
United Way of New York City and Administration for Children's Services: Healthy Eating for a Healthy Start Demonstration Project

2011-2012 Year Two Evaluation Report
September 30, 2012

Stephanie Wexler-Robock, PhD., NCC Learning Analytics
Group, LLC

United Way of New York City and Administration for Children's Services:
Healthy Eating for a Healthy Start Demonstration Project (HEHS)

2011-2012 Year Two Evaluation Report

September 30, 2012

Prepared for United Way of New York City and New York City Administration for Children's Services

Prepared by Learning Analytics Group, LLC
Stephanie Wexler-Robock, PhD., NCC

Contributors to the 2012 Evaluation Report
Jerry Robock Robert Lewis Ellen Saltzman

LEAG wishes to acknowledge the ongoing support and assistance provided by Rose Diaz, PhD., Myeta Moon, MPH, May Hui and others at United Way of New York City, Risa Jaslow of New York City's Administration for Children's Services, as well as staff from Children's Museum of Manhattan and Children's Aid Society. LEAG also wishes to thank staff and families from all eight Head Start demonstration sites for their generosity in providing us with access, time, and sharing their perspectives and experiences.

Learning Analytics Group, LLC (LEAG)
2435 Pinetree Place
Yorktown Heights, New York 10598

UWNYC/ACS Healthy Eating for a Healthy Start Demonstration Project 2011-2012 Year Two Evaluation Report

TABLE OF CONTENTS	page
<u>Executive Summary</u>	<u>4</u>
<u>Introduction</u>	<u>12</u>
<u>Methodology</u>	<u>13</u>
<u>Data Analysis</u>	<u>15</u>
<u>Findings</u>	
<u>I. Overview of HEHS Year Two Trainings and Technical Assistance</u>	<u>16</u>
A. <u> Closer Look: Children’s Aid Society (CAS) Trainings and Technical Assistance</u>	<u>17</u>
B. <u> Closer Look: Children’s Museum of Manhattan (CMOM) Trainings/Technical Assistance</u>	<u>19</u>
<u>II. Wellness Leadership Committee Trainings: Inputs, Process, and Outcomes</u>	<u>20</u>
A. <u> Overview of Wellness Leadership Committee Trainings</u>	
B. <u> WLC Formation, Attendance, Purpose, and Functioning</u>	
C. <u> Identifying and Developing Wellness Policies</u>	
D. <u> Wellness Policy-Outcomes (Nature and Number of Polices Created)</u>	
E. <u> WLC-led Demonstrations/Presentations</u>	
F. <u> Reactions to Training by WLC Members</u>	
<u>III. Cook-Off</u>	<u>38</u>
<u>IV. Center Staff and Parent Experiences: Reactions, Emerging Outcomes, and Perceived Support, Obstacles, and Challenges</u>	<u>40</u>
A. <u> WLC Member Reactions to Training</u>	
B. <u> Staff reactions to WLC activities, purpose, and policies (by overall staff reactions and reactions by each stakeholder group)</u>	
C. <u> Parent reactions to WLC activities, purpose, and proposed policies</u>	
<u>V. Emerging outcomes and impact</u>	<u>49</u>
A. <u> Classroom Staff (head teachers, assistant teachers, teaching assistants)</u>	
B. <u> Administrators (directors, educational/program directors)</u>	
C. <u> Family/social workers</u>	
D. <u> Kitchen staff</u>	
E. <u> Parents/guardians</u>	
<u>Conclusions and Recommendations</u>	<u>97</u>
<u>Appendix</u>	<u>104</u>

Executive Summary

Year Two Evaluation of United Way of New York City and Administration for Children's Services: Healthy Eating for a Healthy Start Demonstration Project

In its second year as a demonstration project, HEHS, a partnership of UWNYP/ACS, has continued to make substantial progress in achieving its objectives of enhancing nutritional literacy and promoting healthy eating and wellness practices for Head Start staff, children, and families. In Year 2, HEHS focused its activities on transitioning the program to be a sustainable initiative, spearheaded by the proposed creation of Center-wide Wellness Leadership Committees (WLCs) with the capacity to create wellness policies and promote receptivity of healthy practices. In addition, to sustain and extend the goal of increasing access to healthy foods, cooking workshops were proposed to inform the cooking practices of all staff, support the work of the WLCs, and culminate in a competitive, final Cook-Off event. A total of eight (8) Head Start Centers in Brooklyn and Manhattan participated in Year 1 and Year 2 of the demonstration project.

Purpose of the Evaluation

An independent, process and impact evaluation of HEHS began in August 2010 and continued through July 2012 to examine the extent to which the project had made progress in its goals and objectives, and to determine the nature, worth, and utility of HEHS implementation activities (e.g., trainings, Wellness Leadership Committees, Cook-Off, materials), reactions to those activities by Head Start staff, WLC members, and families, identified outcomes of HEHS (e.g., sustained changes in nutritional, attitudes, beliefs, and practices, demonstrated knowledge, changes in menus, and creation and conveyance of wellness policies in the eight Head Start Centers), obstacles and recommendations.

Methodology and Data Analysis

To conduct the evaluation, data were collected through multiple sources: staff surveys, parent surveys, observations (including observations of CMOM Staff and WLC trainings and CAS Cooking trainings, on-site WLC demonstrations for parents/parent delegates and demonstrations for staff, observation of Cook-Off), interim and end of year focus groups with all WLCs, document review (e.g., attendance records,

scorecard assessments, WLC feedback forms, Cook-Off recipes, etc.), and pre-post menus from all eight (8) Centers analyzed using the HEHS Menu Rubric jointly designed by CAS and Learning Analytics Group (LEAG) to assess nutritional quality of menus. From September 2011 to July 2012, LEAG conducted thirty-three (33) observations of HEHS Year 2 activities. Fourteen focus groups (7 interim and 7 final) were conducted by teams of evaluators with WLCs (two sites had one joint WLC). Prior to the staff and parent demonstrations and final focus group, approximately 270 retrospective staff surveys and parent surveys (English and Spanish) were distributed to Centers. Two-hundred and eleven (211) surveys were returned and entered into a database for analysis, resulting in a return rate of 78%. Quantitative survey, observation, attendance records, and WLC data were analyzed in the aggregate (combined) and disaggregate (e.g., by position) to generate descriptive statistics (averages, frequencies, percentages, and ranges of response) related to implementation activities and outcomes. Focus group and observation data were analyzed using qualitative techniques of content analysis to determine emerging themes, relationships, and outcomes.

FINDINGS

I. TRAININGS & PARTICIPATION

- Children's Museum of Manhattan (CMOM) and Children's Aid Society (CAS) were retained in Year 2 to design and deliver professional development and technical assistance. CMOM provided refresher nutrition training and focused on the creation, development, work, and outcomes/products of Wellness Leadership Committees, particularly the creation and communication of wellness policies and the development and demonstration of WLC members' nutrition leadership skills and knowledge; CAS focused on building hands-on experience of all demonstration Center staff to implement healthy cooking practices with children, overseeing a final Cooking event, and

working to recognize the critical role of kitchen staff in achieving the goals of HEHS.

