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Snap-Ed New Mexico Outcome Evaluation Report 2024

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SNAP-ED NEW MEXICO OUTCOME EVALUATION REPORT

2024

SNAP-Ed New Mexico

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Executive Summary: Outcome Evaluation

Purpose

The goal of the Supplemental Nutrition Assistance Program-Education in New Mexico (SNAP-Ed NM) is to improve the likelihood that persons eligible for SNAP will make healthy food choices within a limited budget and choose physically active lifestyles consistent with the current Dietary Guidelines for Americans and the US Department of Agriculture (USDA) food guidance. SNAP-Ed NM does this by providing direct nutrition education and physical activity programming, social marketing-based promotion and programming, and by facilitating the implementation of policy, systems and environmental strategies that support these healthy behaviors. The University of New Mexico Prevention Research Center (UNM PRC) evaluated efforts by SNAP-Ed NM during the 2023-2024 academic year. The purpose was to measure health behaviors related to SNAP-Ed NM programming implemented in Head Start centers and elementary schools across the state by the following implementing agencies and programs: Cooking with Kids (CWK), Kids Cook! (KC!), the New Mexico Department of Health's (NMDOH) Healthy Kids Healthy Communities (HKHC) program, the New Mexico State University's (NMSU) Ideas for Cooking and Nutrition (ICAN), and UNM's CHILE Plus and Eat Smart to Play Hard (ESPH) programs.

Methods

The UNM PRC conducted outcome evaluation examining the effect of SNAP-Ed NM programming on healthy eating and physical activity behaviors. During the 2023-2024 academic year, pre-intervention baseline surveys (Fall 2023) and post-intervention follow-up surveys (Spring 2024) were administered both online and via hard copy, across a stratified random sample of Head Start centers and elementary schools in NM. Twenty-six sites participated. Surveys were completed by parents of Pre-K, Kindergarten, and 3rd-5th grade students. In total, 716 baseline surveys and 478 follow-up surveys were included in the data analysis. This research was approved by the UNM Human Research Protections Office and the Albuquerque Public Schools Research Review Board.

Key Findings

- On average, fruit servings among children increased significantly from 1.91 at baseline to 2.05 at follow-up.
- There was a significant increase in the percentage of children eating fruits or vegetables as snacks from 72.2% at baseline to 80.3% at follow-up.
- A greater proportion of children spent three or more hours in active play a day at follow-up compared with baseline.
- Parents reported a significant increase in joint active play with their children, from an average of 3.23 days per week at baseline to 3.45 days per week at follow-up.
- Among Hispanics, a higher percentage of parents placed rules or limits on screen time for their children from baseline (82.0%) to follow-up (84.7%).
- The "Eat Smart to Play Hard" slogan was the healthy message most frequently recalled by children at follow-up.

Conclusion

SNAP-Ed New Mexico strives to increase healthy eating and physical activity across the state using nutrition education, policy, systems, and environmental change strategies, and social marketing campaigns. Overall, the 2023-2024 outcome evaluation demonstrated that NM SNAP-Ed programming continues to be associated with healthy eating and increased physical activity among elementary school-aged children and their families. The evaluation saw increases in fruit servings consumed and in the average number of days being physically active as a family. Students also recalled the Eat Smart to Play Hard messaging designed to influence healthy eating and physical activity. No significant changes in sedentary behavior were observed. These findings highlight the strengths and opportunities to improve future SNAP-Ed NM programming.

Introduction

The goal of the Supplemental Nutrition Assistance Program-Education in New Mexico (SNAP-Ed NM) is to improve the likelihood that persons eligible for SNAP will make healthy food choices within a limited budget and choose physically active lifestyles consistent with the current Dietary Guidelines for Americans and the US Department of Agriculture (USDA) food guidance. To reach this goal, SNAP-Ed NM implements a variety of programming throughout the state. This report summarizes the formal outcome evaluation conducted by the University of New Mexico Prevention Research Center (UNM PRC) to measure the effectiveness of SNAP-Ed NM programming implemented in Head Start centers and elementary schools during the 2023-2024 academic year. This report also provides insights to strengthen current and future SNAP-Ed programming and evaluation.

Implementing Agencies

SNAP-Ed is a national initiative funded and guided by the USDA's Food and Nutrition Services (FNS). In New Mexico, the Health Care Authority (previously the Human Services Department) administers and coordinates SNAP-Ed to deliver programming to New Mexicans across the lifespan, from early childhood to seniors, through direct and indirect education, social marketing, and policy, systems and environmental change approaches. The NM SNAP-Ed implementing agencies and programs include Cooking with Kids (CWK), Kids Cook! (KC!), the New Mexico Department of Health's (NMDOH) Healthy Kids Healthy Communities (HKHC) program, the New Mexico State University's (NMSU) Ideas for Cooking and Nutrition (ICAN), and UNM's CHILE Plus and Eat Smart to Play Hard (ESPH) programs.

Cooking with Kids (CWK)

CWK educates and empowers children and families to make healthy food choices through hands-on learning with fresh, affordable foods. CWK is a non-profit organization that provides nutrition education, in collaboration with elementary schools in Santa Fe and Rio Arriba counties. CWK offers students multiple experiential cooking and tasting classes throughout the school year. Classes and promotions led by CWK educators and/or classroom teachers feature fresh, affordable fruits, vegetables, and whole grains, and recipes from around world. The CWK bilingual curriculum is aligned with National Health Education Standards and Common Core State Standards in Language Arts and Mathematics and is used by educators across the country. Take-home recipes and family volunteers create a classroom-to-kitchen bridge to support healthy eating efforts at home. CWK also provides technical support and training to school cafeteria staff, as farm-to-school and scratch cooking initiatives, and collaborates with local chefs and farmers in their programming.

Kids Cook! (KC!)

KC! provides hands-on education to elementary school students on nutrition, physical activity, and food preparation skills, and cultivates an appreciation of socio-cultural differences. KC! uses an integrated curriculum, including nutrition, literature, music appreciation, art, cultures of the world, math, science, social studies, and geography. The program has served the Albuquerque, Rio Rancho and Bernalillo public school systems since 2001. The KC! curriculum is child-focused, tied to education benchmarks, and includes cooking lessons, tastings, and a physical activity component. KC! educators lead five cooking units per year/per classroom (K-5th grades). Classroom teachers and parent volunteers work with KC! educators to ensure safety and low student-to-adult ratios during cooking classes. KC! also provides monthly cafeteria tastings and up to four fruit and vegetable tastings at parent events (such as math or literacy night). KC! further engages families by hosting one family night per school per semester.

NMDOH's Healthy Kids Healthy Communities (HKHC)

HKHC is a statewide obesity prevention program that builds state and local partnerships to expand healthy eating and physical activity opportunities for children and low-income adults where they live, learn, play, work, eat, and shop. HKHC implements sustainable policy, systems, and environmental change strategies in the school system, community food system, and the built environment. Key strategies in the school system include updating and implementing school wellness policies, establishing edible school gardens and salad bars, working with community partners to conduct fruit and vegetable tastings and gardening lessons, integrating local produce into school meals, making neighborhood schoolyards and parks more accessible and welcoming, and establishing regular in-school walking clubs. Key strategies in the community food system and built environment include establishing farmers' markets and community gardens, working with community partners to conduct tastings, gardening, and cooking lessons at food assistance program sites and WIC clinics, and increasing the number of safe walking and biking routes that connect neighborhoods to schools and other community points of interest. HKHC also provides training and technical assistance to state and local partners on effective implementation strategies.

NMSU's Ideas for Cooking and Nutrition (ICAN)

ICAN's mission is to inspire New Mexico's families to make healthy food and lifestyle choices and to make those choices possible by creating health-friendly communities. ICAN is a program of NMSU Cooperative Extension Service (NMSU CES) and is also funded (in part) by USDA's Expanded Food and Nutrition Education Program (EFNEP). ICAN provides hands-on education related to nutrition, food resource management, gardening, cooking skills, food safety, healthy weight management, and eating healthy on a limited budget to adults in a variety of community settings (e.g., WIC sites, public health offices). ICAN offers free cooking and healthy lifestyle classes for adults and youth, in the local schools and community.

UNM's CHILE Plus

The Child Health Initiative for Lifelong Eating and Exercise (CHILE) Plus program is a continuation of the original CHILE intervention. It is an evidence-based, multidisciplinary nutrition education and obesity prevention program developed for American Indian and Hispanic children enrolled in Head Start programs across NM. CHILE Plus is administered by the UNM PRC and delivered through Head Start centers which serve low-income families. The program incorporates classroom curricula pertaining to healthy eating and physical activity; professional development for teachers, administrators, and food service staff; and family and local community engagement. The program uses a capacity-building model by training Head Start center staff to lead nutrition-based educational activities with students and administrators to implement policy and environmental changes at the centers.

UNM's Eat Smart to Play Hard (ESPH)

ESPH is a social marketing campaign focused on increasing consumption of fruits and vegetables among elementary school students, in under-resourced communities of NM. ESPH collaborates with local schools throughout NM to offer students and their families the opportunity to participate in activities together, cook together, play together, improve health, and have fun together all while promoting healthy living. ESPH collaborates with all other SNAP-Ed implementing agencies to support obesity prevention throughout the state. ESPH is implemented as a 4-week program, that engages students, families, the school, and the community. It is presented as a fun game for students to play and earn prizes for making simple healthy recipes and playing fun physical activities at home with their families. ESPH is an evidence-based program, created by the UNM PRC in collaboration with NM elementary school students and their families.

Theoretical Framework

SNAP-Ed NM programming applies the social-ecological model (SEM) to obesity prevention and recognizes that multiple factors at various levels influence health behaviors. The SNAP-Ed NM evaluation uses the SNAP-Ed Evaluation Framework to guide evaluation planning (https://snaped.fns.usda.gov/administration/evaluation-framework). The Evaluation Framework provides indicators for different levels of SEM influence over time (e.g., short-term, medium-term, long-term). Although programming is being conducted at the individual, environmental, and sector levels, this outcome evaluation is focused on measuring individual behavior change in the medium-term. This will help us to understand the effects of the multiple types of programming including direct and indirect education, policy, system and environmental change efforts, and social marketing on our primary outcomes.

