



# GEORGIA

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# 2021

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**SNAP-ED PROGRAMS  
OUTCOME EVALUATION REPORT**



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## Executive Summary

Georgia's Supplemental Nutrition Assistance Program Education program is administered by the Georgia Division of Family & Children Services and aims to improve the health of low-income Georgians by providing nutrition education, social marketing campaigns, and increasing access to healthy foods through policy, systems, and environmental changes.

All four of Georgia SNAP-Ed Implementing Agencies, HealthMPowers, Open Hand Atlanta, the Georgia Department of Public Health, and the University of Georgia, submitted Federal Fiscal Year 2021 evaluation data to the Georgia Division of Family & Children Services.

The implementing agencies in Georgia reported that there were 119,788 participants in direct education classes in Federal Fiscal Year 2021. In total, 735 low-income Georgian adults participated in Supplemental Nutrition Assistance Program Education direct education classes and completed a pre- or post-survey during Federal Fiscal Year 2021.

Combined results of Georgia's Federal Fiscal Year 2021 evaluation of its adult direct education classes indicated that Georgia's Supplemental Nutrition Assistance Program Education programming was associated with positive improvements in adults' self-reported healthy eating and food resource management behaviors. Adults met benchmarks for improvement across the following seven healthy eating and food resource management behaviors:

- Eating more than one kind of fruit
- Eating more than one kind of vegetable
- Drinking fewer sugar-sweetened beverages
- Choosing healthy foods on a budget
- Reading nutrition facts labels or nutrition ingredients lists
- Comparing prices before buying foods
- Shopping with a list

Compared to Federal Fiscal Year 2020, the same healthy eating and food resource management behaviors continued to meet benchmarks for improvements with the inclusion of two additional indicators – choosing healthy foods on a budget and shopping with a list– which also met the benchmarks for improvement in Federal Fiscal Year 2021.<sup>1</sup>

In addition to direct education, the implementing agencies reported that a total of 486 policy, systems, and environmental changes – 253 nutrition changes, 228 physical activity changes, and 5 combined nutrition + physical activity changes – were implemented at 240 sites across Georgia.

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<sup>1</sup> In FFY2020, logistic regression analyses were conducted to determine which indicators met benchmarks. McNemar tests were used in the FFY2021 analyses. Even though different analyses were conducted, results of which behaviors met benchmarks for improvements are still comparable between FFY20 and FFY21.

## Background

The Supplemental Nutrition Assistance Program (SNAP) is the largest federal food safety net program in the country that reduces hunger and helps put healthy food on the table for low-resourced Americans. SNAP Education (SNAP-Ed) is the nutrition education program of SNAP implemented in every United States (U.S.) state and territory, that equips low-income families and communities with the knowledge and skills they need to make healthy food choices on a budget and be physically active with limited resources based on the recommendations of the *Dietary Guidelines for Americans* (DGA, 2020) and the *Physical Activity Guidelines for Americans* (2018) respectively.

Georgia's SNAP-Ed program is administered by the Georgia Division of Family & Children Services and aims to improve the health of low-income Georgians by providing nutrition education, social marketing campaigns, and increasing access to healthy foods through healthy nutrition and physical supports known as policy, systems and environmental (PSE) changes.

The Georgia Division of Family & Children Services funds and supports four implementing agencies (IA) – HealthMPowers, Open Hand Atlanta, the Georgia Department of Public Health, and the University of Georgia – to implement community-based SNAP-Ed programming across the state. The Georgia SNAP-Ed program selected common indicators from the *SNAP-Ed Evaluation Framework* that all IAs reported on in the Federal Fiscal Year (FFY) 2021 that include common direct education indicators and PSE indicators used for the statewide evaluation.

Additionally, in FFY 2021 differences in health outcomes were explored by disaggregating direct education indicators by race/ethnicity. Disaggregated data is critical to understanding SNAP-Ed programming in Georgia and will allow that “resources and interventions are laser-focused to help address widening health, economic, and social disparities” amongst the most vulnerable communities and groups across the state (Robert Wood Johnson Foundation, 2020).

## Methods

### Participants and Procedure

Program participants are from the SNAP-Ed eligible population in Georgia and are at or below 185% of the federal poverty level. Each IA delivers direct education programming for varying age groups including children, teens, adults, and seniors. Age group and other demographic information are reported by IAs with direct education survey response data. Adult participants are the primary focus of the FFY 2021 statewide evaluation. Results for children and teens can be found in Appendix I.

### Data Sources

Survey response data were provided by all four IAs in Georgia. The data were collected from SNAP-Ed direct-education and PSE interventions targeting children, teens, adults, and seniors. Interventions were evidence-based and developed to address the specific needs of each age group. The interventions were targeted toward the *SNAP-Ed Evaluation Framework* Healthy Eating Behaviors (MT1) and Food Resource Management Behaviors (MT2), as well as PSE Nutrition Supports (MT5) and Physical Activity and Reduced Sedentary Behavior Supports (MT6) SNAP-Ed indicators (USDA-FNS, 2016). All IAs used evidence-based curricula, although the exact curricula and corresponding data collection tools varied by each site.

## Direct Education

Thirteen indicators were prioritized to measure outcomes related to SNAP-Ed activities. The MT1 indicators represent individual and family healthy eating behaviors supported by the current *Dietary Guidelines for Americans* recommendations (U.S. Department of Health and Human Services and USDA, 2020), and the MT2 indicators are related to smarter shopping and food resource management (Table 1).

**Table 1. SNAP-Ed Evaluation Framework indicators relevant to the Georgia direct-education activities**

Relevant Indicator	Description
MT1c	Ate more than one kind of fruit
MT1d	Ate more than one kind of vegetable
MT1g	Drinking water
MT1h	Drinking fewer sugar-sweetened beverages
MT1i	Consuming low-fat or fat-free milk, milk products, or fortified soy beverages
MT1l	Cups of fruit consumed per day
MT1m	Cups of vegetables consumed per day
MT2a	Choose healthy foods for my family on a budget
MT2b	Read nutrition facts labels or nutrition ingredients lists
MT2g	Not run out of food before month's end
MT2h	Compare prices before buying foods
MT2i	Identify foods on sale or use coupons to save money
MT2j	Shop with a list

To evaluate direct education interventions, surveys were used to measure self-reported dietary and food resource management behaviors. The first survey, a pre-test, is typically administered during the first intervention session and a second survey, a post-test, is delivered during the last intervention session. These two surveys are compared to measure any changes in self-reported behaviors. Data are reviewed by IAs, submitted to the Public Health Institute Center for Wellness and Nutrition (PHI CWN), and combined for statewide analyses.

