weekly over 8 weeks beginning in February 2023. Each voucher was valued at \$10 and participants received either 10 or 15 vouchers bi-weekly depending on their household size (Table 1). Vouchers could be redeemed at two centrally-located grocery stores in East Harlem and could be used to purchase SNAP-eligible items.

To be eligible, participants had to be an East Harlem resident aged 18 years or older, live in a household with at least 2 people, be at risk for food insecurity (as determined by a two-question screener, and/or regular use of a food pantry), and not born in the United States (including Puerto Rico). Additionally, no adults in the household could be participants in SNAP.

**Table 1. Grocery Store Voucher Distribution and Value Amounts, by Household Size.**

Household Size	Number of Bi-weekly Vouchers	Value of Bi-weekly Vouchers	Total Value of Vouchers Received Over Study Period
2-3	10	\$100	\$400
4 or more	15	\$150	\$600

### Data collection

Study participants completed interviewer-administered surveys bi-weekly, prior to receiving the vouchers. Participants completed a pre-survey during the first voucher distribution and then completed three short follow-up surveys during subsequent voucher distributions. Participants were asked to complete a post-survey two weeks after receiving their final set of vouchers and received a \$20 gift card for completing the post-survey. Surveys were conducted in either English or Spanish.

Survey topics included demographics, grocery shopping behaviors, food security, and financial stress. In the follow-up and post-surveys, participants were asked qualitative questions about their experience using the vouchers. Food security status was determined using the U.S. Department of Agriculture six-item short form of the U.S. Household Food Security Module. The number of affirmative responses was used to create a score, which was then used to determine food security status (score 0-1, high food security; score 2-4, low food security; 5-6, very low food security).

### Data analysis

Descriptive analyses of the survey data were conducted using SAS to examine the characteristics of survey participants and variables of interest. Change in food insecurity status was assessed by comparing pre- and post-survey food security scores. The change in mean score was assessed using a paired t-test and the change in food security status was assessed using a paired McNemar test. Statistical significance was determined using the threshold of  $p < 0.05$ .

## RESULTS

### Participant Characteristics

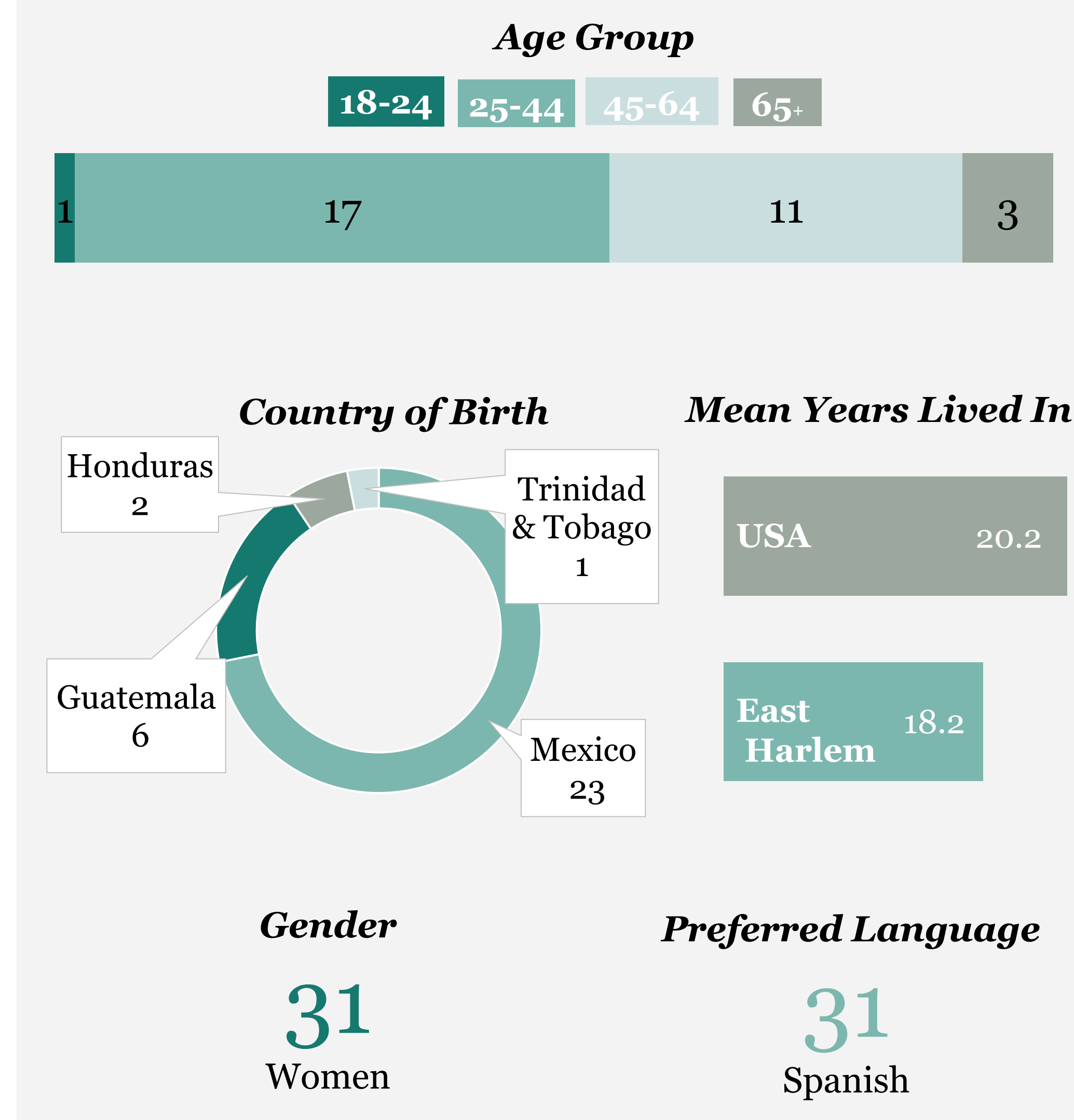
A total of 44 people were screened for study eligibility. Forty-three people were eligible and 1 person was not eligible based on study inclusion and exclusion criteria. Thirty-two participants were enrolled in the study and 11 individuals were placed on a waitlist.