Individual Level

- **Healthy Eating Behaviors (MT1):** This core indicator tracks changes in eating habits, aiming to align with Dietary Guidelines for Americans recommendations.
- **Physical Activity & Reduced Sedentary Behaviors (MT3):** This core indicator focuses on both increasing physical activity and reducing sedentary behavior.

Key Evaluation Outcomes

The key evaluation outcomes examined by this evaluation were medium-term behavior changes in health eating, physical activity, and sedentary behavior. Specifically, we examined changes in fruit and vegetable consumption, screen time (not for school), and days and time spent being physically active.

Methods

Evaluation Design

The outcome evaluation used a pre-post intervention design to examine changes in key outcomes. The evaluation included a stratified random sample of Head Start centers and elementary schools participating in SNAP-Ed NM programming. Five schools were randomly selected from each of the 6 programs, resulting in 30 selected schools. After accounting for schools that declined participation and 2 schools that received different SNAP-Ed programming from 2 different organizations, the final sample consisted of 26 unique schools. Evaluation surveys were administered at baseline (Fall 2023) and follow-up (Spring 2024). The Child Healthy Habits survey was used as the primary evaluation tool. Parents of students in participating schools were asked to complete the survey online or via hard copy. The survey was available in English and Spanish. For hard copy surveys, teachers were responsible for distributing, collecting, and returning the completed forms to educators or directly to the evaluation team.

Survey Instrument

The Child Healthy Habits survey (see Appendix A) was designed to be completed by a parent or other primary caregiver. Questions assess children's health behaviors, including healthy eating patterns, physical activity levels, sedentary behavior, and (at follow-up) exposure to health-related messaging. Additionally, there were items about food security and assistance programs.

Healthy Eating: Fruits and Vegetables

The primary outcome variable measured for healthy eating was fruit and vegetable consumption. Parents were asked to report the number of fruit and vegetable servings their child ate, whether more than one type of fruit or vegetable was consumed, and consumption of fruits or vegetables as snacks. All fruit and vegetable consumption questions asked about consumption "yesterday". The survey also inquired about the frequency of children's participation in meal preparation. While not directly measuring intake, this question aimed to explore potential correlations between cooking involvement and overall fruit and vegetable consumption. Additionally, parents were asked to report on barriers to incorporating fruits and vegetables into their family's diet.

Physical Activity: Active Play

The Child Healthy Habits survey assessed children's physical activity levels through a series of questions focusing on active play. Parents were asked to report the number of hours their child engaged in active play on the previous day, with "active play" defined as activities that cause the child to breathe a little harder or experience an increased heart rate. Parents were also asked how often they were physically active together with their child in a usual week. Examples such as walking or playing together were provided to illustrate the types of activities considered. Additionally, parents were asked to indicate how often their child usually engaged in at least 60 minutes of active play per day.

Sedentary Behavior: Screen Time

Sedentary behavior was measured indirectly using screen time as a proxy measure, given the significant role electronic devices play in children's daily lives and their potential impact on overall physical activity levels. First, parents were asked about the existence of rules or limits on their child's screen time, encompassing television, tablets, movies, videos, and computer games. To capture a snapshot of daily screen time exposure, parents were asked to report the number of hours their child spent watching TV, playing video games, or using a computer or tablet for non-school purposes the previous day. Lastly, parents were asked to indicate the frequency with which television or other electronic devices were typically present during mealtimes throughout the week.

Healthy Messaging and Program Impact

At follow-up, a series of open-ended questions were introduced to assess the effectiveness of healthy eating messaging and to examine the overall impact of SNAP-Ed NM programs. Parents were asked to recall and describe any healthy messages their child had encountered, as well as those they themselves had seen or heard. For program impact, parents were asked to reflect on any changes their family had implemented as a result of program participation, and to identify their child's favorite aspect of the program. Lastly, parents and children were asked to offer suggestions on how the program could be improved.

Data Analysis

Descriptive statistics were calculated for all quantitative variables at baseline and follow-up evaluation periods. For categorical variables, Fisher's exact test was used to compare proportions between independent groups. For continuous variables, non-parametric tests were employed instead of the traditional t-test due to concerns about the normality assumption in our data. The Kruskal- Wallis rank sum test was used to compare distributions across three or more independent groups, functioning as a non-parametric counterpart to the ANOVA. Similarly, the Wilcoxon rank sum test (also known as the Mann-Whitney U test) was employed for comparing two independent groups, functioning as a non-parametric counterpart to the independent samples t-test. All statistical analyses were conducted using R version 4.3.2 (R Core Team, 2023), with a significance level set at $\alpha = 0.05$.

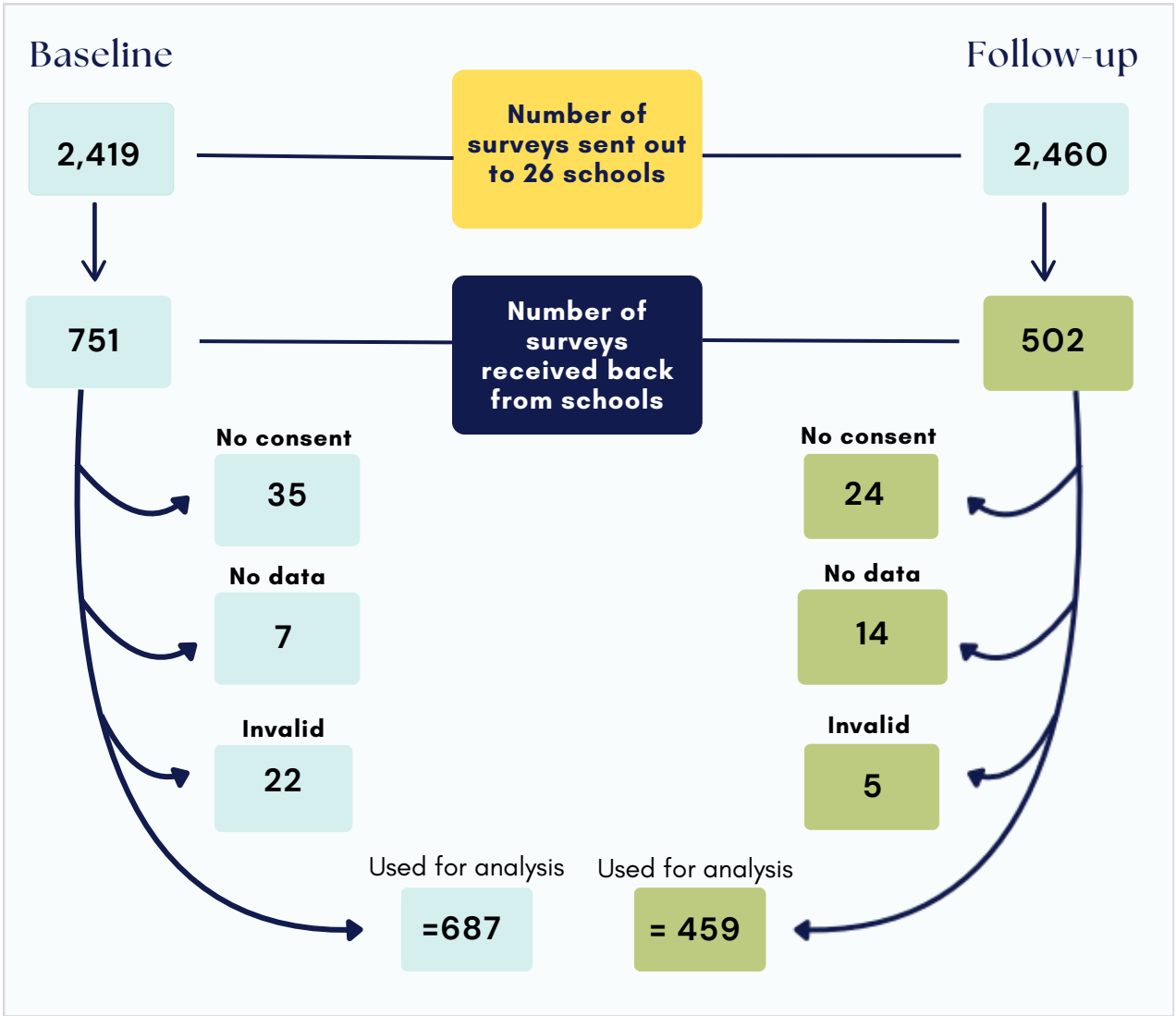
Qualitative responses from open-ended questions were analyzed to identify the most common responses. The evaluation team developed categories, and two team members assigned responses to those categories. Non-responses (e.g., N/A, none, no comment) were systematically identified and excluded from the analysis. The categorization process included cross-checking each other's work for consistency and accuracy.

Results

Survey Responses

The evaluation team received a total of 1,194 survey responses, 716 at baseline and 478 at follow-up. The team removed blank surveys and eliminated duplicate entries (e.g., if a family submitted both an online and hard copy survey, or a survey in both English and Spanish). A total of 48 surveys were removed, representing 4.0% of the original dataset. The final dataset contained 1,146 survey responses, which formed the basis for the analysis (see Figure 1).

Figure 1. Flow diagram of surveys , Healthy Habits Survey, 2023-2024



Demographic Characteristics

Student demographic data are presented in Table 1. The students were fairly evenly distributed across 3rd (30.5%), 4th (29.1%), and 5th (24.9%) grades, with fewer surveys from families with students in Head Start/Pre-K (5.0%) and Kindergarten (10.6%). The majority of participating students were female (56.9%), with 43.0% male, and 0.1% non-binary. The primary survey language was English (81.5%), with nearly one in five families taking the survey in Spanish (18.5%). Most students identified as Hispanic (74.1%), followed by white, non-Hispanic (12.0%), and American Indian (8.8%). Overall, the majority of respondents completing the survey were the child's mother (80.6%) followed by the child's father (10.5%) and other family members (8.9%).