- CAS provided 1 Cook's refresher training and 7 on-site, all-staff cooking trainings, plus on-going technical assistance for the culminating Cook-Off event. CMOM provided 7 on-site, all-staff nutrition refresher workshops, 11 Wellness Leadership Committee (WLC) trainings, and ongoing technical assistance from Fall 2011 through Spring 2012.
- In Year 2, close to 500 people representing kitchen/nutrition staff, classroom staff, family/social workers, administrators, support staff – custodians, office staff, and parents who influence and impact children's nutrition and wellness from the 8 demonstration Centers attended a total of 26 HEHS trainings. Additionally, close to 170 adults and children attended the final Cook-Off event and over 200 attended nutrition workshops led by WLC members. With individuals attending multiple events total Y2 attendance approached 900 for all trainings and events combined.
- Professional development and technical assistance provided by CMOM and CAS was task-oriented and hands-on and related directly to workshop and event goals articulated in their documented lesson plans and resource binder. Ongoing, technical assistance was reportedly targeted to the needs and requests of each Center

The teaching style of the [CMOM and CAS] trainers provided effective role models on how to interact with others about nutrition and health. The trainers' approach were "very professional, lively and provided simple and fun activities that everyone could participate in". As compared with other professional developments offered (such as from ACS) the HEHS workshops were 'very hands-on and practical and 'not focused on lecturing to the class'.

CAS Cooking Workshops. In addition to a cook's refresher workshop, CAS conducted 7 on-site, hands-on workshops for *all* staff at each center to teach and promote cooking with children. The workshop highlighted the nutritional and culinary basis of selecting ingredients prior to and during hands-on preparation by all participants.

- Resources, recipes, step by step procedures, modeling, and individual technical assistance in teaching staff how to cook healthy foods with young children, was provided, with assistance from Center kitchen staff.

- Center Staff worked in teams to prepare/cook 5 different healthy snacks/meals that they could then make with children in their classrooms.
- Cook-Off rules presented at the workshop aligned with best practices demonstrated and taught at the nutrition and cooking workshop. The recipes, kitchen tools utilized, methods for including young children in healthy cooking modeled the guidelines presented to Centers/Cook-Off teams for creating a healthy recipe to be entered and shared at the Cook-Off competition.

II. WELLNESS LEADERSHIP COMMITTEES (WLC)

A major outcome of Year 2 was the creation of a "Wellness Leadership Committee" (WLC) at each of the eight demonstration sites derived from a nucleus of stakeholders at each site, trained by CMOM to develop skills to create policies, widen receptivity of healthy messages, and lay the groundwork for acceptance, implementation, and sustainability of wellness policies and practices.

The [WLC] leadership training has helped us focus on how to work together to spread the message of healthy eating at our center. Before this year we all had the motivation to change the policies in our center but the training this year gave us the opportunity and the tools to learn how to work together and best put forth the concepts we have learned- WLC member

Wellness Policy Creation: WLCs were comprised of 5-15 members representing an array of Head Start staff - kitchen, classroom, family/social work, administrative, and support staff - and to a lesser extent, parents. CMOM facilitated the well-received 3-part hands-on, team building, task-oriented WLC trainings through a systematic, yet flexible approach scaffolded by the use of step-by-step wellness team and policy development tools including a *scorecard* that WLCs used to assess their Center's level of compliance with Head Start nutrition/physical activity standards. Based on that needs assessment, WLC members worked as a team to craft Center-specific policies that strengthened or enhanced their current practices. Thirty-eight (38) wellness policies (4-8 policies per site) were produced in total in the following categories: purchased foods, beverages, meals brought into center, physical activity, nutrition education, mealtime environment, and parent involvement.

WLC-Led Demonstrations: In conjunction with developing policy, training facilitated WLC members' capacity to model, demonstrate, and

inspire parents and staff to expand their receptivity and support of positive health messages and lay the groundwork for acceptance of wellness policies and practices. WLC trainers modeled and explicitly taught best practices of workshop presentation (e.g., eye contact, engaging all participants), while simultaneously teaching the nutrition content of the workshops WLCs would deliver. Further, WLCs practiced leading large group activities that utilized art to teach nutrition and wellness. WLC members, the majority of whom had never conducted workshops or led large group nutrition activities for parents or staff, presented 14 total hands-on nutrition workshops attended by over 200 people that demonstrated the hidden sugar in beverages, and led large group activities that enhanced or refreshed participants' nutrition knowledge.

- 100% of WLCs showed improvement in demonstration skills, fuller knowledge and understanding of hidden sugar in beverages, and all reported greater confidence in leadership skills since conducting the workshops, though some would have liked to have more training in how to extend the demonstration.
- At 100% of presentations the audience was engaged, responsive, and concerned with the information they heard, and indicated that the policies were practical, specific, and meaningful.

Ownership and Belief that Policies Would be Implemented

We want to present policies in ways that people embrace them, rather than have us enforce them - WLC Member

- 100% of WLC focus group informants indicated they feel invested and want to participate in and/or lead the operationalizing of policy objectives into practice.
- 80% of WLC members feel it is their responsibility to implement proposed policies and 89% see a role for themselves in helping to make sure policies are implemented.

We know nowwhat is healthy and unhealthy for ourselves and our children ... We can't act as though we don't knowWe have really been changed by HEHSWe are determined to see things [the policies] through - WLC members

- WLC members attributed their sense of investment, empowerment, and leadership confidence to a variety of factors including: hands-on, energetic, informed, caring, and respectful training and useful resources (Year 1 and Year 2 trainings), "collective confidence" and support developed as a team, having administrator support/or serve on their team, expectations of trainers - as partners whom they do not want to let down, feeling they have a realistic plan and meaningful policies that will enable them to make a difference, cross-site trainings and energy/peer pressure from other WLCs, energy from the Cook-Off event, and deep desire to improve their children's health.

WLC Reactions to WLC Model: 100% of responding members attributed the team approach as important to the success of the program.

- Among their reasons, it provides a core group to help staff stay focused on nutritional goals, makes the workshop feel real and gives us a sense of empowerment, encouraged fellowship among the staff to support each other in making healthy changes, much more effective working together than if we were trying to implement these changes alone, the program indicated its level of dedication and legitimacy in being serious about making lasting change at the sites.

Challenges, Obstacles, Some Lessons Learned

Asked about challenges and obstacles, members responded with lessons learned, and persistent challenges including learning not to convey judgment in improving others' health practices; showing how to make changes (such as healthy cooking) not just lecturing; addressing, not ignoring resistance; being persistent in getting and keeping parents involved, administrator support, optimizing limited time to meet, remaining on track, setting committee ground rules, and dealing with non-productive members. Lack of time, sufficient money and resources to implement planned changes, and non-HEHS trained decision makers were named as obstacles.

III. Staff and Parent Awareness and Reactions to WLC activities and wellness policies

Staff Awareness: 85% of Center Staff respondents indicated they were very aware

(59%) or aware (26%) of the work of the WLC in their Center.

