

BACKGROUND

- Higher fruit, vegetable and whole grain consumption is associated with lower risk of cardiovascular disease.
- The American Heart Association (AHA) and Aramark launched Healthy for Life 20 by 20, a five-year initiative to improve the diet quality of both children and adult families in the U.S., especially underserved communities.
- The collaboration is built on:
 - AHA's science, health and wellness curriculum.
 - Aramark's culinary expertise and community-wide presence.
- Community-based nutrition programs are an effective approach to changing attitudes and behaviors around food and health in underserved populations.

OBJECTIVE

- To evaluate the effectiveness of a health engagement program on improving healthy food purchasing behaviors and making better nutrition choices.

METHODS

- A 12-week pilot intervention implemented in 3 major cities (Houston, Philadelphia, and Chicago) at 5 community centers (March-June 2016). Each center was a member of the Alliance for Stronger Families and Communities.
- Participants were recruited from the Alliance member centers via fliers.
- Target population was single heads of households responsible for their families' food and meal decisions.
- Weekly group education sessions focused on enhancement of cooking and shopping skills, nutrition education, and assessment of personal cardiovascular risk factors.
- Participating centers had the option to choose from two delivery methods:
 - Optimal:** Implement 3 of 4 modules, recruit 50-60 participants, and have 25 participants complete the 3 modules.
 - Flexible:** Implement 2-3 of 4 modules, recruit 50-60 participants per module, and have 25 participants complete each module.
- Participants reported their yesterday fruit, vegetable and whole grain intake, previous week of meals prepared at home before and after completion of the intervention.
- Wilcoxon Signed Rank Tests was used to determine significance between pre-post measures of study outcomes.