Study participants were mostly women ( $n=31$ ), with a mean age of 44 years, and were primarily Spanish speakers ( $n=31$ ). Participants were born in Mexico ( $n=23$ ), Guatemala ( $n=6$ ), Honduras ( $n=2$ ), and Trinidad and Tobago ( $n=1$ ). Participants have lived in the U.S. for an average of 20.2 years and have lived in East Harlem for an average of 18.2 years.

Most participants lived in households with children aged 17 years or younger ( $n=26$ ) and lived in households with an average of 4.4 people.

Twenty-five study participants had 4 or more people in their households and therefore received 15 grocery store vouchers bi-weekly and 7 participants had 2-3 people in their households and received 10 vouchers bi-weekly. All participants completed the pre-survey, follow-up surveys, and post-survey, for a completion rate of 100%. Ninety-nine percent of 1,780 vouchers distributed were redeemed.

**Figure 1. Select Characteristics of Study Participants,  $n=32$**



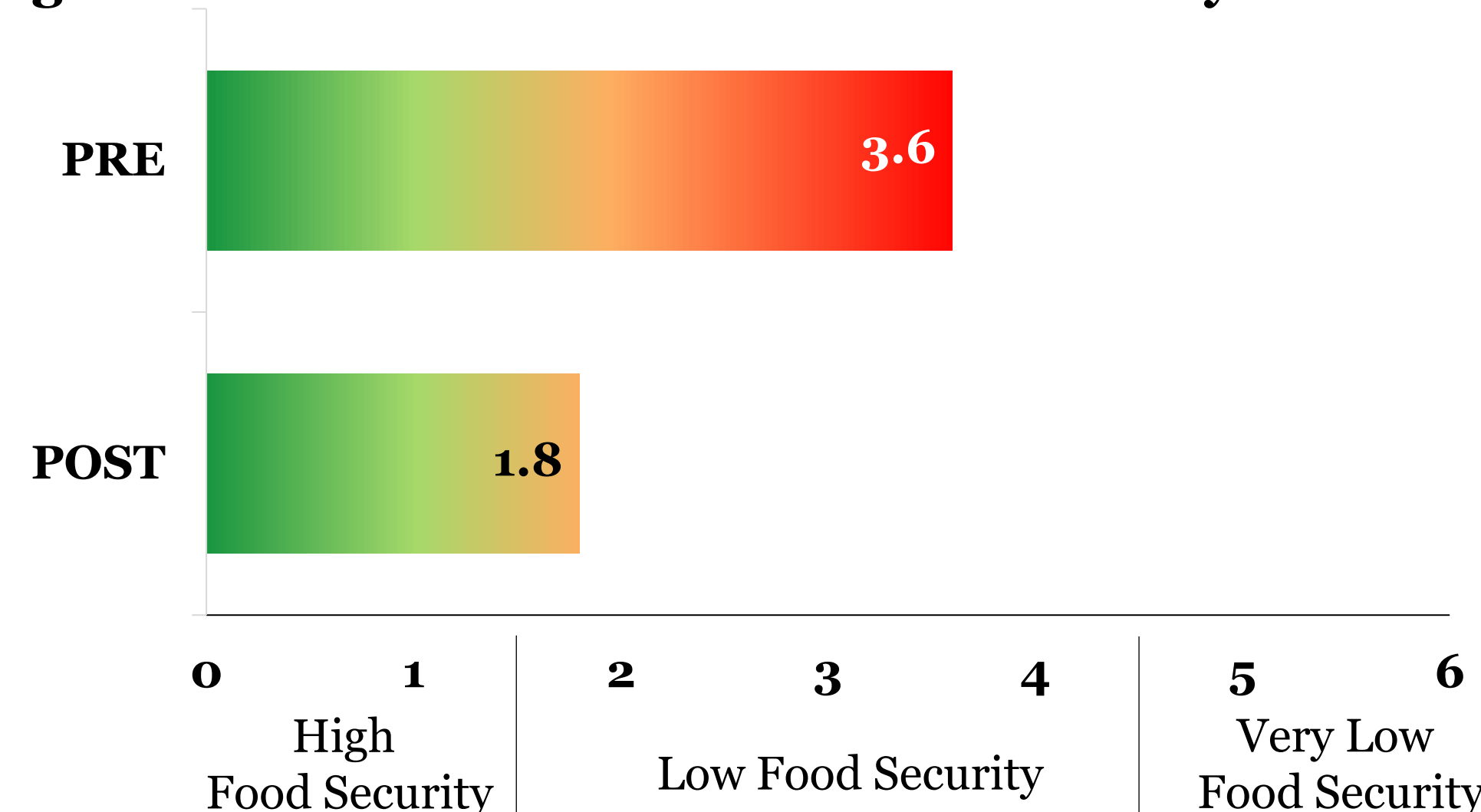
### Food Insecurity

The mean food insecurity score among participants during the pre-survey was 3.6 (range 0-6). Based on their scores, most participants were food insecure ( $n=31$ ) at baseline, with 21 participants identified as having low food security and 10 participants as having very low food security (Figures 2 and 3).

The mean food insecurity score among participants during the post-survey was 1.8 (range 0-6). Based on their scores, most participants were not food insecure after the study ( $n=21$ ), with 21 participants identified as having high food security, 5 as low food security, and 6 as very low food security.