Table 1. Demographic characteristics of children participating in the SNAP-Ed NM Child Healthy Habits survey, 2023-2024

	Baseline N = 687 (%)	Follow-up N = 459 (%)	Total N = 1,146 (%)
Grade			
Head start/Pre-K	30 (4.5)	26 (5.8)	56 (5.0)
K	51 (7.6)	67 (15.0)	118 (10.6)
3rd	190 (28.3)	151 (33.9)	341 (30.5)
4th	227 (33.8)	98 (22.0)	325 (29.1)
5th	174 (25.9)	104 (23.3)	278 (24.9)
Child Gender			
Female	384 (57.1)	252 (56.5)	636 (56.9)
Male	287 (42.7)	194 (43.5)	481 (43.0)
Non-binary	1 (0.1)	0 (0.0)	1 (0.1)
Survey Language			
English	562 (81.8)	372 (81.0)	934 (81.5)
Spanish	125 (18.2)	87 (19.0)	212 (18.5)
Race/Ethnicity			
American Indian	60 (8.7)	41 (8.9)	101 (8.8)
Hispanic	510 (74.2)	339 (73.9)	849 (74.1)
Black (non-Hispanic)	9 (1.3)	6 (1.3)	15 (1.3)
White (non-Hispanic)	83 (12.1)	55 (12.0)	138 (12.0)
Other/Mixed	15 (2.2)	12 (2.6)	27 (2.4)
Unspecified	10 (1.5)	6 (1.3)	16 (1.4)

Table 1. Demographic characteristics of children participating in the SNAP-Ed NM Child Healthy Habits survey, 2023-2024 (Continued)

	Baseline N = 687 (%)	Follow-up N = 459 (%)	Total N = 1,146 (%)
Relationship to Child			
Mom	552 (82.3%)	350 (78.1%)	902 (80.6%)
Dad	60 (8.9)	57 (12.7)	117 (10.5)
Grandma/pa	42 (6.3)	24 (5.4)	66 (5.9)
Aunt/Uncle	8 (1.2%)	2 (0.4%)	10 (0.9%)
Other (please explain)	9 (1.3)	15 (3.3)	24 (2.1)

Healthy Eating: Fruits and Vegetables

Mean fruit servings increased significantly from 1.91 at baseline to 2.05 at follow-up (p = 0.039; see Table 2). The percentage of children eating fruits or vegetables as snacks also increased significantly from 72.2% at baseline to 80.3% at follow-up (p = 0.002). Although several other changes were observed, none were statistically significant.

Table 2. Changes in healthy eating, Child Healthy Habits survey, 2023-2024

	Baseline N = 677	Follow-up N = 460	p-value	Total N = 1137
Fruit Servings			0.039*[1]	
Mean (SD)	1.91 (1.14)	2.05 (1.09)		1.97 (1.12)
>1 Fruit Type Eaten			0.412[2]	
No	252 (38.2)	161 (35.7)		413 (37.2)
Yes	408 (61.8)	290 (64.3)		698 (62.8)
Vegetable Servings*			0.181[1]	
Mean (SD)	1.61 (1.14)	1.71 (1.13)		1.65 (1.13)
Vegetable Servings (recoded)			0.428[2]	
1 or less	324 (48.9)	211 (46.4)		535 (47.9)
2 or more	338 (51.1)	244 (53.6)		582 (52.1)
>1 Vegetable Type Eaten			0.361[2]	
No	295 (44.4)	216 (47.2)		511 (45.5)
Yes	370 (55.6)	242 (52.8)		612 (54.5)
Fruits/Veggies as Snack			0.002*[2]	
No	184 (27.8)	90 (19.7)		274 (24.5)
Yes	478 (72.2)	366 (80.3)		844 (75.5)
Child Helps with Meals			0.454[2]	
Almost never	97 (14.6)	65 (14.3)		162 (14.5)
At least 1 time per month	169 (25.5)	107 (23.6)		276 (24.7)
At least 1 time per week	285 (43.0)	216 (47.6)		501 (44.9)
At least 1 time per day	112 (16.9)	66 (14.5)		178 (15.9)

*Statistically significant result at $p \leq .05$ [1]Wilcoxon rank sum test [2]Fisher's exact test

Healthy Eating by Grade Groups

Among Head Start and Kindergarten children, no statistically significant changes in fruit and vegetable consumption were observed (see Table 3). Among children in grades 3–5, mean fruit servings saw a statistically significant increase from 1.86 at baseline to 2.02 at follow-up (p = 0.027). Additionally, the proportion of children in grades 3-5 consuming fruits or vegetables as snacks increased significantly from 70.4% at baseline to 78.3% at follow-up (p = 0.009).

Table 3. Changes in healthy eating by grade groups, Child Healthy Habits survey, 2023-2024

	Head Start & Kinder, N = 173				Grades 3-5, N = 937			
	Baseline N = 79	**Follow-up N = 94**	**p-value**	**Total N = 173**	**Baseline N = 584**	**Follow-up N = 353**	**p-value**	**Total N = 937**
Fruit Servings			0.886 [1]				0.027* [1]	
Mean (SD)	2.16 (1.17)	2.14 (1.05)		2.15 (1.11)	1.86 (1.14)	2.02 (1.07)		1.92 (1.11)
>1 Fruit Type Eaten			0.862 [2]				0.444 [2]	
No	20 (26.0)	26 (28.3)		46 (27.2)	232 (40.8)	132 (38.2)		364 (39.8)
Yes	57 (74.0)	66 (71.7)		123 (72.8)	337 (59.2)	214 (61.8)		551 (60.2)
Vegetable Servings			0.602 [1]				0.087 [1]	
Mean (SD)	1.78 (1.03)	1.71 (1.01)		1.74 (1.01)	1.58 (1.15)	1.71 (1.15)		1.63 (1.15)
Vegetable Servings			0.647 [2]				0.197 [2]	
1 or less	34 (43.6)	44 (47.3)		78 (45.6)	287 (50.3)	160 (45.8)		447 (48.6)
2 or more	44 (56.4)	49 (52.7)		93 (54.4)	284 (49.7)	189 (54.2)		473 (51.4)
>1 Vegetable Type Eaten			0.646 [2]				0.456 [2]	
No	32 (40.5)	41 (44.1)		73 (42.4)	262 (45.7)	170 (48.3)		432 (46.7)
Yes	47 (59.5)	52 (55.9)		99 (57.6)	311 (54.3)	182 (51.7)		493 (53.3)
Fruits/Veggies as Snack			0.206 [2]				0.009* [2]	
No	15 (19.2)	11 (12.0)		26 (15.3)	169 (29.6)	76 (21.7)		245 (26.6)
Yes	63 (80.8)	81 (88.0)		144 (84.7)	402 (70.4)	275 (78.3)		677 (73.4)
Child Helps with Meals			0.506 [2]				0.616 [2]	
Almost never	9 (11.4)	14 (14.9)		23 (13.3)	87 (15.2)	47 (13.5)		134 (14.6)
At least 1 time per month	17 (21.5)	18 (19.1)		35 (20.2)	149 (26.1)	87 (25.1)		236 (25.7)
At least 1 time per week	37 (46.8)	50 (53.2)		87 (50.3)	240 (42.0)	161 (46.4)		401 (43.7)
At least 1 time per day	16 (20.3)	12 (12.8)		28 (16.2)	95 (16.6)	52 (15.0)		147 (16.0)

*Statistically significant result at $p \leq .05$ [1]Wilcoxon rank sum test [2]Fisher's exact test

Healthy Eating by Race/Ethnicity

When examining healthy eating variables by race/ethnicity, among American Indian children, mean fruit servings increased from 1.97 at baseline to 2.41 at follow-up (p = 0.075) but was not statistically significant (see Table 4). A similar pattern was observed for mean vegetable servings, which saw a non-significant increase from 1.76 at baseline to 2.10 at follow-up (p = 0.082). There was a significant increase in the proportion of American Indian children consuming two or more servings of vegetables on the previous day from 53.4% at baseline to 75.6% at follow-up (p = 0.035). Among Hispanic children, the proportion consuming fruits or vegetables as snacks showed a statistically significant increase from 71.6% at baseline to 81.0% at follow-up (p = 0.002). There were no significant changes among non-Hispanic white students. There was insufficient data to conduct sub-analyses for other racial/ethnic groups.

Table 4. Changes in healthy eating by race/ethnicity, Child Healthy Habits survey, 2023-2024

	American Indian, N = 99				Hispanic, N = 842			
	Baseline N = 58	**Follow-up N = 41**	**p-value**	**Total N = 99**	**Baseline N = 502**	**Follow-up N = 340**	**p-value**	**Total N = 842**
Fruit Servings			0.075 [1]				0.244 [1]	
Mean (SD)	1.97 (1.26)	2.41 (1.22)		2.15 (1.26)	1.87 (1.10)	1.95 (1.04)		1.90 (1.08)
>1 Fruit Type Eaten			0.383 [2]				0.827 [2]	
No	21 (36.8)	11 (26.8)		32 (32.7)	192 (39.0)	127 (38.3)		319 (38.7)
Yes	36 (63.2)	30 (73.2)		66 (67.3)	300 (61.0)	205 (61.7)		505 (61.3)
Vegetable Servings			0.082 [1]				0.709 [1]	
Mean (SD)	1.76 (1.23)	2.10 (1.02)		1.90 (1.16)	1.55 (1.09)	1.59 (1.10)		1.57 (1.10)
Vegetable Servings			0.035* [2]				0.621 [2]	
1 or less	27 (46.6)	10 (24.4)		37 (37.4)	247 (50.1)	175 (51.9)		422 (50.8)
2 or more	31 (53.4)	31 (75.6)		62 (62.6)	246 (49.9)	162 (48.1)		408 (49.2)

*Statistically significant result at p≤.05 [1] Wilcoxon rank sum test [2] Fisher's exact test

Table 4. Changes in healthy eating by race/ethnicity, Child Healthy Habits survey, 2023-2024 (Continued)

	American Indian, N = 99				Hispanic, N = 842			
	Baseline N = 58	**Follow-up N = 41**	**p-value**	**Total N=99**	**Baseline N = 502**	**Follow-up N = 340**	**p-value**	**Total N = 842**
>1 Vegetable Type Eaten			0.68 [2]				0.139 [2]	
No	26 (44.8)	16 (39.0)		42 (42.4)	232 (46.8)	176 (52.1)		408 (48.9)
Yes	32 (55.2)	25 (61.0)		57 (57.6)	264 (53.2)	162 (47.9)		426 (51.1)
Fruits/Veggies as Snack			0.64 [2]				0.002* [2]	
No	16 (27.6)	9 (22.0)		25 (25.3)	140 (28.4)	64 (19.0)		204 (24.6)
Yes	42 (72.4)	32 (78.0)		74 (74.7)	353 (71.6)	272 (81.0)		625 (75.4)
Child Helps with Meals			0.361 [2]				0.335 [2]	
Almost never	10 (17.2)	4 (9.8)		14 (14.1)	73 (14.8)	51 (15.3)		124 (15.0)
At least 1 time per month	21 (36.2)	11 (26.8)		32 (32.3)	123 (24.9)	74 (22.2)		197 (23.8)
At least 1 time per week	22 (37.9)	19 (46.3)		41 (41.4)	215 (43.5)	164 (49.1)		379 (45.8)
At least 1 time per day	5 (8.6)	7 (17.1)		12 (12.1)	83 (16.8)	45 (13.5)		128 (15.5)