In accordance with the *Interpretive Guide to the SNAP-Ed Evaluation Framework* (USDA-FNS, 2016), IAs used validated surveys to collect data for the MT1 and MT2 indicators. IAs used one of nine surveys resulting in a variety of questions used and responses received. To account for differences between surveys, PHI CWN developed guidelines for recoding survey responses for the MT1 and MT2 indicators. Prior to data collection, PHI CWN reviewed each survey question to determine its fit for evaluating direct education in accordance with the *SNAP-Ed Evaluation Framework* (USDA-FNS, 2016). For healthy eating behavior (MT1) changes, responses were recoded to identify whether the participant met or did not meet the standards set by the *Dietary Guidelines for Americans* (DGA). For food resource management (MT2), PHI CWN used determined benchmarks for the indicators related to food security and food resource management, and responses were recoded as meeting or not meeting those benchmarks.

For all pre- and post-test responses, descriptive analyses were conducted. Participants' responses were included in inferential analyses if both a pre-test and a post-test response was present. Various statistical analyses were used for direct education data. For binary outcomes, McNemar tests were conducted to test for differences in the proportions of participants that met guidelines on post-tests, compared to pre-tests. For statistically significant results on McNemar

tests ( $p < 0.05$ ), an effect size was calculated to report the magnitude of differences between post- and pre-tests. For continuous outcomes (MT1l and MT1m), t-tests were used to determine whether there was a significant change in reported means from pre- to post-tests. When a significant difference was identified, a test of effect size was used to provide information on the magnitude of the change. A statistical significance criterion of  $p$ -value  $< 0.05$  was set for each test.

### **Direct Education Disaggregated by Race/Ethnicity**

Data for race and ethnicity were collected using two different questions, like data collected by the U.S. Census Bureau (U.S. Census, 2017). For this report, the race and ethnicity data were recoded for adults, to abide by the Office of Management and Budget (OMB guidelines) (Office of Management and Budget, 1997), and to be able to create a co-equal category for Latino/Hispanic. Race and ethnicity were recoded into five categories, reflecting how participants self-identified, which included: Black or African American, White, Latino/Hispanic, more than one race, and other race/ethnicity. If a participant indicated his/her ethnicity as Latino/Hispanic and did not indicate a race, they were recoded to Latino/Hispanic. If the participant indicated his/her ethnicity as non-Latino/Hispanic, they were recoded according to the race the participant self-identified. Participants identifying as both White and Latino/Hispanic were first recoded as Latino/Hispanic White and then merged with those who identified only as Hispanic/Latino to create a category large enough for analysis. Participants who identified as Native American or Alaskan Native, Asian, Pacific Islander, or other were recoded to "Other race" as individual sample sizes were too small. Participants who identified as more than one race were recoded as such.

To achieve racial health equity, disparities in race and ethnicity for SNAP-Ed performance must be assessed. The OMB guidelines can help provide a baseline to disaggregate race and ethnicity data to further assess racial health inequities and to monitor trends and differences by race/ethnicity over time.

### **Direct Education Loss to Follow-up by Race/Ethnicity**

Each MT1 and MT2 outcome was also analyzed to determine the number of participants who were lost to follow-up from the beginning of the intervention to the end of the intervention. This means that a participant completed an assessment before the start of the direct education intervention but did not complete an assessment at the end of the program.

### **Policy, Systems, and Environmental Changes**

PSE changes were reported by the SER IAs using the MT5, MT6, LT5, and LT6 indicators as described in Table 2. IAs that work with sites or organizations to implement nutrition or physical activity activities reported each PSE site, PSE change, promotional effort, and estimated reach. Reporting of reach is not standardized, but IAs were provided with general guidelines to support estimating reach counts. PSE activities were reported through a data export from Program Evaluation and Reporting System. Descriptive statistics were analyzed for all PSEs (e.g., policy, systems, environmental) as well as promotional efforts.

All analyses were conducted using R statistical software.

**Table 2. SNAP-Ed Evaluation Framework Indicators Relevant to PSE Work**

Relevant Indicator	Description
MT5b/MT6b	Total number of policy changes
MT5c/MT6c	Total number of systems changes
MT5d/MT6d	Total number of environmental changes
MT5e/MT6e	Total number of promotional efforts for a PSE change
MT5f/MT6f	Reach: Total potential number of individuals who encountered the improved environment or were affected by the policy change on a regular (typical) basis and were assumed to be influenced by it

## Results

### Demographics

The IAs in Georgia reported that there were 119,788 participants in direct education classes in FFY 2021 (Table 3).

**Table 3. Total Number of Direct Education Participants by Implementing Agency**

Implementing Agency	Number of participants N (%)
Georgia Department of Public Health	284 (0.2%)
HealthMPowers	117,143 (97.8%)
Open Hand Atlanta	357 (0.3%)
The University of Georgia College of Family and Consumer Sciences	2,004 (1.7%)
<b>TOTAL</b>	<b>119,788 (100%)</b>

A total of 735 adult participants participated in either pre- and/or post-tests for direct education. Table 4 shows the race and ethnicity of FFY 2021 direct education participants.

**Table 4. Direct Education Participants' Race/Ethnicity**

Race/Ethnicity	Number of participants N (%)
Black or African American	369 (50.2%)
White, non-Hispanic	212 (28.8%)
Latino or Hispanic	107 (14.6%)
More than one race	16 (2.2%)
Other race/ethnicity	20 (2.7%)
Missing data	11 (1.5%)
<b>TOTAL</b>	<b>735 (100%)</b>

## Direct Education

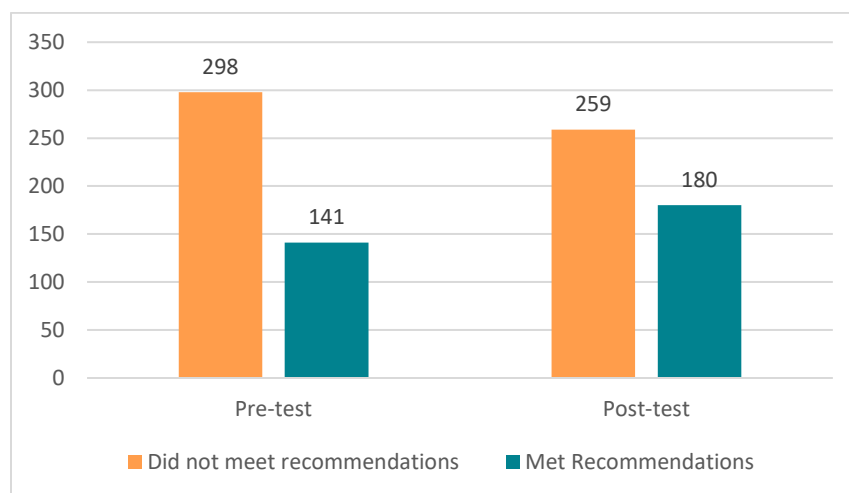
Results showed statistically significant increases for adults meeting guidelines for the following *SNAP-Ed Evaluation Framework* indicators: eating more than one kind of fruit (MT1c), eating more than one kind of vegetable (MT1d), drinking fewer sugar-sweetened beverages (SSBs) (MT1h), choosing healthy foods on a budget (MT2a), reading nutrition facts labels or nutrition ingredients lists (MT2b), comparing prices before buying foods (MT2h), and shopping with a list (MT2j).