Purpose and Roles:

- Over 60% of staff identified multiple leadership roles for their WLC; with top roles involving policy development, implementation, and ongoing support work to improve nutrition and wellness in our center, over half see the WLC as models, demonstrators/teachers, and as resources.
- 65% or more indicated a long term role for their WLC in improving and sustaining nutritional and wellness practices.
- 67% found their WLC to be effective; 9% felt the WLC was either just getting started, 24% either felt they don't really know (6%) or did not respond (18%).
- Given that the task of implementing policies was not a specified objective for Year 2, staff were asked specifically about WLC leadership activities; 86% of staff overall agreed that their WLC has taken a leadership role in modeling and teaching healthy eating and wellness practices.

Staff Awareness of Policies Created and Reaction to those Policies:

Overall, close to sixty percent (58%) of staff survey respondents indicated they were familiar with the wellness policies developed by their WLC. However, just over forty percent (42%) were either not familiar (18%) and or did not respond (24%). Looking at staff more specifically, 70% of responding administrators and kitchen staff reported being familiar with the policies, 63% of family workers indicated familiarity, and 51% of classroom staff, the lowest percentage, reported being familiar with policies.

Staff Reactions to the Wellness Policies:

Overall reactions to the policies by those familiar with them were very positive, though a high percentage wondered how easy it would be to stick to them:

- Close to 100% reported the policies were important, clear, specific, and practical, will help improve the nutrition and wellness of our children, families, children, and staff, will not be hard to carry out, while 80% indicated the policies will be hard to stick to, and 63% felt the policies were not different from what they have currently.
- Overall, 60% of all respondents feel it is their responsibility to make sure those policies were carried out, while more than one-third either feel it is not (9%), are unsure (11%), or did not respond (21%). Looking at

differences among staff; 70% of responding kitchen staff feel it is their responsibility as do 64% of responding administrators, 63% of responding family/socials and 63% of responding classroom staff. (Although about one-third of responding administrators did not indicate responsibility to make sure policies were implemented, close to 80% of respondents overall reported their directors have been clear in explaining the work and importance of the WLC and their commitment to implementing and enforcing the policies created by our WLC.)

- Slightly different than responsibility, staff were asked if they see a role for themselves in making sure policies were carried out; 70% overall see a role for themselves in carrying out the policies, specifically: 90% of kitchen staff see a role for themselves in carrying out policies as do 82% of administrators, 70% of family/social workers and 68% of classroom staff.

Parent Awareness and Reactions to WLC:

95% of responding parents indicated they were aware of the work of their WLC. Close to 70% indicated multiple leadership roles for their WLC involving the development and support of policies, and the provision of education. Parent responses also indicate a long term role for their WLC.

Parents are beginning to see themselves as "partners with the center to help transform the classroom" because of HEHS. This issue of being consistent with the health policies at the center can be a magnifying influence for parents on how they choose to make healthy decisions for their children- WLC Member

Parent Awareness of and Reactions to Policies Created and Reaction to those Policies:

Nearly three-quarters (74%) of responding parents indicated they were familiar with the wellness policies developed by their WLC; close to or 90% reported them to be clear, specific and important, and practical; 81% perceive they will help improve the nutrition and wellness of our children, families, children, and staff, about 60% reported they will not be hard to carry out, and/or felt the policies were not different from what they have currently, and 39% indicated the policies will be hard to stick to. 84% of responding parents see a role for themselves in helping to carry out wellness policies and close to seventy percent (69%) also feel it is their responsibility to make sure the policies are carried out.

IV. COOK-OFF

The culminating activity for HEHS was a Cook-Off held at CMOM and overseen and led by CAS. Staff and children at all Centers had created a recipe(s) that met the healthy guidelines for submission and served to attendees. Awards for a variety of categories were given to all Cook-Off teams, with awards generally being an appliance to help Centers make healthy foods. Certificates of completion were awarded to WLC members. The event was an opportunity to recognize all the WLC members and each spoke about their HEHS journey.

Working with children to create the dish offered an effective learning experience for our center's children. It reinforced concepts of color, sizes, counting and measuring, science in terms of texture and the effects of cooking. The staff shopped with children for the cook-off and discussed with them the importance of looking at the texture and quality fresh foods; [Cook-Off] was an easy way to see how much we learned by preparing foods with the children at the center.

- 82% of Center staff survey respondents found the experience of the Cook-Off – both preparing for and attending - created a team spirit of healthy eating, was informative and fun. Approximately 170 adults and children attended, although only 50 had been expected.

Imagine children actually asking for second helpings of Kale salad- Cook-Off Attendee.

IV. CHANGES AND OUTCOMES SINCE PARTICIPATING IN HEHS:

To understand the environment in which the WLCs worked and for which the policies were proposed, Center staff and parents were asked a series of survey questions to gauge perceived center and personal benefits and changes since HEHS began: Overall, 80% to 100% of respondents, across all groups and across all demonstration centers, continued to report a range of nutrition and health benefits and practices since participating in HEHS.

- Reported Benefits to Centers.** 80% to over 90% of Center staff reported a variety of positive wellness-related changes and impacts to their Center over the two years since HEHS began including: kitchen staff are making healthier meals and snacks; staff have been encouraged to use healthy eating and exercise activities; classroom staff are

routinely teaching lessons to children about nutrition and wellness; family/social workers are offering more workshops to families on healthy eating and wellness; we have changed birthday and social gathering policies to cut down on unhealthy foods; increased time for children to have physical activities; healthy eating pictures and messages have been posted throughout our Center, Healthy eating and exercise have become daily topics of conversation among Center staff, while 60%-70% (an increase over Year 1 results) of staff indicated that parents have shown positive interest in the new menus and foods their children are served.

Attitudes and beliefs continue to reflect an understanding across all staff positions of the environment, their influence, as well as others, in engaging children in activities that promote healthy eating and wellness: 80%-100% of responding staff agreed that: The way I introduce new foods can influence my students' willingness to try new foods; children need daily physical or gross motor activity in addition to movement and dance; what children eat as youngsters can impact their long term health; teaching children about nutrition and healthy living should be required in all Pre-K classrooms; programs like HEHS help prepare early childhood staff to teach about nutrition and health; our students' nutrition behaviors and knowledge have improved since HEHS.

Reported Benefits to Children.

According to 80% to over 90% of staff respondents, over the last two years of HEHS, children have continued to benefit from HEHS by demonstrating improved knowledge, attitudes, and behaviors concerning healthy eating including: greater interest in learning about nutrition and healthy eating, greater motivation to eat healthy foods, become less picky and shown greater willingness to try new foods, talked more about nutrition and health topics, shared their knowledge about nutrition with their family.

Staff perceptions of parent interest in new menus and children's increased exercising were mixed; however close to or over 70% of staff saw improvements in these areas as well.

Reported Benefits to Center Staff: Kitchen Staff, Classroom Staff, Family/Social Workers, and Administrators.