*Statistically significant result at $p \leq .05$ [1] Wilcoxon rank sum test [2] Fisher's exact test

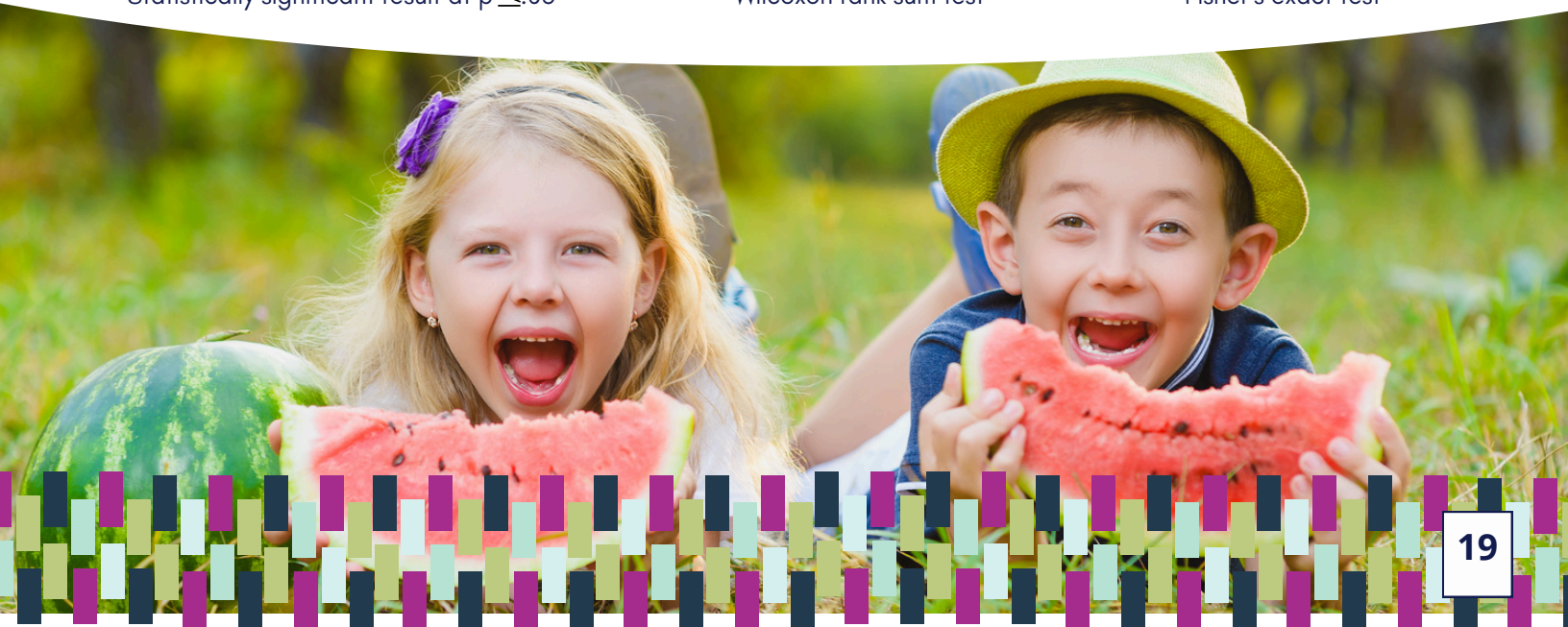
Healthy Eating by Gender

Both female and male children saw a significant increase in consumption of fruits and vegetables as snacks (see Table 5). No other variables showed statistically significant changes for either female or male children with regards to healthy eating variables.

Table 5. Changes in healthy eating by gender, Child Healthy Habits survey, 2023-2024

	Female, N = 636				Male, N = 481			
	Baseline N = 384	**Follow-up N = 252**	**p-value**	**Total N = 636**	**Baseline N = 287**	**Follow-up N = 194**	**p-value**	**Total N = 481**
Fruit Servings			0.132 [1]				0.065 [1]	
Mean (SD)	1.95 (1.12)	2.07 (1.11)		2.00 (1.12)	1.82 (1.13)	2.03 (1.04)		1.91 (1.10)
>1 Fruit Type Eaten			0.670 [2]				0.250 [2]	
No	138 (36.8)	86 (35.0)		224 (36.1)	115 (40.9)	68 (35.6)		183 (38.8)
Yes	237 (63.2)	160 (65.0)		397 (63.9)	166 (59.1)	123 (64.4)		289 (61.2)
Vegetable Servings			0.078 [1]				0.751 [1]	
Mean (SD)	1.62 (1.12)	1.77 (1.08)		1.68 (1.11)	1.57 (1.11)	1.62 (1.11)		1.59 (1.11)
Vegetable Servings (recoded)			0.140 [2]				0.779 [2]	
1 or less	181 (47.8)	103 (41.5)		284 (45.3)	144 (51.4)	102 (52.8)		246 (52.0)
2 or more	198 (52.2)	145 (58.5)		343 (54.7)	136 (48.6)	91 (47.2)		227 (48.0)
>1 Vegetable Type Eaten			0.805 [2]				0.136 [2]	
No	164 (43.4)	106 (42.2)		270 (42.9)	133 (46.8)	104 (53.9)		237 (49.7)
Yes	214 (56.6)	145 (57.8)		359 (57.1)	151 (53.2)	89 (46.1)		240 (50.3)
Fruits/Veggies as Snack			0.016* [2]				0.043* [2]	
No	102 (27.1)	46 (18.5)		148 (23.6)	82 (29.1)	40 (20.7)		122 (25.7)
Yes	275 (72.9)	203 (81.5)		478 (76.4)	200 (70.9)	153 (79.3)		353 (74.3)
Child Helps with Meal Prep			0.111 [2]				0.960 [2]	
Almost never	48 (12.7)	29 (11.6)		77 (12.3)	49 (17.4)	32 (16.8)		81 (17.2)
At least 1 time per month	93 (24.5)	50 (20.1)		143 (22.8)	75 (26.7)	55 (28.8)		130 (27.5)
At least 1 time per week	161 (42.5)	130 (52.2)		291 (46.3)	122 (43.4)	82 (42.9)		204 (43.2)
At least 1 time per day	77 (20.3)	40 (16.1)		117 (18.6)	35 (12.5)	22 (11.5)		57 (12.1)

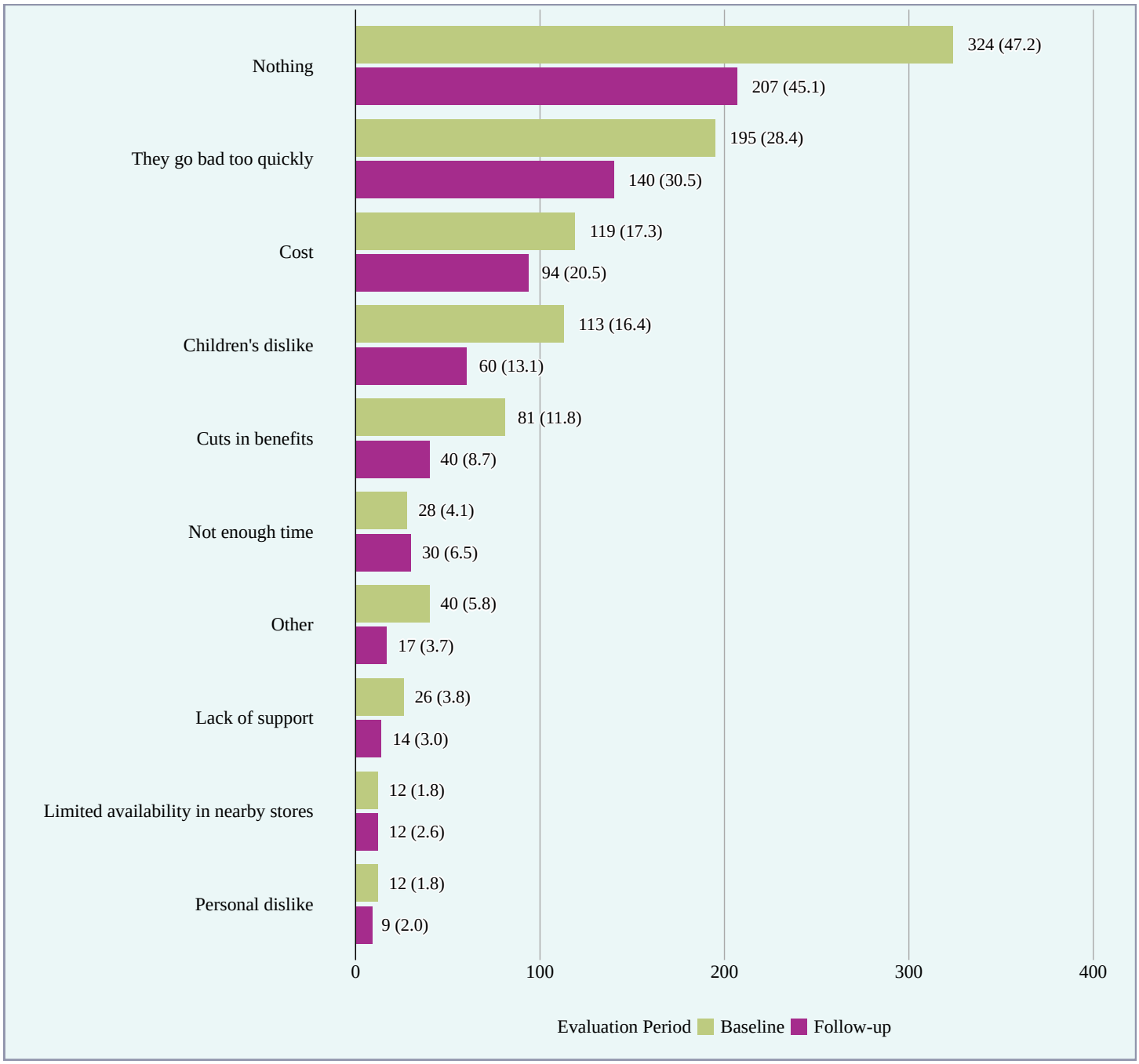
*Statistically significant result at $p \leq .05$ [1] Wilcoxon rank sum test [2] Fisher's exact test



Barriers to Healthy Eating

Nearly half of the respondents reported no barriers to eating fruits and vegetables at baseline (47.4%) and follow-up (45.0%; see Figure 2). The most common barrier was that fruits and vegetables go bad too quickly, followed by cost. Children disliking fruits and vegetables and cuts in benefits were reported by more than 1 in 10 respondents as barriers.