Results showed no statistically significant changes for adults meeting guidelines for drinking water (MT1g), consuming low-fat or fat-free milk products, (MT1l), cups of fruit consumed per day (MT1i), cups of vegetables consumed per day (MT1m), not running out of food before month's end (MT2g) or identifying foods on sale or using coupons to save money (MT2i). Below are results with significant increases because of the SNAP-Ed direct education interventions implemented by the IAs. Additional results for adults are available in Appendix II.

### MT1c. Ate more than one kind of fruit.

Participants were asked whether they ate more than one kind of fruit each day. A significant increase was found for reports of adults consuming more than one kind of fruit (Figure 1). Before the intervention, 141 participants (32.1%) met recommendations. After the intervention, 180 participants (41.0%) met recommendations.

**Figure 1. Ate more than one kind of fruit**

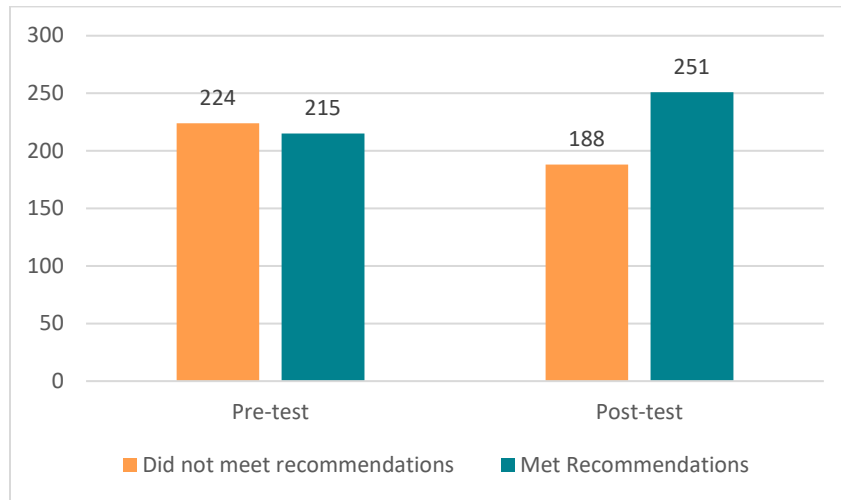


*A McNemar test showed a significant increase in reports of eating more than one kind of fruit each day ( $n=439$ ,  $X^2(1) = 11.7$ ,  $p < 0.001$ ,  $g = 0.16$ ).*

### MT1d. Ate more than one kind of vegetable

Participants were asked whether they ate more than one kind of vegetable each day. A significant increase was found for reports of adults consuming more than one kind of vegetable (Figure 2). Before the intervention, 215 participants (49.0%) met recommendations. After the intervention, 251 participants (57.2%) met recommendations.

**Figure 2. Ate more than one kind of vegetable**

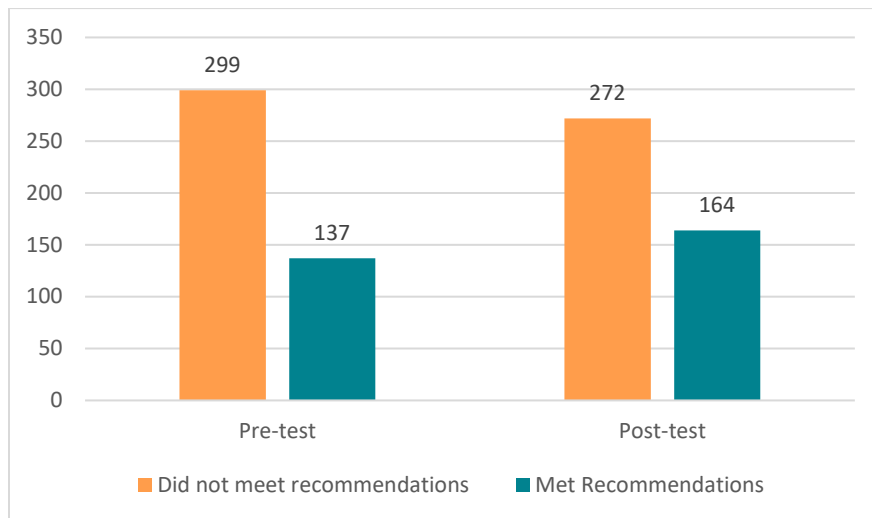


A McNemar test showed a significant increase in reports of eating more than one kind of fruit each day ( $n=439$ ,  $X^2(1) = 9.14$ ,  $p = 0.002$ ,  $g = 0.13$ ).

**MT1h. Drinking fewer sugar-sweetened beverages**

Participants were asked whether they drank fewer sugar-sweetened beverages. A significant increase was found for reports of adults consuming fewer SSBs (Figure 3). Before the intervention, 137 participants (31.4%) met recommendations. After the intervention, 164 participants (37.6%) met recommendations.

**Figure 3. Drinking fewer SSBs**



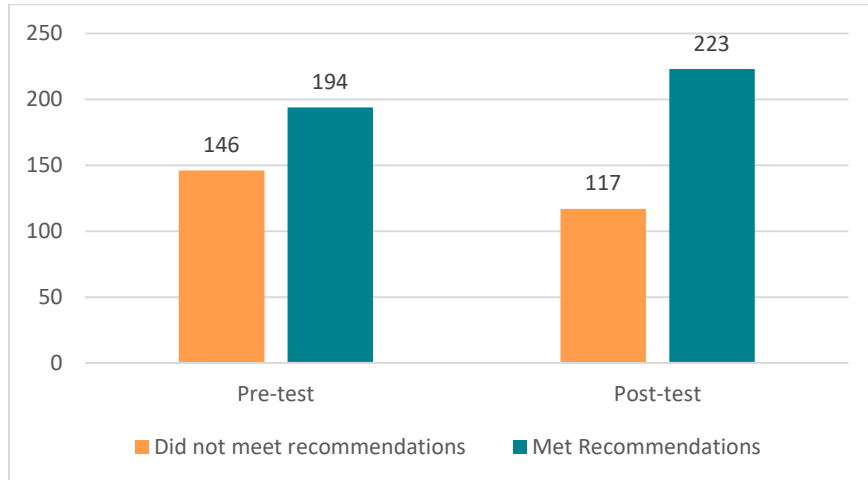
A McNemar test showed a significant increase in reports of drinking fewer SSBs ( $n=436$ ,  $X^2(1) = 7.95$ ,  $p = 0.005$ ,  $g = 0.05$ ).