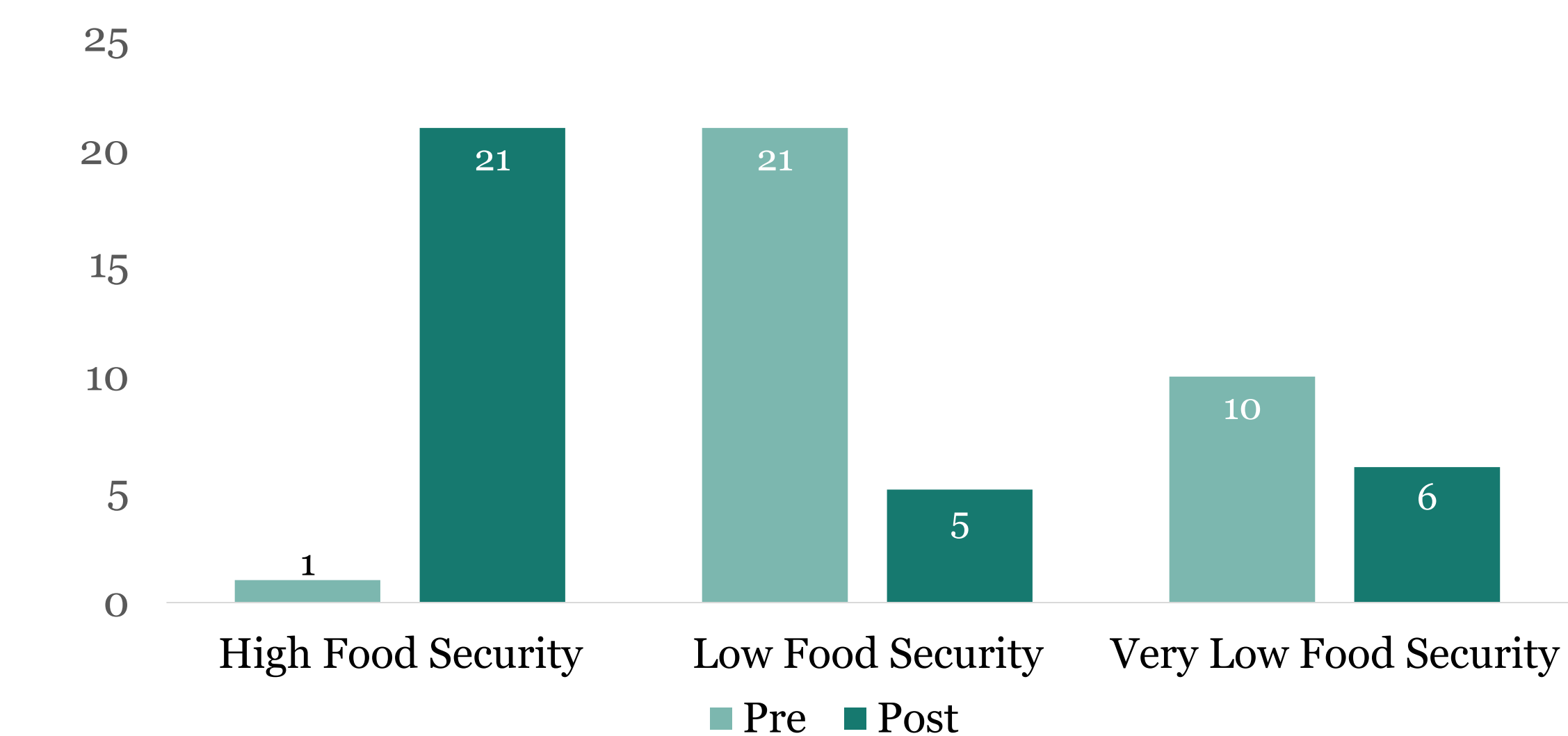
The mean difference in food insecurity score between follow-up and baseline was 1.8 and was statistically significant ( $p < 0.0001$ ). The change in food insecurity status was also statistically significant ( $p < 0.0001$ ).

**Figure 2. Mean Pre- and Post- Food Insecurity Score**



## RESULTS, CON'T

**Figure 3. Food Security Status during Pre- and Post-Surveys**



### Participant Feedback and Impact

Responses to qualitative post-survey questions highlighted the positive impact study participation had on alleviating financial stress and helping families feel more food secure. Participants reflected on their experience in the program and many felt that the grocery store vouchers helped them afford all the food needed to feed their families. Participants also noted being able to purchase foods they usually cannot afford by using the vouchers, including healthier items.

...it helped us have food in the fridge and to save money for other things.

During the time, I was not afraid that I would be hungry or without food.

I learned how to buy healthier foods with the vouchers instead of just buying anything that was low cost and affordable for my budget.

...my kids were able to eat foods that I normally cannot afford but with the vouchers I was able to afford them.

## DISCUSSION

Findings from the East Harlem Food Voucher Study reveal that bi-weekly grocery store vouchers may be an effective intervention to improve food security among foreign-born families in East Harlem who are at risk for food insecurity. During the two-month study period, the average food security score improved significantly, as did participants' food security status, indicating that the amount of vouchers and the frequency of distribution helped to improve food access.

These findings are illustrative of low food security, and an unmet community-level need, among long-term East Harlem residents who do not participate in SNAP. However, they also demonstrate the potential to significantly improve the food security, and consequently the economic security, of residents in a relatively short amount of time, by providing vulnerable households with adequate resources to meet and make choices about their food needs.

While the Bureau of Harlem Neighborhood Health plans to continue and expand upon this work in partnership with Meals for Good and other community partners, long term solutions will be required to sustainably address food insecurity among foreign-born East Harlem residents who are at risk for food insecurity and who do not participate in SNAP.

## ACKNOWLEDGEMENTS

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For more information, please contact Adam Wohlman at [awohlman@health.nyc.gov](mailto:awohlman@health.nyc.gov)