Figure 2. Barriers to Healthy Eating, Child Healthy Habits survey, 2023-2024



Physical Activity: Active Play

The proportion of children engaging in more hours of active playtime on the prior day increased significantly from baseline to follow-up (p = 0.016 ; see Table 6). Joint active play, measured as the mean number of days per week parents usually engaged in physical activity with their children, showed a significant increase from baseline (3.23 days) to follow-up (3.45 days ; p = 0.039). The number of days per week that children usually play actively for at least 60 minutes did not see a significant change.

Table 6. Changes in physical activity, Child Healthy Habits survey, 2023-2024

	Baseline N = 677	Follow-up N = 460	p-value	Total N = 1137
Active Play Duration Yesterday			0.016*[2]	
1 hour or less	270 (40.4)	148 (32.2)		418 (37.1)
2 hours	195 (29.2)	132 (28.8)		327 (29.0)
3 hours	111 (16.6)	102 (22.2)		213 (18.9)
4 hours	54 (8.1)	41 (8.9)		95 (8.4)
5+ hours	38 (5.7)	36 (7.8)		74 (6.6)
Days of Active Play - Parent with Child			0.039*[1]	
Mean (SD)	3.23 (2.10)	3.45 (1.97)		3.32 (2.05)
Usual Number of Active Play Days (at least 60 min)			0.305 [2]	
Once in a while	62 (9.3)	28 (6.2)		90 (8.1)
1 - 2 days each week	120 (18.1)	86 (18.9)		206 (18.4)
3 - 4 days each week	178 (26.8)	123 (27.1)		301 (26.9)
5 - 6 days each week	92 (13.9)	75 (16.5)		167 (14.9)
Every day	212 (31.9)	142 (31.3)		354 (31.7)

*Statistically significant result at p $\leq$.05 [1] Wilcoxon rank sum test [2] Fisher's exact test

Physical Activity by Grade Group

No statistically significant changes were observed in physical activity measures by grade group, when examining the youngest children (Head Start and Kindergarten) separately from the older children (grades 3-5; see Table 7).

Table 7. Changes in physical activity by grade group, Child Healthy Habits survey, 2023-2024

	Head Start & Kinder, N = 173				Grades 3-5, N = 937			
	Baseline N = 79	**Follow-up N = 94**	**p-value**	**Total N = 173**	**Baseline N = 584**	**Follow-up N = 353**	**p-value**	**Total N = 937**
Active Play Duration Yesterday			0.233[2]				0.234 [2]	
1 hour or less	30 (38.0)	24 (25.5)		54 (31.2)	235 (40.8)	121 (34.4)		356 (38.4)
2 hours	24 (30.4)	27 (28.7)		51 (29.5)	170 (29.5)	104 (29.5)		274 (29.5)
3 hours	11 (13.9)	25 (26.6)		36 (20.8)	94 (16.3)	72 (20.5)		166 (17.9)
4 hours	7 (8.9)	9 (9.6)		16 (9.2)	46 (8.0)	31 (8.8)		77 (8.3)
5+ hours	7 (8.9)	9 (9.6)		16 (9.2)	31 (5.4)	24 (6.8)		55 (5.9)
Days of Active Play - Parent with Child			0.768 [1]				0.168 [1]	
Mean (SD)	4.06 (2.12)	4.08 (1.81)		4.07 (1.95)	3.09 (2.07)	3.28 (1.99)		3.16 (2.04)
Usual Number of Active Play Days (at least 60 min)			0.628 [2]				0.679 [2]	
Once in a while	6 (7.6)	3 (3.3)		9 (5.3)	55 (9.6)	25 (7.2)		80 (8.7)
1 - 2 days each week	8 (10.1)	12 (13.0)		20 (11.7)	111 (19.4)	72 (20.6)		183 (19.8)
3 - 4 days each week	18 (22.8)	22 (23.9)		40 (23.4)	158 (27.6)	98 (28.1)		256 (27.8)
5 - 6 days each week	13 (16.5)	20 (21.7)		33 (19.3)	76 (13.3)	53 (15.2)		129 (14.0)
Every day	34 (43.0)	35 (38.0)		69 (40.4)	173 (30.2)	101 (28.9)		274 (29.7)

*Statistically significant result at p $\leq$.05 [1] Wilcoxon rank sum test [2] Fisher's exact test

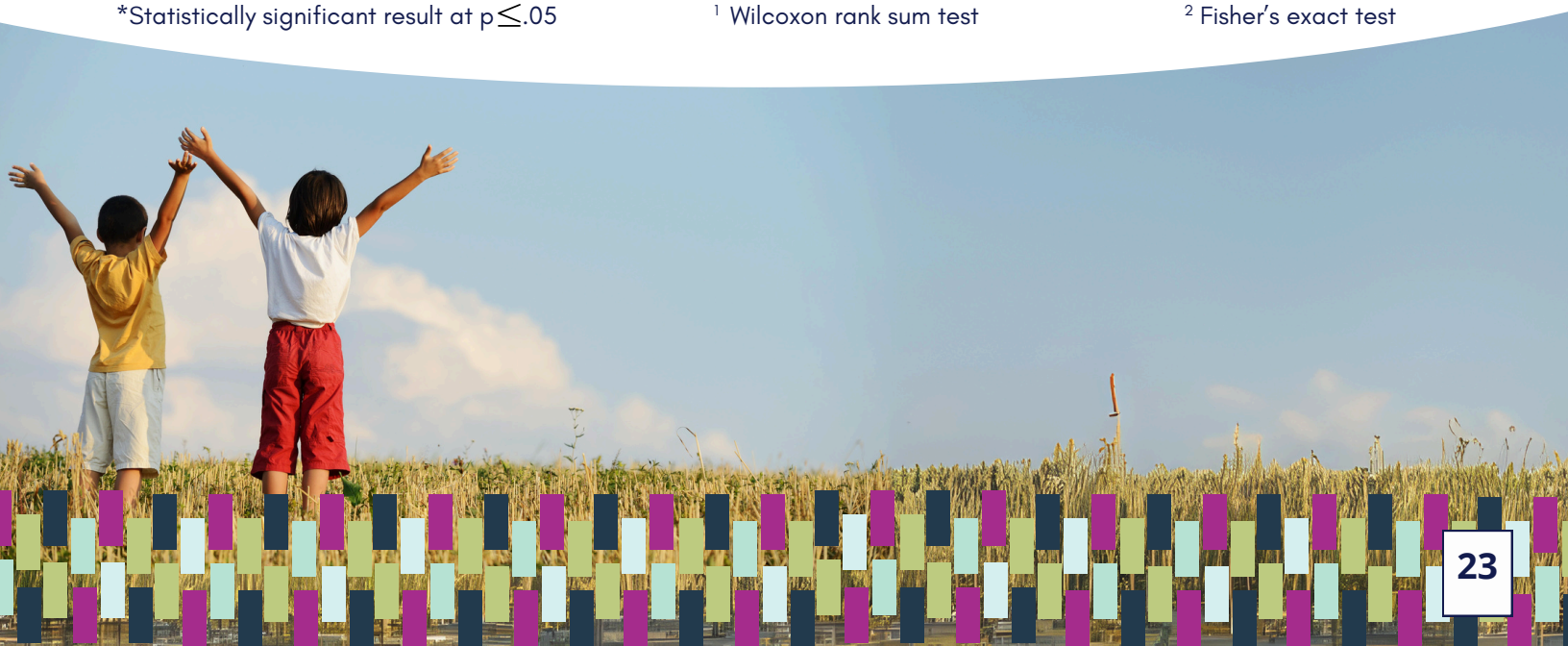
Physical Activity by Race/Ethnicity

Significant increases in the hours of active play yesterday were observed among Hispanic children (see Table 8). Although American Indian children and their parents reported nearly an additional day of active play per week (3.40 days at baseline and 4.24 at follow-up), it did not reach statistical significance (p = 0.064). This may have been a result of low numbers. Joint active play among Hispanic children and their parents showed a smaller, non-significant increase from baseline (3.21 days) to follow-up (3.42 days; p = 0.076). There were no significant changes among non-Hispanic white students. There was insufficient data to conduct sub-analyses for other racial/ethnic groups.

Table 8. Changes in physical activity by race/ethnicity, Child Healthy Habits survey, 2023-2024

	American Indian, N = 99				Hispanic, N = 842			
	Baseline N = 58	**Follow-up N = 41**	**p-value**	**Total N = 99**	**Baseline N = 502**	**Follow-up N = 340**	**p-value**	**Total N = 842**
Active Play Duration Yesterday			0.0 [2]				0.017* [2]	
1 hour or less	19 (32.8)	10 (24.4)		29 (29.3)	211 (42.1)	112 (32.9)		323 (38.4)
2 hours	17 (29.3)	10 (24.4)		27 (27.3)	144 (28.7)	94 (27.6)		238 (28.3)
3 hours	9 (15.5)	10 (24.4)		19 (19.2)	84 (16.8)	80 (23.5)		164 (19.5)
4 hours	9 (15.5)	2 (4.9)		11 (11.1)	38 (7.6)	35 (10.3)		73 (8.7)
5+ hours	4 (6.9)	9 (22.0)		13 (13.1)	24 (4.8)	19 (5.6)		43 (5.1)
Days of Active Play - Parent with Child			0.064 [1]				0.076 [1]	
Mean (SD)	3.40 (2.43)	4.24 (2.18)		3.75 (2.36)	3.21 (2.09)	3.42 (1.91)		3.29 (2.02)
Usual Number of Active Play Days (at least 60 min)			0.385 [2]				0.179 [2]	
Once in a while	7 (12.1)	3 (7.3)		10 (10.1)	46 (9.3)	18 (5.4)		64 (7.7)
1 - 2 days each week	12 (20.7)	5 (12.2)		17 (17.2)	90 (18.1)	65 (19.3)		155 (18.6)
3 - 4 days each week	8 (13.8)	10 (24.4)		18 (18.2)	147 (29.6)	94 (28.0)		241 (29.0)
5 - 6 days each week	11 (19.0)	5 (12.2)		16 (16.2)	62 (12.5)	54 (16.1)		116 (13.9)
Every day	20 (34.5)	18 (43.9)		38 (38.4)	151 (30.4)	105 (31.2)		256 (30.8)

*Statistically significant result at p≤.05 [1] Wilcoxon rank sum test [2] Fisher's exact test



Physical Activity by Gender

Among female children, the mean number of days per week that parents/guardians reported being physically active with their child increased from 3.05 days at baseline to 3.40 days at follow-up (p = 0.024; see Table 9). No other physical activity variables showed statistically significant changes for either female or male children.