**MT2a. Choose healthy foods for my family on a budget**

Participants were asked how often they chose healthy food for their families on a budget. A significant increase was found for participants reporting choosing healthy foods on a budget

(Figure 4). Before the intervention, 194 participants (57.1%) met recommendations. After the intervention, 223 participants (65.6%) met recommendations.

**Figure 4. Choose healthy foods for my family on a budget**

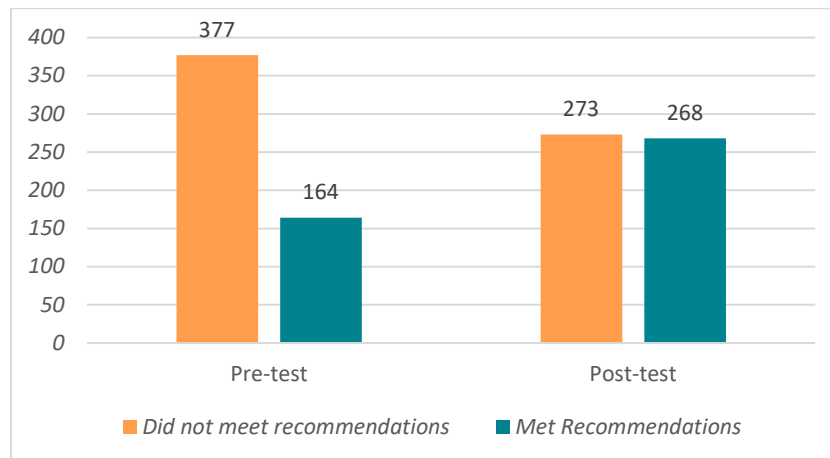


*A McNemar test showed a significant increase in choosing healthy foods on a budget ((n=340,  $X^2(1) = 8.8$ ,  $p = 0.003$ ,  $g = 0.16$ ).*

**MT2b. Read nutrition facts labels or nutrition ingredients lists**

Participants were asked how often they read nutrition facts labels or nutrition ingredients lists. A significant increase was found among participants reporting reading nutrition facts labels or nutrition ingredients lists (Figure 5). Before the intervention, 164 participants (30.3%) met recommendations. After the intervention, 268 participants (49.5%) met recommendations.

**Figure 5. Read nutrition facts labels or nutrition ingredients lists**

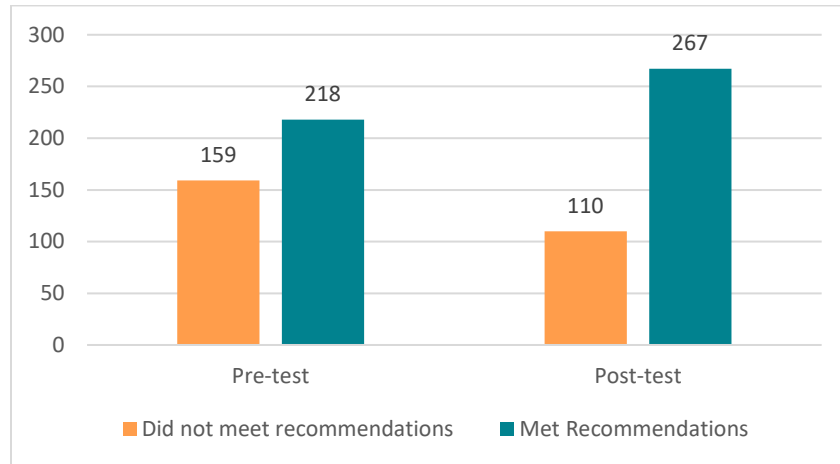


*A McNemar test showed a significant increase in reading nutrition facts labels or nutrition ingredients lists (n=541,  $X^2(1) = 58.3$ ,  $p < 0.001$ ,  $g = 0.29$ ).*

### MT2h. Compare prices before buying foods

Participants were asked how often they compare prices before buying foods. A significant increase was found among participants reporting that they compared prices before buying foods (Figure 6). Before the intervention, 218 participants (57.8%) met recommendations. After the intervention, 267 participants (70.8%) met recommendations.

**Figure 6. Compare prices before buying foods**

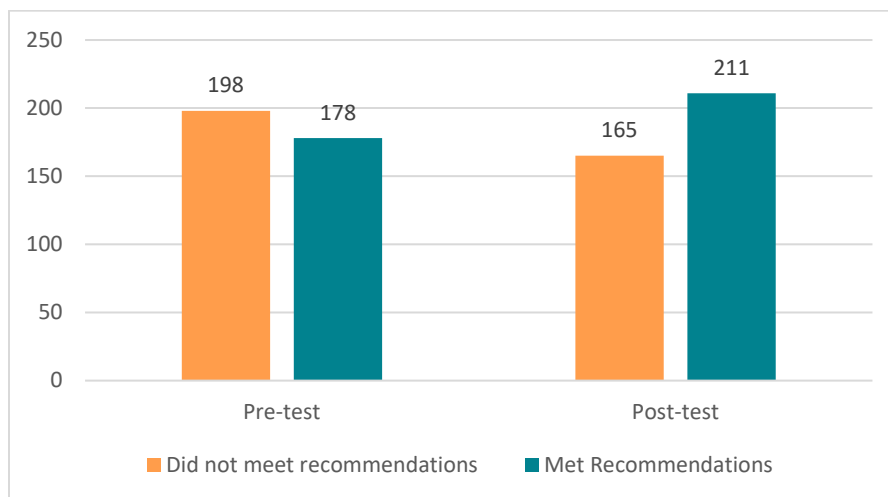


*A McNemar test showed a significant increase in reports of comparing prices before buying foods ( $n=377$ ,  $X^2(1) = 18.1$ ,  $p < 0.001$ ,  $g = 0.19$ ).*

### MT2j. Shopping with a list

Participants were asked how often they shop with a list. A significant increase was found among participants reporting that shopping with a list (Figure 7). Before the intervention, 178 participants (47.3%) met recommendations. After the intervention, 211 participants (56.1%) met recommendations.

**Figure 7. Shopping with a list**



*A McNemar test showed a significant increase in reports of shopping with a list ( $n=376$ ,  $X^2(1) = 10.8$ ,  $p = 0.001$ ,  $g = 0.174$ ).*

## Direct Education Disaggregated by Race/Ethnicity

Data were disaggregated by race/ethnicity to better understand SNAP-Ed programming in Georgia using an equity lens. Table 5 presents healthy eating (MT1) and food resource management behaviors (MT2). Indicators with a checkmark (✓) specify outcomes with significant increases in behaviors, and results with a “NA” did not have a sufficient sample size for analyses. Participants who identified as more than one race or other race/ethnicity (which included Native American or Alaskan Native, Asian or Pacific Islander) were not included in this analysis because the sample sizes were not sufficient for analyses. See Appendix III for the complete results by race/ethnicity.