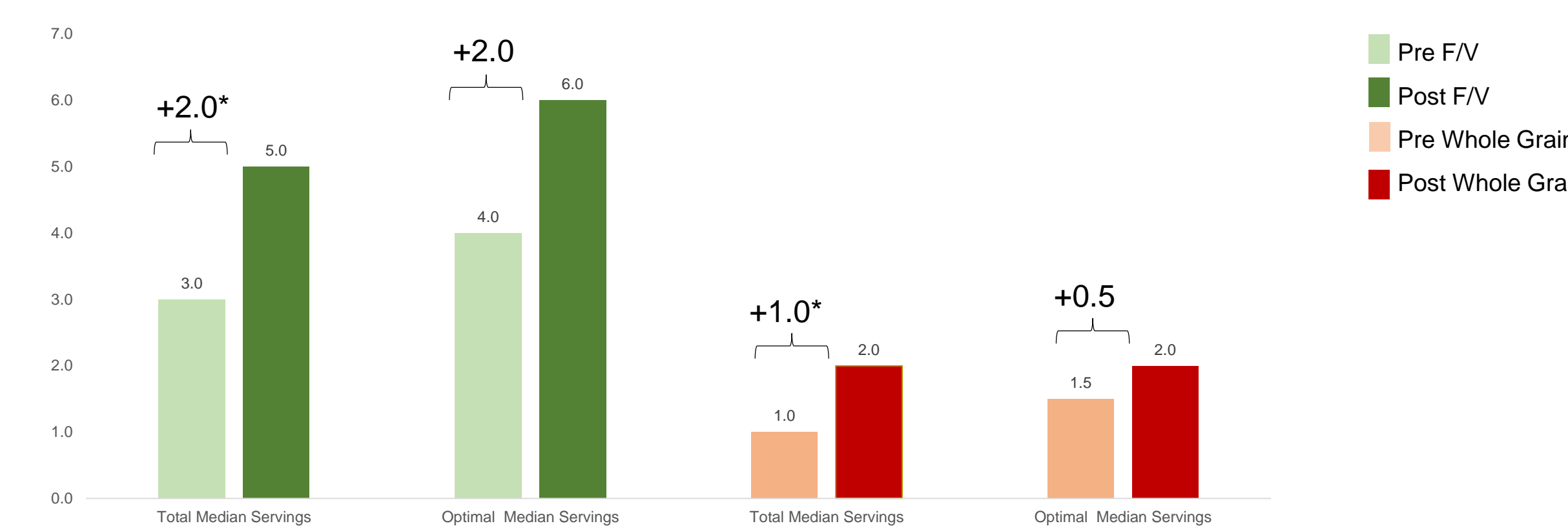
RESULTS

Table 1. Sample Characteristics

Variable	n (%)	Site A	Site B	Site C	Site D	Site E
N	115	25	20	21	8	41
Female	91 (79%)	25 (100%)	11 (55%)	18 (86%)	8 (100%)	29 (71%)
Age (y)						
<34	52 (45%)	6 (24%)	7 (35%)	5 (24%)	2 (25%)	32 (78%)
35-54	41 (36%)	17 (68%)	7 (35%)	8 (38%)	5 (62%)	4 (10%)
55+	16 (14%)	2 (8%)	2 (10%)	6 (29%)	1 (12%)	5 (12%)
Race						
White	2 (2%)	-	-	1 (5%)	-	1 (2%)
Hispanic	69 (60%)	24 (96%)	15 (75%)	17 (81%)	6 (75%)	7 (17%)
Black/AA	31 (27%)	-	-	1 (5%)	2 (25%)	28 (68%)
Asian	3 (3%)	-	-	-	-	3 (7%)
Other	6 (5%)	1 (4%)	1 (5%)	2 (10%)	-	2 (5%)
≤ High school educational attainment	77 (67%)	19 (76%)	5 (25%)	12 (57%)	4 (50%)	37 (90%)
Income (\$)						
<20,000	45 (39%)	6 (24%)	3 (15%)	11 (52%)	5 (62%)	20 (49%)
20-39,999	46 (40%)	17 (68%)	11 (55%)	3 (14%)	2 (25%)	13 (32%)
40,000+	9 (8%)	2 (8%)	1 (5%)	1 (5%)	-	5 (12%)
Has Children <18 yr. living at home	79 (69%)	21 (84%)	12 (60%)	11 (52%)	8 (100%)	27 (66%)

Study participants were predominately female, Hispanic or African-American, had high school or lower educational attainment, were lower income, young and middle aged, and had two or more children living in their household.

Figure 1. Median Fruit/Vegetable and Whole Grain Consumption Optimal Model vs. Total *p<0.05



The HFL program evidences a positive impact on participants' consumption of fruits/vegetables and whole grains, with significant pre-to-post median serving gains.