Table 9. Changes in physical activity by gender, Child Healthy Habits survey, 2023-2024

	Female, N = 636				Male, N = 481			
	Baseline N = 384	**Follow-up N = 252**	**p-value**	**Total N = 636**	**Baseline N = 287**	**Follow-up N = 194**	**p-value**	**Total N = 481**
Active Play Duration			0.080 [2]				0.451 [2]	
1 hour or less	175 (45.9)	92 (36.5)		267 (42.2)	93 (32.5)	49 (25.3)		142 (29.6)
2 hours	99 (26.0)	65 (25.8)		164 (25.9)	95 (33.2)	65 (33.5)		160 (33.3)
3 hours	59 (15.5)	56 (22.2)		115 (18.2)	54 (18.9)	44 (22.7)		98 (20.4)
4 hours	31 (8.1)	22 (8.7)		53 (8.4)	24 (8.4)	19 (9.8)		43 (9.0)
5+ hours	17 (4.5)	17 (6.7)		34 (5.4)	20 (7.0)	17 (8.8)		37 (7.7)
Joint Active Play			0.024* [1]				0.333 [1]	
Mean (SD)	3.05 (2.13)	3.40 (2.04)		3.19 (2.10)	3.46 (2.07)	3.60 (1.87)		3.52 (1.99)
Active Play 60 min			0.339 [2]				0.497 [2]	
Once in a while	41 (10.8)	15 (6.0)		56 (8.9)	20 (7.1)	10 (5.2)		30 (6.3)
1 - 2 days each week	83 (21.8)	55 (22.1)		138 (21.9)	39 (13.8)	26 (13.5)		65 (13.7)
3 - 4 days each week	102 (26.8)	67 (26.9)		169 (26.8)	73 (25.8)	55 (28.6)		128 (26.9)
5 - 6 days each week	52 (13.6)	37 (14.9)		89 (14.1)	40 (14.1)	36 (18.8)		76 (16.0)
Every day	103 (27.0)	75 (30.1)		178 (28.3)	111 (39.2)	65 (33.9)		176 (37.1)

*Statistically significant result at $p \leq .05$ [1] Wilcoxon rank sum test [2] Fisher's exact test

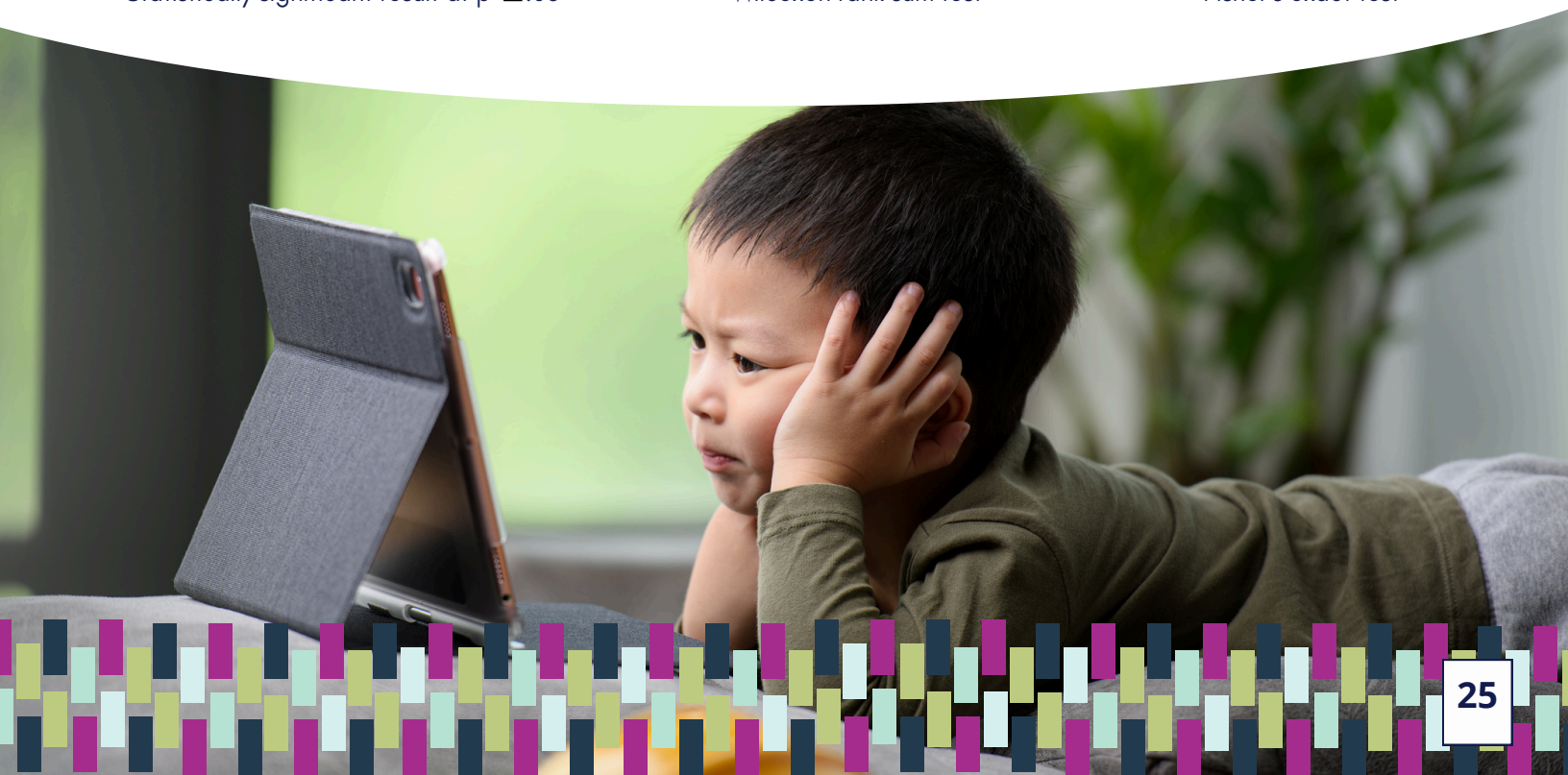
Sedentary Behavior: Screen Time

Most parents reported having rules or limits on their child's screen time (81.3% at baseline, 85.2% at follow-up; see Table 10). Although not statistically significant, screen time hours trended lower from baseline to follow-up with most participants spending 1-2 hours the previous day in front of a screen, not related to school, at both time periods. Similarly, screen time during meals decreased from baseline to follow-up, but these changes were not statistically significant (p = 0.119). On average, a TV or other electronic device was on during mealtimes 2.71 days per week at baseline and 2.41 days at follow-up.

Table 10. Changes in sedentary behavior, Child Healthy Habits survey, 2023-2024

	Baseline N = 687	Follow-up N = 459	p-value	Total N = 1,146
Screen Time Rules			0.108 [2]	
No	127 (18.7)	68 (14.8)		195 (17.1)
Yes	553 (81.3)	390 (85.2)		943 (82.9)
Screen Time			0.173 [2]	
Less than 1 hour	86 (12.7)	70 (15.4)		156 (13.8)
1 - 2 hours	372 (55.0)	260 (57.1)		632 (55.9)
3 - 4 hours	173 (25.6)	105 (23.1)		278 (24.6)
5 - 6 hours	29 (4.3)	16 (3.5)		45 (4.0)
7 or more hours	16 (2.4)	4 (0.9)		20 (1.8)
Screen Time during Meals			0.199 [1]	
Mean (SD)	2.71 (2.87)	2.41 (2.69)		2.59 (2.80)

*Statistically significant result at p $\leq$.05 [1] Wilcoxon rank sum test [2] Fisher's exact test



Sedentary Behavior by Grade Group

Screen time behaviors remained largely stable for both Head Start and kindergarten children as well as those in grades 3-5, with no statistically significant changes observed in screen time rules, screen time duration, or screen time during meals (see Table 11).

Table 11. Changes in sedentary behavior by grade group, Child Healthy Habits survey, 2023-2024

	Head Start & Kinder, N = 173				Grades 3-5, N = 937			
	Baseline N = 81	**Follow-up N = 93**	**p-value**	**Total N = 174**	**Baseline N = 591**	**Follow-up N = 353**	**p-value**	**Total N = 944**
Screen Time Rules			>0.999 [2]				0.168 [2]	
No	7 (8.6)	9 (9.7)		16 (9.2)	119 (20.3)	58 (16.5)		177 (18.9)
Yes	74 (91.4)	84 (90.3)		158 (90.8)	466 (79.7)	294 (83.5)		760 (81.1)
Screen Time			0.711 [2]				0.279 [2]	
Less than 1 hour	12 (14.8)	17 (18.5)		29 (16.8)	72 (12.4)	50 (14.3)		122 (13.1)
1 - 2 hours	47 (58.0)	55 (59.8)		102 (59.0)	317 (54.6)	198 (56.6)		515 (55.3)
3 - 4 hours	21 (25.9)	18 (19.6)		39 (22.5)	149 (25.6)	85 (24.3)		234 (25.1)
5 - 6 hours	1 (1.2)	2 (2.2)		3 (1.7)	27 (4.6)	14 (4.0)		41 (4.4)
7 or more hours	0 (0.0)	0 (0.0)		0 (0.0)	16 (2.8)	3 (0.9)		19 (2.0)
Screen Time during Meals			0.700 [1]				0.292 [1]	
Mean (SD)	2.26 (2.59)	2.40 (2.59)		2.33 (2.58)	2.72 (2.90)	2.45 (2.73)		2.62 (2.84)

*Statistically significant result at $p \leq .05$ [1] Wilcoxon rank sum test [2] Fisher's exact test

Sedentary Behavior by Race/Ethnicity

Screen time behaviors remained largely stable among American Indian and Hispanic children, with no statistically significant changes observed in screen time rules, screen time duration, or screen time during meals (see Table 12). Among Hispanic children, there was a marginally significant increase in children spending less than 1 hour on screens (15.7% at follow-up, p = 0.056).