**Table 5. Direct Education Statistically Significant Increases in Outcomes by Race/Ethnicity**

	All adults	Black adults	White adults	Latino adults
MT1c. Ate more than one kind of fruit	✓	✓		✓
MT1d. Ate more than one kind of vegetable	✓			
MT1g. Drinking water				
MT1h. Drinking fewer SSBs	✓	✓		
MT1i. Consuming low-fat or fat-free milk products		✓		NA
MT1l. Cups of fruit consumed per day			NA	NA
MT1m. Cups of vegetables consumed per day			NA	NA
MT2a. Choose healthy foods for my family on a budget	✓			✓
MT2b. Read nutrition facts labels or nutrition ingredients lists	✓	✓	✓	✓
MT2g. Not run out of food before month’s end				
MT2h. Compare prices before buying foods	✓	✓		NA
MT2i. Identify foods on sale or use coupons to save money				NA
MT2j. Shop with a list	✓	✓		NA

## Direct Education Loss to Follow-up by Race/Ethnicity

Each MT1 and MT2 outcome was also analyzed to determine the number of participants who were lost to follow-up from the beginning of the intervention to the end of the intervention. When disaggregated by race/ethnicity, on average, Black adult participants experienced, on average, a 36% loss to follow-up rate, ranging from 30% to 62% on any given indicator. Latino/Hispanic adult participants and adult participants who identify with more than one race experienced a 17% average loss to follow-up rate. White adult participants experienced a 12% average loss to follow-up rate and other adult participant race/ethnicity groups (which included Native American or Alaskan Native, Asian or Pacific Islander) had an 8% average loss to follow-up.

## Policy, Systems, and Environmental Changes

IAs reported a total of 486 PSE changes with a combined reach of 111,373. Of these changes, there were 16 (3.3%) policy changes, 295 (60.7%) systems changes, and 175 (36.0%) environmental changes. These PSE changes were supported by one promotional change directly paired with a PSE and 23 promotional changes not directly paired with a PSE change.

## Policy Changes

In total, 16 policy changes were reported across the IAs, with 4 changes related to nutrition and 12 changes related to physical activity. Of the four nutrition-related policy changes, most (n=3) were related to policy restrictions on using food as a punishment and one was a healthy retail policy (Table 6).

**Table 6. Nutrition-related policy changes (MT5b)**

Policy Change Description	Frequency
Policy restrictions on using food as a punishment	3
Healthy retail policy	1

Twelve policy changes were reported related to physical activity, with the most frequent as policies to increase time spent doing physical activity (n=8), followed by policy restriction on physical activity as a punishment (n=4) (Table 7).

**Table 7. Physical activity-related policy changes (MT6b)**

Policy Change Description	Frequency
Policy to increase time spent doing physical activity	8
Policy restrictions on physical activity as a punishment	4

## Systems Changes

In total, 295 systems changes were reported, with 134 changes related to nutrition, 156 changes related to physical activity, and 5 changes related to both nutrition and physical activity.

The most common systems changes related to nutrition were improving professional development opportunities for nutrition (n=34) and improving free water access (n=22). Table 8 lists the top five systems changes related to nutrition in Georgia.

**Table 8. Nutrition-related systems changes (MT5c)**

Systems Change Description	Frequency
Initiated, improved or expanded professional development opportunities on nutrition (e.g. nutrition standards, gardening, breastfeeding, etc.)	34
Improved free water access, taste, quality, smell, or temperature	22
Initiated or expanded farm-to-table/use of fresh or local produce	13
Initiated, improved or expanded implementation of guidelines on use of food as rewards or during celebrations	10
Improved menus/recipes (variety, quality, etc.)	10

The most common systems changes related to physical activity were improving professional development opportunities on physical activity (n=47) and incorporating physical activity into the school day or during classroom-based instruction (not recess/free play or physical education) (n=44). Table 9 lists the top four systems changes related to physical activity in Georgia.

**Table 9. Physical activity-related systems changes (MT6c)**

<b>Systems Change Description</b>	<b>Frequency</b>
Initiated, improved or expanded professional development opportunities on physical activity	47
Incorporated physical activity into the school day or during classroom-based instruction (not recess/free play or PE)	44
Improved quality of physical education	35
Increased or improved opportunities for unstructured physical activity time/free play	18

### **Environmental Changes**

In total, 175 environmental changes were reported, with 115 changes related to nutrition and 60 changes related to physical activity.

The most common environmental changes related to nutrition were educational displays to prompt healthy eating behavior choices close to the point of purchase (n=34) and creating dedicated lactation spaces (n=22). Table 10 lists the top five environmental changes related to nutrition in Georgia.

**Table 10. Nutrition-related environmental changes (MT5d)**

<b>Environmental Change Description</b>	<b>Frequency</b>
Used interactive educational display (that will stay at the site), other visual displays, posters, taste testing, live demonstrations, audiovisuals, celebrities, etc. to prompt healthy eating behavior choices close to the point of decision	34
Initiated or expanded dedicated lactation space and other environmental concerns	22
Increased or improved opportunities for nutrition education	22
Initiated, improved, expanded, reinvigorated, or maintained edible gardens	8
Improved or expanded cafeteria/dining/serving areas or facilities	6

The most common environmental changes related to physical activity reported were increased or improved opportunities for structured physical activity (n=23) and improved physical activity facilities, equipment, or outdoor space (n=17). Table 11 lists the top five environmental changes related to physical activity in Georgia.

**Table 11. Physical activity-related environmental changes (MT6d)**

<b>MT6d Environmental Changes Description</b>	<b>Frequency</b>
Increased or improved opportunities for structured physical activity	23
Improved or expanded physical activity facilities, equipment, structures, or outdoor space	17
Improved quality of structured physical activity (non-PE)	11
Initiated new or expanded access to physical activity facilities for after-hours recreation or shared use	8
Installed signage and prompts for use of walking, stairs, and bicycle paths	1

## Promotional Changes

In total, one promotional change was directly paired with a PSE and 23 promotional changes were not paired with a PSE change. The promotion that was paired with a PSE was improving vending machine labeling (n=1) and the unpaired PSEs were taking steps to improve the appeal of the school meal programs to increase meal participation (n=23). All promotions were nutrition-related.

A complete list of all PSE changes across Georgia can be found in Appendix IV for nutrition and Appendix V for physical activity.

## Reach by Domain

The total estimated reach for all PSEs was 111,373. PSE changes took place in multiple settings where people, learn, live, and shop. The highest reach for PSE changes was reported in the learn setting (n=82,418). No PSE changes occurred in the eat, play, or work settings.