Increased Nutrition/Wellness Understanding and Skills: 80% to over 90% of staff across all Centers reported a number of benefits in their

nutrition and health related understanding and skills, albeit to varying extents, since HEHS began including: greater understanding of the relationship between nutrition, exercise, and children's academic achievement; causes, prevention, and impact of childhood obesity; hidden sugar in foods and beverages; food labels; improved ability to model healthy eating and portion size' introduce new foods to picky eaters; improved knowledge of nutrition; exercise and health; greater confidence in my ability to teach children about nutrition and healthy living; create engaging lessons; engage my students in critical thinking and problem solving about nutrition and healthy living; and increased from Year 1, increased opportunities to have conversations with kitchen staff about meals and snacks.

- Personal Changes in Nutrition/Wellness Practices:** 80% to 100% of staff across all Centers have reportedly continued to improve the frequency of a variety of healthy eating and wellness practices in their personal lives, compared to before they participated in HEHS, including: trying a variety of healthy foods, drinking more water and less soda/sugary drinks, learning and reading more about nutrition and healthy living, checking food labels on cans and packages, exercising more, using correct portion size when I eat, avoiding fast food restaurants, making meals with my family, cooking at home more often, and shopping at green grocery or farmer's markets.

Staff Perceived Benefits and Changes in Families: Staff perceptions of changes and benefits to families were more uneven however more than 50% to over 80% of staff, an overall increase over last year, reported a range of perceived nutrition and wellness benefits to families over the last two years of HEHS, albeit to varying degrees. These included: greater motivation to eat healthy foods, demonstrated increase in their knowledge of nutrition and healthy eating, reported or shown greater willingness to try new foods, interest in learning about nutrition and healthy eating, cooking at home, or making meals together as a family, motivation to eat less unhealthy and fast foods, increase in their exercising, responded well to the nutritional workshops family/social workers have provided, and talked more about nutrition and health topics.

Changes in Nutrition Literacy/Practices by Classroom Staff: Over 80% to 100% of classroom staff (70 to 100% in Year 1) reported implementing a range of nutrition and wellness

related activities in their classroom; a reported increase even over the positive results of Year 1. Those done more often in Year 2 included: making foods from scratch; talking with parents about healthy eating and wellness; providing time and activities for children to be physically active at least one hour per day; using gross motor equipment in the classroom or playground; reading aloud to children from books with a healthy eating theme having children sing healthy eating songs; creating healthy eating lesson plans; having children make hands-on art nutrition or healthy living projects; inviting kitchen staff to talk with children about the days meals; talking with staff about nutrition related activities or ways to implement HEHS; and about as often as Year 1, discussing healthy eating with children in my class.

Changes in Access to Healthy Foods

Findings based on pre Fall 2010-post Spring 2012 menu analysis support reports indicating much positive change in kitchen staff's professional/nutrition knowledge and application of knowledge into practice: Comparative analysis of Fall 2010 to Spring 2012 averages across Centers showed gains in all 6 Menu Rubric criteria of nutritional quality, albeit with clear room for continued growth:

- On average, impressive gains and improvement in the frequency and variety of whole grains in menus. The average overall went from the deficient - fair level (1.8) to the good- basic level (3.4). All Centers that had rated at the fair -deficient in Fall 2010 moved to the basic level and above, and in several cases, jumped two levels. .
- On average, results show improvement in from Fall 2010 to Spring 2012 in the increased frequency of making homemade foods rather than using pre-prepared foods, as well as an increase in the quality of pre-prepared foods when they are used. On average, across all sites, scores increased one full level went from basic to good.
- On average, overall results show improvement in the frequency, preparation and variety of fruits and vegetables served, however two Centers showed a slight decrease of 0.3 and 0.4 (yet both remained in the good level).
- On average, positive nutritional changes were found overall in variety, type, and frequency of protein sources, though two Centers showed no change overall, and two showed a slight decrease . Frequency, type, and variety of protein sources was uneven

across Centers and while improving, remains an area for greater improvement.

Kitchen staff have really been “leading by example”, by the healthy changes they have done with the food preparation at the site- WLC member

Reported Benefits by Families/Parents.

- 90% or more of responding parents indicated they have benefitted from their Center having participated in HEHS in gaining knowledge and understanding of nutrition and wellness.

Since HEHS surveyed parents indicated they have sustained reported positive changes in their nutrition practices:

- 95 to 99% report more opportunities to have conversations with my family about healthy eating, deeper understanding of the hidden sugar in foods and beverages, improved ability to model healthy eating and portion size for my children and family, causes, prevention, and impact of childhood obesity, effective ways to introduce new foods to my family, confidence in my ability to teach my children and family about nutrition and healthy living, improved my knowledge of exercise and health, understanding of the relationship between nutrition, exercise, and children's academic achievement, improved my knowledge of nutrition, and attended workshops on healthy eating and wellness in my Center. 90% have learned to read and understand food labels.
- Close to 100% of responding parents reported that their child(ren) have benefitted from HEHS, to varying extents, in improved nutrition and wellness practices and knowledge, including Increased knowledge of nutrition and healthy eating, shared knowledge about nutrition with our family, talked more about nutrition and health topics, greater motivation to eat healthy foods, greater interest in learning about nutrition and healthy eating, Increased time spent exercising, become less picky and shown greater willingness to try new foods, expressed greater willingness to eat less unhealthy and fast foods.

Obstacles and Challenges to Implementing HEHS

Based on survey results, a low percentage of respondents indicated obstacles to implementation of HEHS. The top obstacles identified included: lack of parent support

(26%), lack of time to conduct necessary work (25%), work overload (20%), insufficient funds/resources (18%), and inadequate materials, equipment and/or facilities (11%).

V. CONCLUSIONS AND RECOMMENDATIONS

In its second year, UWNYP/ACS Healthy Eating for a Healthy Start Demonstration Project has continued to make impressive progress, in some ways transformational, in achieving its objectives of enhancing nutritional literacy and promoting healthy eating and wellness practices for Head Start staff, children, and families. Building on its successful first year, Year 2 activities focused on transitioning HEHS to be a sustainable initiative that, through policy and informed practice, would enable, promote, and embed continuing access to healthy, nutritious food in Head Start and ongoing engagement by children, families and staff in activities that lead to and sustain healthy eating and physical activity.

Adding to the sizeable cohort of Head Start staff and families trained in Year 1 through HEHS was the substantial group that received nutrition, cooking, and leadership training in Year 2. Through the hands-on, task oriented, quality professional development and technical assistance they received, WLC members began a systematic process of assessing their Center's nutritional and physical activity strengths and needs, and based on that assessment, developed wellness policies (commitments) designed to promote and sustain improvements in healthy eating and wellness. By the end of Year 2, WLCs at all sites had worked as a team to create an average of 5 and range of 4-8 policies per site, and all had effectively presented those policies along with their rationale to staff and parents. WLC members' capacity to model, demonstrate, and inspire parents and staff to expand their receptivity and support of positive health messages was demonstrated through 14 workshops that engagingly taught over 200 attending staff and parents about the hidden sugar in beverages, and effectively led large group activities that enhanced or refreshed participants' nutrition knowledge. WLC members' skills and resolve in developing and creating wellness policies and conducting workshop demonstrations were facilitated through a systematic process that included 1) the utilization of wellness policy tools and workshop props provided by CMOM that scaffolded their work, 2) a top-down/bottom-up

approach that was grounded from the top in Head Start standards, yet bottom-up in that the policies that emerged were created at the ground or Center level based on needs that emerged from members' own assessment of those standards at their Center, which created ownership, investment, and identification with policies, leading members to feel invested and motivated to ensure policies were implemented. 100% of WLCs had already begun some level of new policy implementation, although this was beyond the goals of Year 2.