Table 12. Changes in sedentary behavior by race/ethnicity, Child Healthy Habits survey, 2023-2024

	American Indian, N = 99				Hispanic, N = 842			
	Baseline N = 58	**Follow-up N = 41**	**p-value**	**Total N = 99**	**Baseline N = 502**	**Follow-up N = 340**	**p-value**	Total N = 842
Screen Time Rules			0.234 [2]				0.349 [2]	
No	17 (29.3)	7 (17.1)		24 (24.2)	90 (18.0)	52 (15.3)		142 (16.9)
Yes	41 (70.7)	34 (82.9)		75 (75.8)	411 (82.0)	287 (84.7)		698 (83.1)
Screen Time			0.794 [2]				0.056 [2]	
Less than 1 hour	10 (17.2)	7 (17.1)		17 (17.2)	55 (11.1)	53 (15.7)		108 (12.9)
1 - 2 hours	23 (39.7)	20 (48.8)		43 (43.4)	292 (58.8)	194 (57.6)		486 (58.3)
3 - 4 hours	20 (34.5)	13 (31.7)		33 (33.3)	123 (24.7)	80 (23.7)		203 (24.3)
5 - 6 hours	3 (5.2)	1 (2.4)		4 (4.0)	16 (3.2)	9 (2.7)		25 (3.0)
7 or more hours	2 (3.4)	0 (0.0)		2 (2.0)	11 (2.2)	1 (0.3)		12 (1.4)
Screen Time during Meals			0.947 [1]				0.247 [1]	
Mean (SD)	2.67 (2.97)	2.31 (2.74)		2.52 (2.86)	2.74 (2.85)	2.45 (2.65)		2.63 (2.78)

*Statistically significant result at p ≤.05 [1] Wilcoxon rank sum test [2] Fisher's exact test

Sedentary Behavior by Gender

Among female children, there was a statistically significant change in screen time duration (p = 0.023), with an increase in those spending less than 1 hour (from 13.5% at baseline to 17.6% at follow-up) and 1-2 hours (from 52.1% at baseline to 54.8% at follow-up) on screens, while those spending 3-4 hours on screens decreased (from 28.0% at baseline to 23.2% at follow-up; see Table 13). Among male children, there was a marginally significant increase in screen time rules (from 80.8% to 87.6%, p = 0.059).

Table 13. Changes in sedentary behavior by gender, Child Healthy Habits survey, 2023-2024

	Female, N = 636				Male, N = 481			
	Baseline N = 384	**Follow-up N = 252**	**p-value**	**Total N = 636**	**Baseline N = 287**	**Follow-up N = 194**	**p-value**	**Total N = 481**
Screen Time Rules			0.593 [2]				0.059 [2]	
No	69 (18.1)	41 (16.3)		110 (17.4)	55 (19.2)	24 (12.4)		79 (16.5)
Yes	313 (81.9)	211 (83.7)		524 (82.6)	231 (80.8)	169 (87.6)		400 (83.5)
Screen Time			0.023*[2]				0.700 [2]	
Less than 1 hour	51 (13.5)	44 (17.6)		95 (15.1)	35 (12.2)	24 (12.5)		59 (12.3)
1 - 2 hours	197 (52.1)	137 (54.8)		334 (53.2)	166 (58.0)	115 (59.9)		281 (58.8)
3 - 4 hours	106 (28.0)	58 (23.2)		164 (26.1)	65 (22.7)	46 (24.0)		111 (23.2)
5 - 6 hours	14 (3.7)	11 (4.4)		25 (4.0)	14 (4.9)	5 (2.6)		19 (4.0)
7 or more hours	10 (2.6)	0 (0.0)		10 (1.6)	6 (2.1)	2 (1.0)		8 (1.7)
Screen Time during Meals			0.356 [1]				0.543 [1]	
Mean (SD)	2.70 (2.89)	2.40 (2.67)		2.58 (2.81)	2.65 (2.84)	2.41 (2.68)		2.55 (2.77)

*Statistically significant result at p≤.05 [1] Wilcoxon rank sum test [2] Fisher's exact test

Food Security and Food Assistance

At baseline, most households reported having adequate access to healthy foods "always" (45.8%) or "most of the time" (37.8%), totaling 83.6% of respondents (see Table 14). No significant changes in food security were observed from baseline to follow-up.

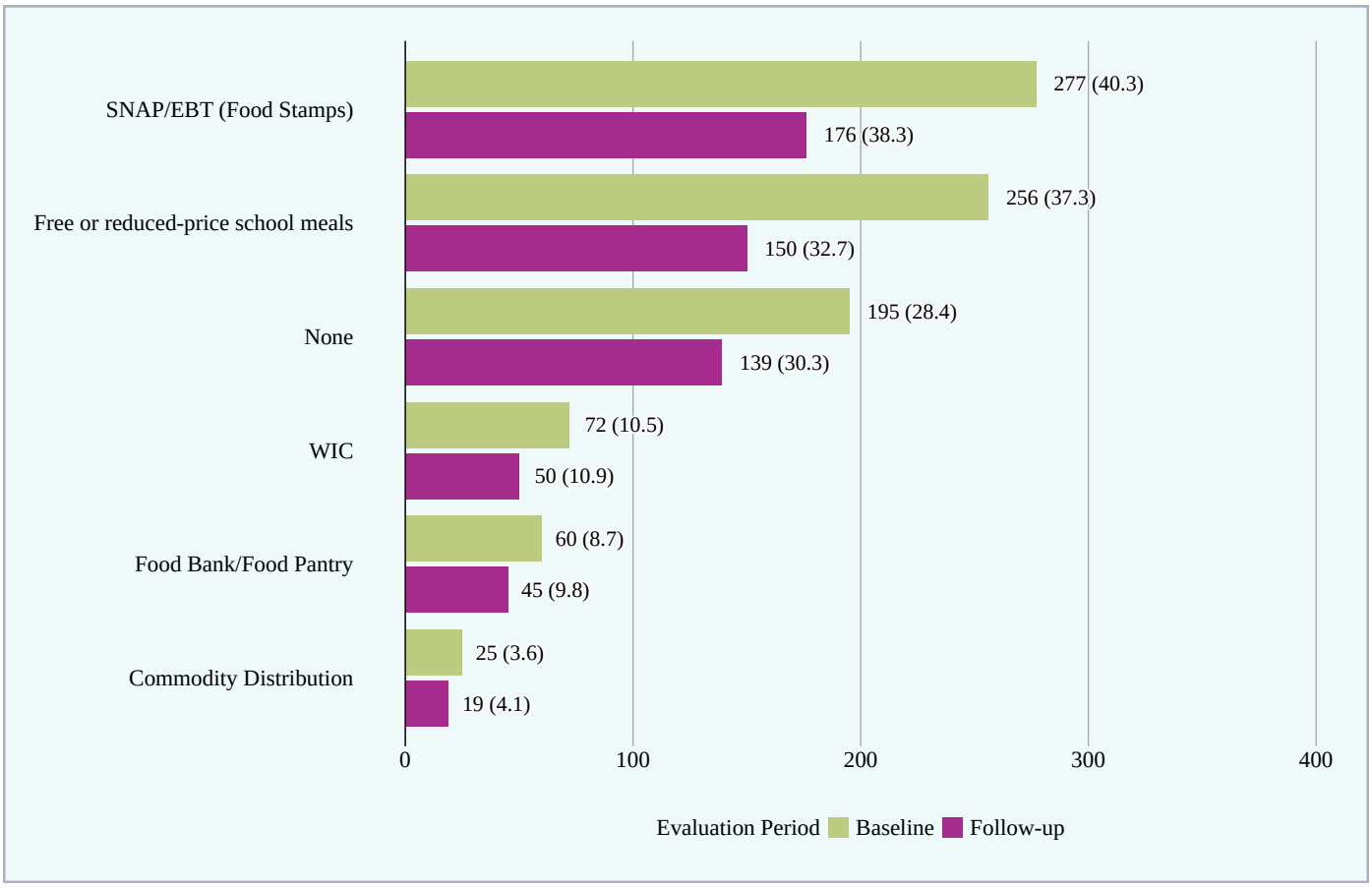
Table 14. Changes in food security, Child Healthy Habits survey, 2023-2024

	Baseline N = 687	Follow-up N = 459	p-value	Total N = 1,146
Food Secure			0.090 [1]	
Never	14 (2.1)	16 (3.6)		30 (2.7)
Rarely	7 (1.0)	8 (1.8)		15 (1.3)
Sometimes	90 (13.3)	60 (13.6)		150 (13.4)
Most of the time	256 (37.8)	138 (31.2)		394 (35.2)
Always	310 (45.8)	220 (49.8)		530 (47.4)

[1] Fisher's exact test

Survey participants were asked about their household's current use of various food assistance programs to help stretch their food budget. SNAP/EBT was the most utilized program, with 40.3% of households using it at baseline and 38.3% at follow-up (see Figure 3). Free or reduced-price school meals were the second most common food assistance program reported by participants, used by 37.3% of households at baseline and 32.7% at follow-up. One in ten families participated in WIC and nearly one in ten used a Food Bank/Food Pantry. Commodity Distribution programs were the least frequently used program. Three in ten households reported no food assistance programs.