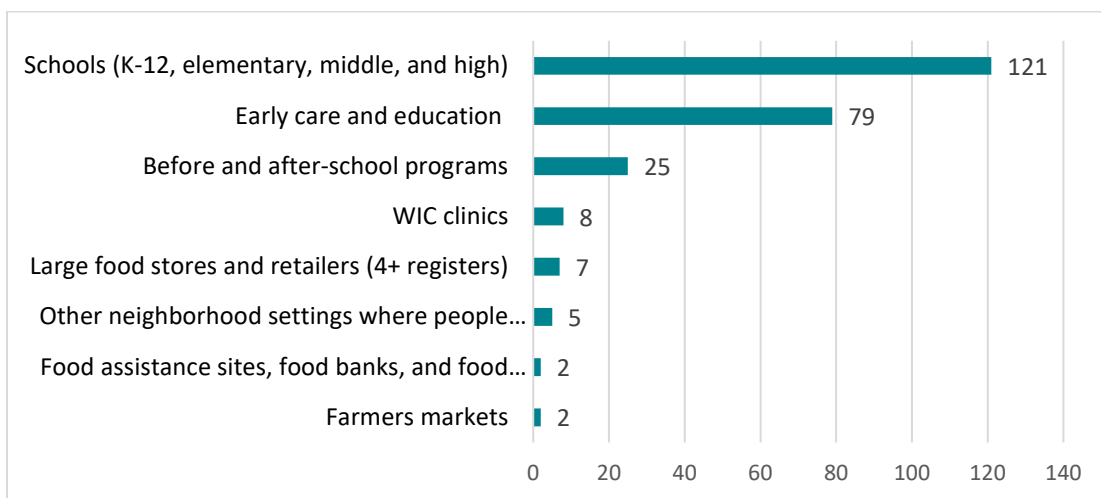
**Table 12. Reach by Domain**

Domain	Reach	Percent
Learn (e.g. schools, early childhood education, libraries)	82,418	74.0%
Shop (e.g. food stores, farmers markets, food banks)	14,626	13.1%
Live (e.g. public housing, shelters, places of worship)	14,329	12.9%
<b>Total Reach</b>	<b>111,373</b>	<b>100%</b>

## PSEs by Setting

Georgia IAs reported the specific settings where PSE changes took place. The most-reported setting was school sites (K-12, elementary, middle, and high) (n=121) followed by early care and education facilities (n=79). Figure 8 shows the settings with PSE changes in Georgia.

**Figure 8. Types of Settings with PSE Changes in Georgia**



## Limitations

First, this study used self-reported data for the pre- and post-surveys to measure healthy eating and food resource management behaviors. As with all self-reported data, responses may have been subject to systematic biases in memory or reporting such as recall bias and social desirability bias.

Second, data were only included in analyses if there was a matched set of pre- and post-survey responses for a question. Therefore, the results may have been affected by the participants who were missing from the post-survey. In addition, the loss to follow-up of participants between the pre- and post-survey may not have been reported consistently across IAs. For example, some IAs could have only provided PHI CWN matched pre-post data whereas other IAs provided all data.

Next, most of the responses to questions assessing healthy eating and food resource management had to be recoded dichotomously. This was because the survey instruments used by the IAs varied in type and contained different questions and response options. Recoding was necessary so that responses could be combined. However, recoding results in a loss of sensitivity to identify incremental changes in the analyses.

Finally, PHI CWN formulated the method for recoding race/ethnicity data into one variable for analysis. While PHI CWN believes this method is in line with OMB guidelines, this method is welcome to feedback and dialogue to determine if it is the most accurate method to reflect race/ethnicity data for Georgia.

## Conclusions

Results of Georgia's FFY 2021 evaluation of its direct education classes indicated that Georgia's programming was associated with positive improvements in adults' self-reported healthy eating and food resource management behaviors. Adults met benchmarks for improvement across the following seven healthy eating and food resource management behaviors:

- Eating more than one kind of fruit
- Eating more than one kind of vegetable
- Drinking fewer sugar-sweetened beverages
- Choosing healthy foods on a budget
- Reading nutrition facts labels or nutrition ingredients lists
- Comparing prices before buying foods
- Shopping with a list

Compared to FFY 2020, the same healthy eating and food resource management behaviors continued to meet benchmarks for improvements with the inclusion of two additional indicators – choosing healthy foods on a budget and shopping with a list – which also met the benchmarks for improvement in FFY 2021.

The results of the race/ethnicity disaggregation of direct nutrition education data may seem to indicate that Black participants had more significant outcomes than White or Latino participants. However, more than one-third of Black participants in direct education courses did not complete the course (i.e., loss to follow-up) thus the participants included in the analysis may represent a more motivated sample. Therefore, results presented in Table 5 above may be different (e.g., fewer significant results for Black participants) if the missing one-third of participants were to be included. Other potential confounding factors include the differences in the IA service provider, provision of free fruits/vegetables along with intervention, actual participants surveyed vs. the total pool of participants in direct education (see Tables 3 and 4), socioeconomic status of participants (may be reaching higher-income participants with virtual classes due to COVID-19), etc. According to the National Equity Atlas, Georgia ranks number 35 out of 50 on the Racial Equity Index at the state level, which is in the lowest third of all states (National Equity Atlas, 2019). Also, according to the Kaiser Family Foundation, in Georgia, poverty among Black (19.1%) and Hispanic Americans (19.7%) is more than two times that of White Americans (9.1%) (KFF, 2021). Health disparities exist, often due to persisting racial inequities. Therefore, this FFY 2021 report used an approach to look at differences in health outcomes by disaggregating direct education indicators by race/ethnicity. Further discussions with the IAs are required to interpret the data as well as ensure a standardized approach is used to collect racial/ethnic data. Analyzing the data over time and looking for trends year over year would be important to assess if these results are consistent with these initial findings.

In FFY 2021, there were a total of 486 PSE changes, with a total reach of 111,373. While total PSE changes decreased between FFY 2020 and FFY 2021, changes in physical activity increased from 199 in 2020 to 228 in 2021.

## Recommendations

Based on the findings and conclusions of this report the following recommendations should be considered:

- Ensure PSEs are being recorded accurately and consistently through statewide training and technical assistance with IAs to demonstrate expectations and differences in one-time activities vs. PSE changes, i.e., an annual professional development wellness policy training requirement for all school personnel (systems change) vs. a one-time professional development training for school personnel (capacity-building).
- Increase the intentional pairing of promotional strategies with PSE strategies. The promotion of new PSE strategies can increase awareness and usage of newly implemented healthy changes.
- Capture additional qualitative data regarding PSE and multi-level interventions to complement the quantitative statewide data. This could be in the form of success stories, quotes, or other anecdotal evidence.
- Collect copies of passed policies to review. Share copies of successful policy language that were successfully passed to create templates for other IAs and partners to use.
- Continue to work towards a common survey tool used by IAs for adults as well as children and teen participants, so that there is no longer a need to recode results into

dichotomous variables. This will provide the ability to capture incremental changes in the data reported. Consider an approach that reduces the burden on the participants of these programs (limit surveys to relevant questions only, reduce duplication, etc.).