Figure 2. Median Fruit/Vegetable Consumption By Site

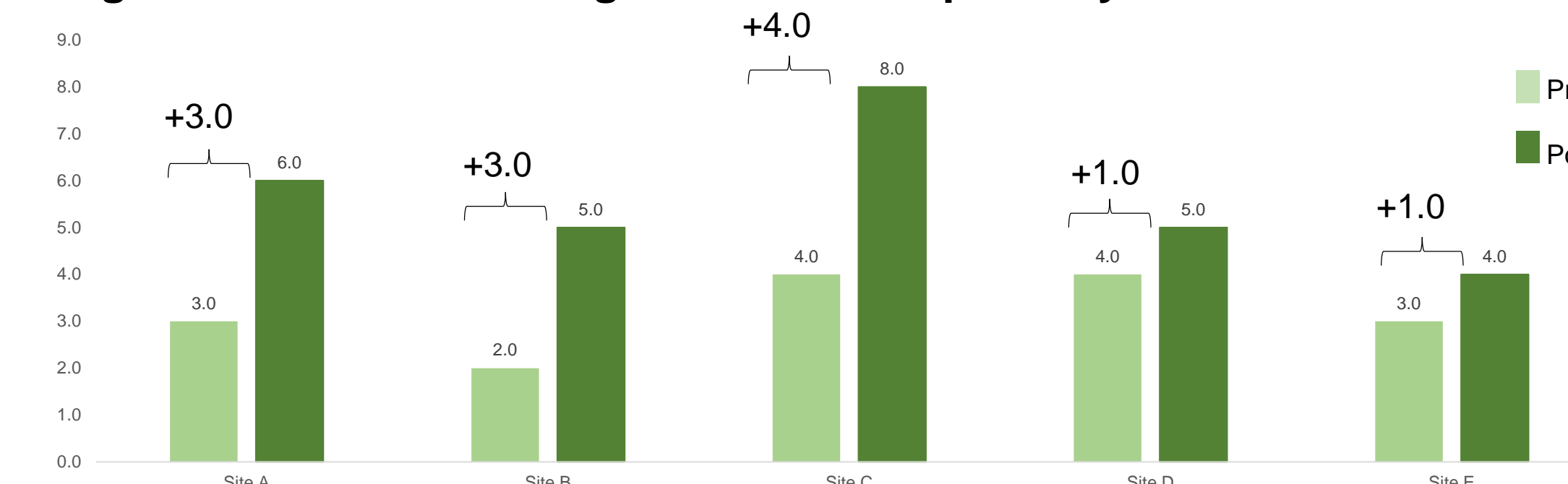


Figure 3. Median Whole Grain Consumption By Site

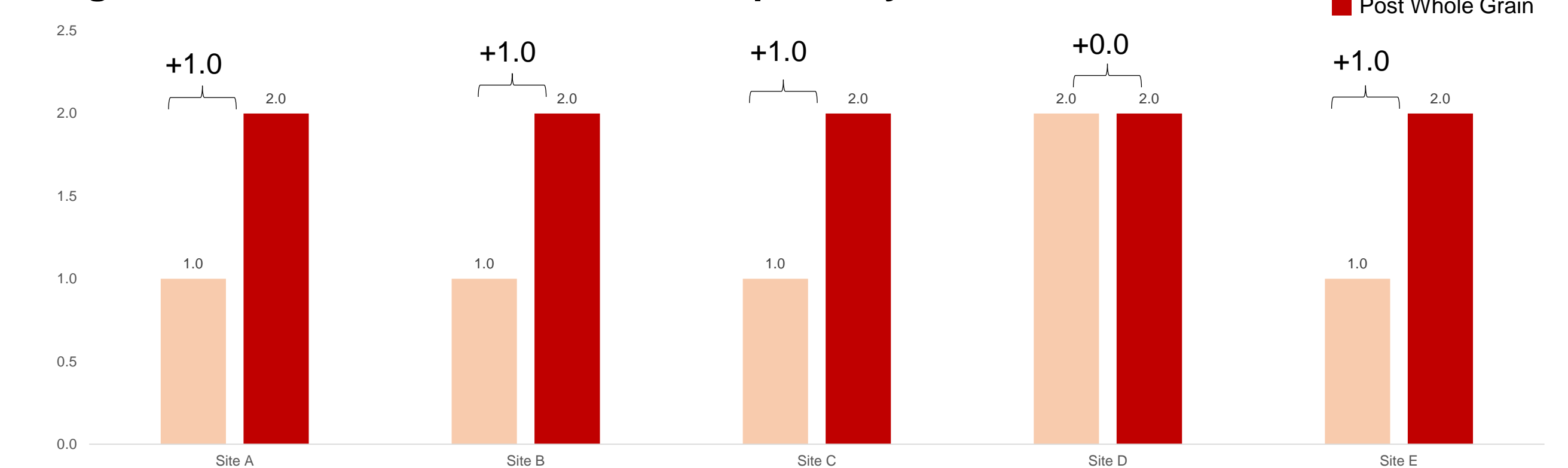
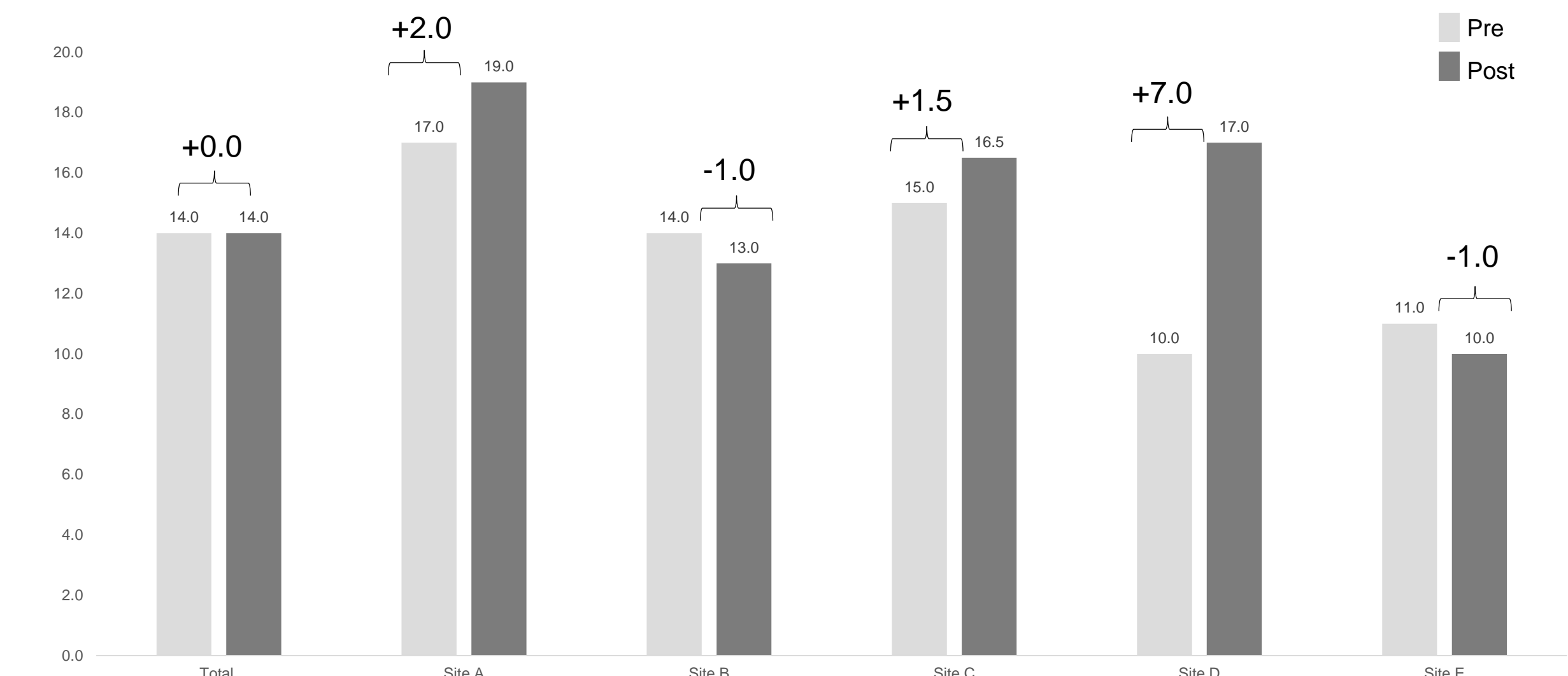


Figure 4. Median Meals Prepped at Home by Site



SUMMARY/CONCLUSIONS

- The community-centered engagement program involving science-based curriculum enabled an increase in shopping and cooking skills and improved individual health behaviors, with potential to impact family health behaviors.
- Collaborative partnerships between industry and public health non-profits can be an effective way to leverage resources and facilitate programs that impact health behaviors in low-income communities. These results suggest that this community engagement partnership approach, if scaled, can positively transform health on a population level and drive the American Heart Association's goal of improving Americans' health by 20% by 2020.