Figure 3. Household usage of food assistance programs, Child Healthy Habits survey, 2023-2024



Healthy Messaging

There was a strong alignment between the healthy eating and physical activity messages received by children and their parents/guardians. Among the 377 respondents writing in about any health messages received by children, the promotion of healthy eating, encouragement of physical activity, and the "Eat Smart to Play Hard" slogan were most frequently mentioned. Responses were similar for the 330 parents/guardians who responded about messages that they had seen or heard. In addition to messages promoting healthy eating and encouraging physical activity, they also reported messages about staying hydrated with water. Less common messages mentioned across both groups included reducing sedentary behavior and drinking milk.

Program Impact

Among the 102 respondents writing about the program's impact on their families, many shared about changes made due to the program. These included increased fruit and vegetable consumption, a shift towards healthier eating habits overall, and an increased willingness to try new foods. Families also reported engaging in more outdoor activities and preparing meals together more frequently. When asked about their children's favorite parts of the SNAP-Ed NM program they were participating in, 425 participants wrote in responses. They highlighted eating fruits and vegetables, learning about healthy eating, and participating in meal preparation as the top three favorite parts of SNAP-Ed. Being more physically active and trying new foods were also mentioned.

Program Feedback

Participants were asked how SNAP-Ed NM programming could be better. Feedback was provided by the majority of respondents at follow-up (N = 349). Overall, comments were positive, with many participants expressing satisfaction with current programming. However, there were also some suggestions for improvement, including requests that programs provide additional information on healthy eating, increase the availability of fruits and vegetables, add more variety to activities, and include more recipes.

Discussion

This evaluation's main purpose was to determine the extent to which SNAP-Ed NM affects key health behavior outcomes identified by the SNAP-Ed Evaluation Framework: changes in healthy eating behaviors (MT1) and changes in physical activity/sedentary behavior (MT3). Overall, the findings from this outcome evaluation support the role of SNAP-Ed NM programming in helping NM children live more healthy lives. Significant increases in fruit consumption, time in active play, joint active play with parents and children, and the consumption of fruits and vegetables as snacks align with SNAP-Ed programming and represent progress toward achieving the current Dietary Guidelines for Americans and Youth Physical Activity Guidelines.

Comparing this current 2023-2024 academic school-year evaluation of NM SNAP-Ed programming to the previous evaluation conducted in 2018, there are some similar changes noted. In the previous evaluation, there was a significant increase in the average number of daily servings of fruits and vegetables (+0.23 servings from baseline to follow-up). For this evaluation, there was an increase in average daily servings of fruit alone (+0.14 servings from baseline to follow up). One notable difference, was that there was no significant increase in physical activity observed in the previous evaluation. However, in this current evaluation, there were significant increases in time spent in active play and the average number of days per week parents and children were active together.

One notable finding in the current evaluation was that no significant changes in healthy eating were observed among the youngest children (Head Start and kindergarten), although significant changes were observed among older children (grades 3-5). There are several possible explanations for this. Young children already ate a higher number of servings at baseline, they tend to have less control over their diets than older children, and several of the SNAP-Ed NM programs focus primarily on the older age group.

It is also important to acknowledge some limitations of this evaluation, which includes the lack of a control group. While there were significant changes from baseline to follow up, without a control group to compare these findings against, the effects of the programming are not as conclusive and causal inferences are not possible. Another limitation was the sample size, which limited some analyses such as matched-pair analyses. With a more robust sample size, some of the findings that were trends may have achieved significance.

Conclusion

Overall, the 2023-2024 outcome evaluation demonstrated that SNAP-Ed NM programming appears to be effective in motivating healthy eating and increased physical activity among pre-school and elementary school aged children and their families. Specifically, significant increases in fruit consumption and average number of days being physically active as a family were observed. No significant differences were seen in sedentary behaviors. The process of conducting this outcome evaluation, and the findings themselves, will serve to build up the strengths and further improve future SNAP-Ed NM programming.

Appendix A: Healthy Habits Survey

INSTRUCTIONS

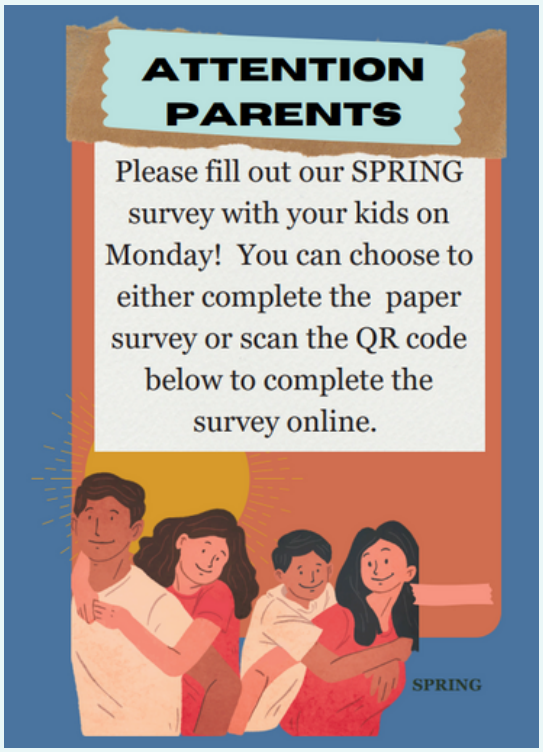
Please take this survey with your child's help. Please fill this out on Monday. Tell us what your child **usually** does, and what your child did **yesterday (Sunday).** If today is not Monday, that's OK. Just tell us what your child did **yesterday**.

Please add up the fruits and vegetables your child ate **yesterday**. **Do not count** fried vegetables (like French fries) or any kind of juice.

Count fruits and vegetables on their own, or in foods like smoothies, sandwiches, burritos, stir-fry, salads, soups, and salsas. **Count fruits and vegetables that come in cans, frozen, dried, or fresh.**

Example: Your child ate a **1/2 cup** of salad at lunch + 1 child handful of broccoli at dinner. That's **2 servings for the whole day**.

(Circle the total number of servings):



FRUITS AND VEGETABLES

Child's name: _____

Today's date: _____

1/2 cup OR child handful = 1 child serving

1 - Circle the number of servings of fruit your child ate **yesterday**.

0 1 2 3 4 5

2 - Did your child eat more than one kind of fruit **yesterday**?

☐ Yes ☐ No

3 - Circle the number of servings of vegetables your child ate **yesterday**.

0 1 2 3 4 5

4 - Did your child eat more than one kind of vegetable **yesterday**?

☐ Yes ☐ No

5 - Did your child eat any fruits or vegetables as a snack **yesterday**?

☐ Yes ☐ No

6 - How often does your child help make meals? (**check one**)

☐ Almost never

☐ At least 1 time per day

☐ At least 1 time per week

☐ At least 1 time per month

FRUITS AND VEGETABLES

7 - What are some of the things that make it hard for your family to eat fruits and vegetables? (**check all that apply**)

- ☐ Nothing
- ☐ They go bad too quickly
- ☐ No one really supports or encourages me to eat them
- ☐ Not enough time to shop for or prepare them
- ☐ Not enough stores close to me carry them
- ☐ Cuts in benefits (SNAP, WIC, etc.)
- ☐ My child/children don't like them
- ☐ I don't like to eat them
- ☐ Buying more costs too much
- ☐ Other (**please explain**): _____

SCREEN TIME

8 - Do you have rules or limits on screen time (TV, tablet, movies, videos, computer games) for your child?

- ☐ Yes
- ☐ No

9 - Check the number of hours your child spent watching TV, playing video games, or using a computer or tablet (not for school) **yesterday**.

- ☐ Less than 1 hour
- ☐ 1 - 2 hours
- ☐ 3 - 4 hours
- ☐ 5 - 6 hours
- ☐ 7 or more hours

10 - Check the number of days each week the TV or other electronic device is **usually** on during meal times.

- ☐ 0 days
- ☐ 1 day
- ☐ 2 days
- ☐ 3 days
- ☐ 4 days
- ☐ 5 days

PHYSICAL ACTIVITY

11 - Check how many hours your child played actively **yesterday**. Actively means that they breathe a little harder or their heart beats faster.

- ☐ Less than 1 hour
- ☐ 1 hour
- ☐ 2 hours
- ☐ 3 hours
- ☐ 4 hours
- ☐ 5+ hours

12 - Check the number of days in a **usual** week that you are physically active together with your child (like walking together or playing together).

- ☐ 0 days
- ☐ 1 day
- ☐ 2 days
- ☐ 3 days
- ☐ 4 days
- ☐ 5 days

13 - Check how often your child **usually** plays actively for at least 60 minutes a day.

- ☐ Once in a while
- ☐ 1 -2 days each week
- ☐ 3 - 4 days each week
- ☐ 5 - 6 days each week
- ☐ Every day

HEALTHY EATING MESSAGES

Ask the Kids!

14 - Please tell us about healthy messages **your child** has seen or heard. What did the messages say?

15 - Please tell us about healthy messages **you** have seen or heard. What did the messages say?

16 - Please tell us about any changes you or your family have made because of the program.

17 - What was your child's favorite part of the program?

18 - Please tell us how you or your child think the program could be better.

ABOUT YOUR FAMILY

19 - What is your child's gender? _____

20 - How old is your child? _____

21 - Are you the child's:

- ☐ Mom
- ☐ Dad
- ☐ Grandma/pa
- ☐ Aunt/Uncle
- Other (**explain**): _____

22 - How many **years** has your child been in this school? (**circle one**)

1 2 3 4 5 6

23 - Is your child in... (**check one**):

- ☐ Preschool/Head Start
- ☐ Kindergarten
- ☐ 1st Grade
- ☐ 2nd Grade
- ☐ 3rd Grade
- ☐ 4th Grade
- ☐ 5th Grade
- ☐ 6th Grade

24 - What is your child's race/ethnicity? (**check all that apply**)

- ☐ American Indian/Alaska Native
- ☐ Asian/Pacific Islander
- ☐ Black/African American
- ☐ Hispanic/Latino
- ☐ White
- ☐ Other (**explain**): _____

ABOUT YOUR FAMILY

25 - Does anyone in your home use any of these to help stretch your food dollars? (**check all that apply**)

- [ ] Free or reduced-price school meals
- [ ] SNAP/EBT (Food Stamps)
- [ ] WIC
- [ ] Commodity Distribution
- [ ] Food Bank/Food Pantry
- [ ] We do not use any of these

26 - In the last 3 months, did your family have adequate access to healthy food?

- [ ] Never
- [ ] Rarely
- [ ] Sometimes
- [ ] Most of the time
- [ ] Always