A sampling of actions taken and planned by the WLCs (found in the Appendix) reflects a level of seriousness, resolve, and sense of urgency to *stop the epidemic* of diet related diseases and increase the health and wellness of children and adults. The Cook-Off and on-site cooking workshops were effective at building a sense of team spirit and fun in improving wellness and access to healthy foods. In Year 2 again, there was widespread approval of the CMOM and CAS trainings and widespread agreement on the effectiveness of trainings, technical assistance and the Cook-Off in improving knowledge, and promoting attitudes, beliefs, and practices that positively influence children's and their own health and wellbeing. Participants responded well to the energetic, hands-on, task-oriented, supportive, and informed trainers and trainers from whom they felt respect, trust, and partnership. WLC members were enthusiastic in their endorsement of HEHS, and more specifically in the legitimacy of the committee work they performed.

With its impressive accomplishments, implementation of HEHS, however, was not without its obstacles and challenges, with more work to do in creating and sustaining healthy environments in all Centers and communities. An objective of Year 2 training was to recognize the critical role of kitchen staff in achieving the goals of HEHS, and while small there remain cook staff who do not feel appreciated for their work, and concern has been voiced that cuts in staff due to Early Learning may decrease the amount of homemade foods and increase the use of pre-prepared foods. Menu Rubric results show progress and improvements as well as

room for growth and a need for consistency in filling our menus. While a sizeable percentage of staff and responding parents reported having a role and responsibility to ensure implementation of wellness policies, not all respondents felt that way. Parent involvement is still viewed as an obstacle to implementation as is a lack of access and affordability to healthy foods and healthy ways to prepare culturally-traditional classic recipes. But with improvements overall in their Centers, WLC respondents are now looking at obstacles beyond their Centers; for example now viewed as a prominent challenge to sustainability is the poor nutritional quality of meals in the public schools HEHS children will eventually attend.

Many recommendations from WLC respondents focused on utilizing and expanding the skills and knowledge they acquired through HEHS; using the human capital and resources HEHS enabled. Recommendations include sustaining professional relationships and learning communities within and across Centers. Suggested trainings include the advocacy and proposal writing skills to help ensure adequate materials and resources to implement their planned activities, along with strategies to improve upon physical activity and new nutritional/wellness demonstrations and/or research skills so they themselves can develop additional hands-on demonstrations beyond hidden sugar. With the critical role of cook staff in providing healthy meals should participate in field testing the Menu Rubric not only to improve its usability but to expand and scaffold their training of what constitutes exemplary healthy meals. Along those same lines, recommendations also suggest that the contributions, skills, and efforts of kitchen staff be recognized professionally through a career ladder or certification. Such recommendations may improve, strengthen, and sustain an already valuable program.

Prepared for: United Way New York City and Administration for Children's Services ; September 2012 *Stephanie Wexler-Robock, PhD., NCC; Learning Analytics Group;*
swrobock@learningag.com

INTRODUCTION

United Way of New York City's Healthy Eating for a Healthy Start Demonstration Project: Year 2; 2011-2012 Evaluation

Beginning in 2010, United Way of New York City (UWNYC) in partnership with New York City Administration for Children's Services (ACS) launched the *Healthy Eating for a Healthy Start* (HEHS) Demonstration Project. Designed to address research showing that almost 40% of children in NYC Head Start programs are obese or overweight, the aim of HEHS is to increase access to healthy foods and improve nutrition and wellness literacy for low-income families, their children, and Head Start staff to help reduce the prevalence of diet-related diseases and increase the number of youth and adults who are healthy.

Children's Museum of Manhattan (CMOM) and Children's Aid Society (CAS) were selected by UWNYC and ACS in Year 1 to design and implement a series of nutrition and wellness workshops utilizing an inclusive approach to train "all those who influence and impact children's nutrition and wellness" within the eight Head Start demonstration centers, rather than train only one or selected groups or individuals. Detailed in the Year 1 Evaluation Report, utilizing this team approach, CMOM and CAS provided a series of well-attended, well-received professional development workshops that resulted in reported and documented improvements in healthy eating practices by a wide range of staff, as well as an increase in nutrition-literacy lessons provided by Center staff for children. Year 1 was not without its challenges and obstacles, including a need to involve and educate more parents, continuing to address varying levels of resistance by some staff to embracing healthy meals and practices and model healthy eating, and being deliberate in establishing partnerships to increase access and affordability of healthy foods.

In its second year (Year 2), the proposed focus of UWNYC/ACS HEHS activities was to transition HEHS to be a sustainable initiative that, through policy and informed practice, would enable, promote, and embed continuing access to healthy, nutritious food in Head Start and Early Education centers and ongoing engagement by children, families and staff in activities that lead to and sustain healthy eating and physical activity. Spearheading the path to sustainability and widening acceptability of healthy practices would be the creation of Center-wide Wellness Leadership Committees (WLC), to be introduced to Centers at CMOM's nutrition-refresher workshops. Through team building, leadership, and policy training provided by CMOM, the intention was that WLCs would develop and establish Center wellness policies that would sustain and imprint HEHS goals beyond the initial funding period. Additionally, to sustain and extend the goal of increasing access to healthy foods, a version of the healthy eating cooking workshops for kitchen staff, found to be successful in Year 1, would now be offered by CAS to inform the practice of all staff in Year 2, support the work of the WLCs and culminate in a competitive, final Cook-Off event.

A total of eight (8) Head Start Centers in Brooklyn and Manhattan took part in Year 1 and all eight (8) of those Centers continued to participate in the demonstration project in Year 2. As noted in Year 1 report, Centers were selected in part due to reported high levels of obesity in the community. Three of the demonstration Head Start centers were located in Manhattan and five centers were located in Brooklyn.

Purpose of the Evaluation

With the aims of HEHS in mind, an independent, process and impact evaluation of HEHS began in August 2010 and continued in Year 2 through July 2012. The evaluation sought to examine the extent to which the project had made progress in its goals and objectives, along with an examination of the activities designed to sustain HEHS, particularly the process of creating Wellness Leadership Committees and policies. Towards that end a

combined formative and summative evaluation of HEHS was conducted by Learning Analytics Group, LLC (LEAG), to determine the nature, process, worth, and utility of Healthy Eating for a Healthy Start implementation activities (e.g., trainings, Cook-Off, materials), reactions to those activities and resources by WLC members, Head Start staff, and families, identified outcomes of HEHS (e.g., creation and work of Wellness Leadership Committees, partnerships, application of trainings, changes in nutritional knowledge, attitudes, beliefs and practices, changes in menus, and creation and implementation of wellness policies in the eight Head Start Centers), obstacles, recommendations, and planning next steps for program sustainability.