- Analyze direct education outcomes with the corresponding direct education curriculum topics that were used by each IA. Consider only including indicators in the analysis if the direct education curriculum topic addressed the specific SNAP-Ed indicator. For example, if a curriculum doesn't cover how to shop with a list, then MT2j "Shop with a list", should not be asked. This approach will lead to a greater impact from each indicator as the programmatic activity will align with the evaluation.
- Continue to report race/ethnicity disaggregation for direct education outcomes, to be able to assess health equity for specific indicators over time and monitor trends. Compare results with other commonly used surveillance data as comparisons. Ensure race/ethnicity data is being collected consistently across the IAs. Consider if other information is needed such as preferred language. Assess if any curriculum has been culturally or linguistically tailored.
- Suggest that IAs report all data to PHI CWN, and not just paired pre-post data, so further analysis can be conducted for loss to follow-up.
- Implement a statewide social marketing campaign that focuses on nutrition or physical activity and have IAs report on relevant *SNAP-Ed Evaluation Framework* Indicators. Include community voice in future campaigns to determine the best method of implementation and evaluation.

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## Appendix I

### Descriptive Analyses: Teens

Table 1 presents the counts and proportions of teens who met the recommendations at pre- and post-survey for all indicators

**Table 1. All Teens for All Indicators**

Indicator	Pre-Survey			Post-Survey		
	Total	Met Recommendations	Percent	Total	Met Recommendations	Percent
MT1c	1820	669	36.8%	1820	713	39.2%
MT1d	1820	533	29.3%	1820	565	31.0%
MT1g	1842	634	34.4%	1842	620	33.7%
MT1h	1842	614	33.3%	1842	652	35.4%

### Descriptive Analyses: Children

Table 2 presents the counts and proportions of children who met the recommendations at pre- and post-survey for all indicators

**Table 2. All Children for All Indicators**

Indicator	Pre-Survey			Post-Survey		
	Total	Met Recommendations	Percent	Total	Met Recommendations	Percent
MT1g	39	20	51.3%	39	5	12.8%
MT1h	39	23	59.0%	39	7	17.9%

## Appendix II

### Descriptive Analyses: Adults

Table 1 presents the counts and proportions of adults who met the recommendations at pre- and post-survey for all indicators

**Table 1. All Adults for All Indicators**

Indicator	Pre-Survey			Post-Survey		
	Total	Met Recommendations	Percent	Total	Met Recommendations	Percent
MT1c	439	141	32.1%	439	180	41.0%
MT1d	439	215	49.0%	439	251	57.2%
MT1g	443	308	69.5%	443	324	73.1%
MT1h	436	137	31.4%	436	164	37.6%
MT1i	279	97	34.8%	279	106	38.0%
MT1l	61	44	72.1%	61	57	93.4%
MT1m	60	49	81.7%	60	54	90.0%
MT2a	340	194	57.1%	340	223	65.6%
MT2b	541	164	30.3%	541	268	49.5%
MT2g	327	210	64.2%	327	218	66.7%
MT2h	377	218	57.8%	377	267	70.8%
MT2i	377	154	40.8%	377	175	46.4%
MT2j	376	178	47.3%	376	211	56.1%

## Appendix III

### Direct Education Disaggregated by Race/Ethnicity

Table 1 presents the counts and proportions of adults who met the recommendations at pre- and post-survey for all indicators.

Indicator	Race/Ethnicity	Pre-Survey			Post-Survey			<i>p-value (McNemar test)</i>
		Total	Met Recommendations	Percent	Total	Met Recommendations	Percent	
MT1c	Black or African American	151	43	28.5%	151	60	39.7%	0.03*
	Non-Hispanic White	168	40	23.8%	168	50	29.8%	0.13
	Latino/Hispanic	91	40	44.0%	91	54	59.3%	0.02*
	More than one race	9	3	33.3%	9	1	11.1%	NA
	Other race/ethnicity	16	14	87.5%	16	13	81.3%	NA
MT1d	Black or African American	152	72	47.4%	152	86	56.6%	0.002*
	Non-Hispanic White	167	71	42.5%	167	83	49.7%	0.07
	Latino/Hispanic	91	51	56.0%	91	62	68.1%	0.10
	More than one race	9	4	44.4%	9	3	33.3%	NA
	Other race/ethnicity	16	14	87.5%	16	14	87.5%	NA
MT1g	Black or African American	225	185	82.2%	225	187	83.1%	0.89
	Non-Hispanic White	100	52	52.0%	100	57	57.0%	0.4
	Latino/Hispanic	90	50	55.6%	90	57	63.3%	0.21
	More than one race	9	6	66.7%	9	6	66.7%	NA
	Other race/ethnicity	16	13	81.3%	16	15	93.8%	NA
MT1h	Black or African American	227	79	34.8%	227	97	42.7%	0.02*
	Non-Hispanic White	96	33	34.4%	96	34	35.4%	1
	Latino/Hispanic	85	18	21.2%	85	24	28.2%	0.07
	More than one race	9	5	55.6%	9	5	55.6%	NA
	Other race/ethnicity	16	2	12.5%	16	2	12.5%	NA
MT1i	Black or African American	201	63	31.3%	201	77	38.3%	0.045*
	Non-Hispanic White	40	14	35.0%	40	13	32.5%	1
	Latino/Hispanic	15	13	86.7%	15	8	53.3%	NA
	More than one race	5	3	60.0%	5	2	40.0%	NA
	Other race/ethnicity	16	3	18.8%	16	6	37.5%	NA
MT2a	Black or African American	92	54	58.7%	92	58	63.0%	0.61
	Non-Hispanic White	158	84	53.2%	158	94	59.5%	0.11
	Latino/Hispanic	75	46	61.3%	75	60	80.0%	0.006*
	More than one race	9	7	77.8%	9	7	77.8%	NA
	Other race/ethnicity	3	1	33.3%	3	2	66.7%	NA

Indicator	Race/Ethnicity	Pre-Survey			Post-Survey			p-value (McNemar test)
		Total	Met Recommendations	Percent	Total	Met Recommendations	Percent	
MT2b	Black or African American	231	71	30.7%	231	123	53.2%	<0.001****
	Non-Hispanic White	188	62	33.0%	188	86	45.7%	<0.001****
	Latino/Hispanic	87	22	25.3%	87	41	47.1%	<0.001****
	More than one race	13	6	46.2%	13	9	69.2%	NA
	Other race/ethnicity	18	0	0.0%	18	8	44.4%	NA
MT2g	Black or African American	90	45	50.0%	90	50	55.6%	0.51
	Non-Hispanic White	153	105	68.6%	153	109	71.2%	0.61
	Latino/Hispanic	69	50	72.5%	69	51	73.9%	1
	More than one race	9	5	55.6%	9	3	33.3%	NA
	Other race/ethnicity	3	2	66.7%	3	3	100.0%	NA
MT2h	Black or African American	204	123	60.3%	204	146	71.6%	0.01*
	Non-Hispanic White	129	75	58.1%	129	86	66.7%	0.08
	Latino/Hispanic	15	9	60.0%	15	10	66.7%	NA
	More than one race	9	4	44.4%	9	7	77.8%	NA
	Other race/ethnicity	18	5	27.8%	18	17	94.4%	NA
MT2i	Black or African American	206	86	41.7%	206	99	48.1%	0.20
	Non-Hispanic White	129	49	38.0%	129	53	41.1%	0.62
	Latino/Hispanic	15	11	73.3%	15	10	66.7%	NA
	More than one race	8	4	50.0%	8	6	75.0%	NA
	Other race/ethnicity	17	2	11.8%	17	7	41.2%	NA
MT2j	Black or African American	204	92	45.1%	204	112	54.9%	0.014*
	Non-Hispanic White	128	68	53.1%	128	74	57.8%	0.31
	Latino/Hispanic	15	8	53.3%	15	8	53.3%	NA
	More than one race	9	5	55.6%	9	7	77.8%	NA
	Other race/ethnicity	18	4	22.2%	18	8	44.4%	NA

\*p<.05; \*\*\*\*p<.001

## Appendix IV

### PSE Changes – Nutrition

MT5b Policy Changes Description	Frequency	Percent
Policy restrictions on using food as a punishment	3	75.0%
Healthy retail policy	1	25.0%
<b>Total number of policy changes</b>	<b>4</b>	<b>100%</b>

MT5c Systems Changes Description	Frequency	Percent
Initiated, improved or expanded professional development opportunities on nutrition (e.g. nutrition standards, gardening, breastfeeding, etc.)	34	25.4%
Improved free water access, taste, quality, smell, or temperature	22	16.4%
Initiated or expanded farm-to-table/use of fresh or local produce	13	9.7%
Initiated, improved or expanded implementation of guidelines on use of food as rewards or during celebrations	10	7.5%
Improved menus/recipes (variety, quality, etc.)	10	7.5%
Improved child feeding practices (e.g. served family style, adults role model healthy behaviors, staff sit with children, children decide when they are full, etc.)	7	5.2%
Implemented, improved or expanded fundraisers involving healthy food or decreasing unhealthy food	5	3.7%
Expanded or improved food system transportation options (to increase food access opportunities)	5	3.7%
Staff include nutrition education as a learning standard for children	5	3.7%
Initiated, improved or expanded implementation of guidelines for healthier snack options	5	3.7%
Partners adopt or improve use of a system to monitor implementation of food/beverage or wellness related policy	4	3.0%
Improved food purchasing/donation specifications or vendor agreements towards healthier food(s)/beverages	3	2.2%
Initiated, improved or expanded use of standardized, healthy recipes	3	2.2%
Initiated, improved or expanded opportunities for parents/students/community to access fruits and vegetables from the garden	2	1.5%
Improved or increased healthy beverage options	2	1.5%
Clients have the opportunity to choose at least some foods they would like to take from food pantries, food banks, or soup kitchens (i.e. a client-choice model)	1	0.7%
Initiated or expanded mechanism for distributing seedlings and/or other materials to families or communities for home gardening	1	0.7%
Implemented price manipulation/coupons/discounts to encourage healthy choices	1	0.7%
Initiated or enhanced limits on marketing/promotion of less healthy options	1	0.7%
<b>Total number of systems changes</b>	<b>134</b>	<b>100%</b>

<b>MT5d Environmental Changes Description</b>	<b>Frequency</b>	<b>Percent</b>
Used interactive educational display (that will stay at the site), other visual displays, posters, taste testing, live demonstrations, audiovisuals, celebrities, etc. to prompt healthy eating behavior choices close to the point of decision	34	29.6%
Initiated or expanded dedicated lactation space and other environmental concerns	22	19.1%
Increased or improved opportunities for nutrition education	22	19.1%
Initiated, improved, expanded, reinvigorated, or maintained edible gardens	8	7.0%
Improved or expanded cafeteria/dining/serving areas or facilities	6	5.2%
Established healthy food/beverage defaults (whole wheat bread, salad, or fruit instead of fries, water instead of soda, etc.)	5	4.3%
Improved appeal, layout or display of meal food/beverages to encourage healthy and discourage unhealthy selections	4	3.5%
Establish or improve a practice that encourages meal service staff to prompt healthy choices	4	3.5%
Initiated or expanded the use of digital platforms (websites, social media, text messages, etc.) to improve convenience of/access to healthy food (i.e. by promoting food distribution site, retail, cafeteria, community garden, etc.)	3	2.6%
Initiated or expanded price manipulation/coupons/discounts to encourage healthy food choices (including fruit & vegetable prescriptions with cost-offset)	3	2.6%
Improve appeal, layout or display of snack or competitive foods to encourage healthier selections	1	0.9%
Established or improved salad bar	1	0.9%
Decreased space/amount/variety of unhealthy options (includes shelf space, number of booths, options on menus)	1	0.9%
Initiated or expanded use of onsite garden produce for meals/snacks provided onsite	1	0.9%
<b>Total number of environmental changes</b>	<b>115</b>	<b>100%</b>

## Appendix V

### PSE Changes – Physical Activity

MT6b Policy Changes Description	Frequency	Percent
Policy to increase time spent doing physical activity	8	67.1%
Policy restrictions on physical activity as a punishment	4	50.1%
<b>Total number of policy changes</b>	<b>12</b>	<b>100%</b>

MT6c Systems Changes Description	Frequency	Percent
Initiated, improved or expanded professional development opportunities on physical activity	47	30.1%
Incorporated physical activity into the school day or during classroom-based instruction (not recess/free play or PE)	44	28.2%
Improved quality of physical education	35	22.4%
Increased or improved opportunities for unstructured physical activity time/free play	18	11.5%
Increased quantity (minutes) of physical education (PE)	4	2.6%
Partners adopt or improve use of a system to monitor implementation of physical activity policies	4	2.6%
Implemented new or expanded restrictions on use of physical activity as punishment	4	2.6%
<b>Total number of systems changes</b>	<b>156</b>	<b>100%</b>

MT6d Environmental Changes Description	Frequency	Percent
Increased or improved opportunities for structured physical activity	23	38.3%
Improved or expanded physical activity facilities, equipment, structures, or outdoor space	17	28.3%
Improved quality of structured physical activity (non-PE)	11	18.3%
Initiated new or expanded access to physical activity facilities for after-hours recreation or shared use	8	13.3%
Installed signage and prompts for use of walking, stairs, and bicycle paths	1	1.7%
<b>Total number of environmental changes</b>	<b>60</b>	<b>100%</b>



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