METHODOLOGY

A mixed method approach was employed using qualitative and quantitative methodology to assess the extent, nature, and satisfaction with program implementation, describe/determine the process of creating Wellness Leadership Committees and wellness policies, identify additional emerging achievements of the demonstration project, and lessons learned from the two year demonstration project. To conduct the evaluation data were collected through multiple sources to provide triangulation of data and greater assurance of accuracy.¹

Data sources included: Observations at HEHS activities, interim and final WLC focus groups, staff and parent surveys, and menus and document review.

Observations: LEAG conducted thirty-three (33) observations of HEHS Year 2 activities, with each observation approximately 3 hours in length (for a total of approximately 99² hours of observation time). Observations, recorded in field notes, were conducted of CMOM trainings (All-staff Refresher Training and Wellness Leadership Committee Trainings) CAS trainings (Cook staff training and On-site staff Cooking workshops), WLC formal demonstrations/presentations to parents and to staff, and the Final Cook-Off event. LEAG also “observed” two Cook-Off telephone conference meetings led by CAS, as well as UWNYP/ACS HEHS partner team meetings.

Wellness Leadership Committees Data Collection Sources: With a major focus of this year’s evaluation the work of the Wellness Leadership Committees, LEAG conducted a mixed methods approach in collecting data that examined the nature, satisfaction, worth, and value of HEHS activities related to the creation, development, and activities of Wellness Leadership Committees, particularly the creation of wellness policies for each demonstration Center. Data sources included field notes of observations, interim and final focus groups, Center staff survey questions pertaining to WLC activities, as well as a review of WLC documents, including a review of each WLC’s proposed nutrition and wellness policies.

Observation of CMOM trainings for each WLC:³ LEAG conducted 3 hour observations of all Wellness Leadership Committee trainings conducted by CMOM from January, 2012–February, 2012 (total of 11 WLC trainings), 1 overall staff/refresher staff training, as well as observation at twelve (12) formalized demonstration/presentations in June 2012 by each WLC at their Center to parents (5 parent demonstrations) and to staff (7 staff demonstrations) (See Findings section on WLC Demonstrations).

¹ Data collection instruments were reviewed by UWNYP and the Administration for Children’s Services, with feedback incorporated into the appropriate instrument.

² Multiple evaluators observed at 8 HEHS events resulting in the total number of observation hours in excess of one-hundred-fifty hours.

³ CMOM held WLC Training #1 at each site; Trainings 2 and 3 were conducted at CMOM with 4 sites attending each training). LEAG observed all CMOM WLC trainings. CMOM also provided a refresher overall training to all center staff prior to the formation of its WLC. Late notification of the dates of those trainings allowed LEAG to attend only one refresher training.

Wellness Leadership Committee Focus Groups: Protocols were developed for interim and final WLC focus groups in collaboration with UWNYS and the Administration for Children’s Services. Interim focus group protocols were also shared with CMOM and CAS as the purpose of the interim focus group was to share feedback and allow CMOM and CAS to ask questions and make course corrections in a timely way based on feedback. The purpose of the final WLC focus group was to explore how well the WLC activities were implemented and received, the process of creating the WLC and wellness policies, personal and professional changes of WLC members, exploring challenges and barriers/obstacles, strategies for overcoming these challenges, and recommendations for project sustainability. LEAG conducted fourteen (14) WLC focus groups (7/8 interim and 7/8 final focus groups) with WLC members in June and July of 2012. Focus groups were conducted in teams of two evaluators.

Surveys

Center Staff Survey:⁴ The Center Staff survey was designed to retrospectively gauge ALL center staff (classroom, family/social worker, kitchen staff, support staff, parents/guardians) perceptions for the following: Experiences with activities and perceived impacts of HEHS within their centers; Awareness, reactions and perceived utility of Wellness Committees (WLC) and policies developed by their WLC; Extent to which Staff perceive being informed, invested, and prepared to accept and implement policies perceived changes, including level of sustainability of those changes from Year 1 in their own and their Center’s children’s knowledge, attitudes, and practices regarding nutritious eating and wellness, gross motor/movement activities, and perceived obstacles to implementation, and recommendations for sustainability.

Parent Survey: The Parent Survey was designed to gauge parent/family reactions to the HEHS project including awareness, purpose, and interactions with their Center’s WLC and the wellness policies developed by their WLC, observed changes in their Centers related to healthy eating practices, and changes and sustainability of changes in their families’ health and wellness practices since HEHS began. The Parent Survey was distributed in both English and Spanish, with noted assistance by UWNYS in translating the survey.

Approximately two-hundred (200) Center Staff Surveys in total were requested and distributed by hand to the 8 Head Start Centers prior to the WLC demonstrations with instructions for the distribution and collection of the surveys. Surveys were to be handed out following the scheduled WLC demonstrations to staff and parents. (See Findings section for description of WLC demonstrations). Completed surveys were collected by LEAG on the day of the on-site WLC focus group with some surveys returned at the Cook-Off event. One hundred forty-one (141) Center staff surveys were returned and entered into a database for analysis, resulting in approximately a 70% return rate. Parent surveys were distributed to parents who attended the WLC demonstration. Seventy (70) parent surveys were returned and entered into a database for analysis. A total of 211 surveys were completed, returned, and analyzed.

- **Pre-post changes in Center Menus:** Appropriate menu documents were reviewed to ascertain the extent of changes in menu planning and food purchases. The HEHS Menu Rubric (designed by Learning Analytics Group and Children’s Aid Society and based on nutrition criteria determined by CAS grounded in nutrition research, and reviewed by five nutritionists) was used to assess the nutritional level of menus submitted by each of the 8 participating centers prior to and following Children’s Aid Society kitchen staff trainings in Year 1 as well as to determine nature and extent of changes in menu planning by each of the 8 demonstration

⁴ In Year 1, a classroom staff survey was developed and distributed to classroom staff members. Where appropriate, results of the Year 1 Classroom Staff survey will be compared to results of the Center Staff survey for Year 2.

centers, and the extent to which kitchen staff have sustained and/or improved access to healthy meals in the eight demonstration centers.

Document Review, including proposed wellness policies: Attendance data for all HEHS activities provided by CAS and CMOM were reviewed (i.e., training attendance, Cook-Off). Various forms provided by CMOM to Wellness Leadership Committees (e.g., scorecard, proposed wellness policies, demonstration feedback forms), as well as training workshop hand-outs from CAS were reviewed. CMOM and CAS documents describing their proposed Year 2 trainings were also reviewed.

Ongoing communication with key project staff pertaining to proposed and implemented activities: LEAG met with CMOM to review their goals and objectives for each training and provided input into the scoring categories used in the Head Start Standards Score Card tool. LEAG attended telephone conference calls, in person meetings, and interacted with project staff in collecting data.

DATA ANALYSIS

A database was designed for the Center staff Survey and for the Parent Survey. Center staff survey data and Parent Survey data were entered into the two survey databases and then analyzed to generate descriptive statistics (measures of central tendency, frequency distributions, variability). The data analysis plan integrated the data from the sources and instruments noted in order to respond to the major goals of the evaluation and key evaluation questions. To do so, descriptive and inferential statistics generated from survey instruments were woven with the qualitative data from observations, document reviews, and focus groups for a broad, rich, in-depth analysis of HEHS.

- Center staff Survey responses and Parent Survey responses were analyzed quantitatively in the aggregate to provide results of reactions, use, perceptions and reported changes in nutrition and wellness activities by students, staff, and families, as well as perceived support for HEHS in their centers. The survey results were then disaggregated by category of Center staff (classroom, family/social worker, kitchen, support, administration, WLC member) to determine possible differences in overall reaction to the trainings. Descriptive statistics (frequency, mean, range, percentage) are reported. Open-ended survey responses were analyzed using qualitative techniques of content analysis to determine emerging outcomes, themes and patterns.
- Focus group and observation data were analyzed using qualitative techniques of content analysis to determine emerging themes, relationships, and outcomes.
- Sustainability and/or changes in Menus were analyzed using the Menu Rubric to include descriptive and inferential statistical analysis of:
 - Pre Year I (Fall, 2010) - Post Year II (Spring, 2011) menus
 - Fall 2011 menus - Spring 2012 menus
 - Fall 2010 - Fall 2011 menus
 - Spring 2011 - Spring 2012 menus

FINDINGS

I. Overview of HEHS Year Two Trainings and Technical Assistance

Children’s Museum of Manhattan (CMOM) and Children’s Aid Society (CAS) were retained in Year 2 to design and deliver professional development and technical assistance with the continuing goal of helping sites grow and sustain effective nutritional/obesity prevention practices as reported in Year 1.⁵ Discussed below, CMOM focused on the creation, development, work, and outcomes/products of *Wellness Leadership Committees*, particularly the creation and communication of wellness policies and the development and demonstration of WLC members’ nutrition leadership skills and knowledge; CAS focused on building hands-on experience of all demonstration Center staff to implement healthy cooking practices with children, overseeing a final Cooking event, and working to recognize the critical role of kitchen staff in achieving the goals of HEHS.

- Year 2 HEHS inputs/activities were found to utilize a multi-pronged approach of professional development and technical assistance with content and activities designed to refresh, extend, deepen, and structurally sustain interest, knowledge, and improvements in nutritional and wellness practices reported by all stakeholder groups during Year 1. Year 2 HEHS activities incorporated recommendations from stakeholders in Year 1.
- Year 2 HEHS activities again utilized the benefits of a *team approach* in which all those who influence young children’s nutrition and wellness in Head Start settings (kitchen, classroom, family/social workers, administrators, support staff, and parents/guardians) are included in trainings and invited to become nutrition leaders.
 - ⊕ CMOM and CAS leveraged their positive influence, relationships of trust, and prior shared knowledge with staff and families from Year 1 to more seamlessly generate higher levels of immediate acceptance and participation in Year 2 activities: In addition to “cook’s refresher” workshops, CAS provided on-site cooking workshops to all staff and guided the work of cooking teams competing in a Cook-Off; CMOM facilitated the formation and training of Wellness Leadership Committees from all demonstration centers, designed to create leaders able to inform and demonstrate sustainable healthy practices and create wellness policies. The initial resistance and skepticism of trying new foods observed in Year 1 was absent or greatly lessened in Year 2. Also, nearly absent during Year 2 trainings and events, was the fast-food regularly brought to many Year1 trainings by participants.
 - ⊕ Responsive to requests from stakeholders in Year 1, a majority of workshops were provided on-site rather than primarily at CMOM or CAS, as had been the case in Year 1. Additionally, all staff had the opportunity to learn hands-on cooking skills, rather than only kitchen staff, as had also been the case in Year1.

⁵ Approximately, or close to 500 people are counted as having participated in HEHS trainings in Year 2: approximately 214 participated in CAS-led trainings and approximately 280 participated in CMOM led-trainings. It is not feasible to determine how many of the same people participated in both CMOM and CAS trainings to determine a precise count of number of discrete individuals who participated in Year2 HEHS trainings, or to determine dosage level for each participant. In addition, over 100 people attended the Cook-Off, many of whom likely participated in other CMOM or CAS trainings. Attendance data is further discussed in the sections discussing CAS trainings and CMOM trainings, respectively.

One of the cornerstones of the program has been the enthusiasm and passion that the trainers show during the sessions. Their energy is infectious and is a motivating factor for us to the changes at our center. The trainers presented themselves as believable/credible which is important when you are asking us to step out of our comfort zone. There was a safe atmosphere during the trainings that allowed us to ask questions and take risks. Also, the different styles of the trainers complemented each other...WLC member

- ✦ Professional development and technical assistance provided by CMOM and CAS was task-oriented and hands-on and related directly to workshop and event goals articulated in their documented lesson plans and resource binder.
- ✦ Trainers used inclusive approaches, involving everyone in activities and activated prior knowledge by refreshing and referring to core learning from Year 1.
- ✦ CMOM and CAS trainings followed a common agenda across all sites, reflecting an equality of exposure and experiences.
- ✦ Ongoing, technical assistance was reportedly targeted to the needs and requests of each Center; CMOM reported providing approximately 15-20 technical assistance emails or phone calls to each Wellness Leadership Committee; CAS reported approximately 2-3 technical assistance emails or phone calls related to the Cook-Off.

Observations at cooking workshops indicate that staff were actively engaged in learning how to read and prepare recipes, safety skills and utensils to use when cooking with children, and appeared to thoroughly enjoy working together to both prepare and eat the fruits of their labors.

Along with CAS staff, Center kitchen staff helped supervise the preparation and executed the actual baking as needed. Kitchen staff served as technical advisors for the on-site cooking workshops, concretely highlighting their skills and willingness to assist staff in conducting cooking activities with children.

As the food cooked, CAS staff explained and demonstrated the procedures and guidelines of the culminating event of HEHS, the Cook-Off. CAS created and guided the build-up and execution of the Cook-Off to further develop investment, energy, interest and team spirit in competing to create and cook healthy foods/snacks for children.

A. A CLOSER LOOK: CHILDREN'S AID SOCIETY (CAS) TRAININGS AND TECHNICAL ASSISTANCE

- **Children's Aid Society (CAS)** workshops and technical assistance focused on increasing access, preparation, and knowledge of healthy foods for all staff members, along with enhancing recognition of the role of Head Start kitchen staff, and guiding and facilitating the final Cook-Off event.
 - ⊕ Based on document review and observations of trainings, a total of 8 trainings (1 Overall Food Service Refresher training and 7/8 on-site All Staff Cooking workshops), 2 Cook-Off telephone conferences, 1 Cook-Off final event, and ongoing, as-needed technical assistance phone calls and emails were provided by CAS to the 7/8 HEHS Demonstration Centers.
 - CAS provided one 4-hour Cook's refresher training to all food service in November, 2011, and seven 3-hour on-site trainings, (one at each demonstration site) for all staff, in which staff worked in teams to prepare/cook 5 different healthy snacks/meals that they could then make with children in their classrooms.
 - **Cook's Refresher Training:** One Cook's refresher training for all Food Service staff in which nutrition topics such as food allergies, substitutions, benefits of food groups, changes in menus, etc., were presented and discussed and new recipes were introduced, made, and eaten together as a group. At that training, results of last year's assessment of the nutritional improvements in Center menus were presented, along with the importance of identifying and documenting the kinds of ingredients used (e.g. whole grain, fresh or frozen vs. canned vegetables).
 - Cook's Refresher Training Total attendance = 18; 15 cook staff and 5 administrative staff from 7 of the 8 Centers.
 - **CAS On-site Cooking Workshops.** Based on Year 1 recommendations to have on-site cooking training, CAS designed a workshop for all staff at each center to teach and promote cooking with children through a hands-on workshop that reportedly increased comfort and confidence by providing good tasting sample recipes, and creating a fun atmosphere to work in teams to make the recipes which showed the joy and ease of cooking with children. CAS provided resources, recipes, step by step procedures,

modeling, and individual technical assistance in teaching staff how to cook healthy foods with young children. CAS highlighted the nutritional (health) and culinary (presentation) basis of selecting ingredients prior to and during hands-on preparation by all participants.

- CAS provided a HEHS Resource Binder and CD to each Center that included a CD of sample policies (e.g., birthday foods policy in English and Spanish, healthy beverages), the curriculum it for Go! Kids (24 consecutive and interactive lessons and exercises), tips for successful cooking experiences with children, sample recipes to make with children, safety tips/rules for cooking with children, and Cook-Off guidelines.
- Cook-Off rules presented at the workshop aligned with best practices demonstrated and taught at the nutrition and cooking workshop. The recipes presented and made, kitchen tools utilized, methods for including young children in healthy cooking reflected the guidelines for creating a healthy recipe to be entered into the Cook-Off competition.

A1. Attendance at Children’s Aid Society On-Site Cooking and Cook-Off Workshops

Table 1
Number of Staff Attending CAS On-Site Cooking Trainings by Site and Position

Location	Kitchen	Staff*	Parent	Other	Attendance/Site
Site 1	3	16	1	3	23
Site 2					
Site 3/4 ⁶	5	35	0	2	42
Site 5	2	36	1	1	40
Site 5	1	25	0	1	27
Site 7	4	23	0	2	29
Site 8	1	33	0	1	35
TOTAL					196

*Note: Staff includes administrators, teachers, assistant teachers, and family/social workers

- Total Attendance for CAS On-Site Cooking Workshops: 96 individual attendees participated in the on-site CAS cooking trainings conducted at each site .
 - As shown in **Table 1**, the on-site cooking workshops were well attended by staff, though few parents attended.
- Attendance for CAS trainings (Cook’s Refresher and On-site Cooking workshops) totaled approximately 214 participants.

B. A CLOSER LOOK: CHILDREN’S MUSEUM OF MANHATTAN (CMOM) TRAININGS AND TECHNICAL ASSISTANCE

⁶ Sites 3 and 4 were two associated sites. They had joint trainings and WLC, and share the same director.

➤ **Children’s Museum of Manhattan (CMOM) provided refresher trainings at each demonstration Center and Wellness Leadership Committee trainings and technical assistance** focused on facilitating the formation, development, and work of the Wellness Leadership Committees, guiding the development of wellness polices, teaching workshop leadership skills, as well as refresher training for all staff to develop deeper understanding of the importance of establishing healthy habits utilizing hands-on art and movement activities. CMOM also hosted the Cook-Off, and in July produced/launched a Healthy Eating for a Healthy Start resource website.

⊕ **Refresher Trainings:** CMOM provided seven (one at each Center) 3-4 hour professional development refresher workshops for all staff from November 2011 – December 2011. The hands-on refresher workshop reviewed the core health messages and strategies from Year 1 trainings, and energized the staff to continue and sustain healthy behaviors and practices begun in Year 1. During the refresher training, participants were introduced to the concept and purpose of Wellness Leadership Committees and were invited to complete an application to become a member of a Wellness Leadership Committee. Table 2 below shows attendance by site and position.

B1. Attendance at Children’s Museum of Manhattan On-Site Refresher Trainings

**Table 2
Number and Position of Staff Attending by Training Session**

TRAINING	Number of Classroom Staff	Number of Administrators (sites 3 & 4 share administrators)	Number of Kitchen Staff	Number of Policy Council/ Parents	Number f Family/Social Workers	Other (Book Keeper, Custodian, nutrition support staff)	Total # Attendees
Site 1 :	11	2	3	1	6	3	26
Site 2:	25	3	2	1	6		37
Site 3/4	22	1	5		6	8	42
Site 5:	21		3		8	1	33
Site 6:	10	1	2		1	1	15
Site 7:	21	1	2		6	2	32
Site 8:	24		1	1	6	2	34
Totals	134	8	18	3	39	17	219

➤ Two hundred nineteen (219) people, representing an array of staff, including classroom, administrators, kitchen, family/social workers, and other support staff at each of the demonstrations sites attended the on-site all staff CMOM training (See **Table 2** above).

II. Wellness Leadership Committee Trainings: Inputs, Process, and Outcomes

With the focus of Year Two on the process and outcomes of the Wellness Leadership Committees, the next sections of the report presents findings that look more closely at the formation, make-up, inputs, functioning, and outputs of the WLCs.

A. Overview of Wellness Leadership Committee Trainings

B. WLC Formation, Attendance, Purpose, and Functioning

1. Joining the WLCs

2. Becoming a Cohesive and Productive Team

3. Developing Common Purposes

C. Identifying and Developing Wellness Policies

1. Scorecard Needs Assessment

D. Wellness Policy-Outcomes (Nature and Number of Polices Created)

1. Ownership and Belief Polices Would be Implemented

E. WLC-led Demonstrations/Presentations

F. Reactions to Training by WLC Members

Year 2 of HEHS focused especially on expanding and sustaining practices related to healthy eating and wellness by creating a “Wellness Leadership Committee” at each of the eight demonstration sites. As documented in the application for membership⁷, the purpose of each WLC was *to support and build the capacity of your Head Start Center; and to provide leadership in the development and implementation of Wellness Commitments that could potentially lead to the creation of Wellness Polices in the Head Start Centers.*

A. Overview of Wellness Leadership Committee Trainings

- CMOM provided a series of three, 3-hour Wellness Leadership Committee capacity or process trainings that moved each WLC forward in its formation, development, and work.
 - ⊕ From January – April 2012, CMOM provided nine 3-hour Wellness Leadership Committee trainings (7 on-site and 2 at CMOM), along with as- needed technical assistance (approximately 10- 15 emails and 5-7 telephone calls) for each Wellness Leadership Committee. As a primary focus of Year 2, WLC trainings, including attendance are discussed in detail in the sections that follow.
 - ⊕ Content, activities, and tools focused on developing skills, knowledge, and strategies to build capacity and ability to form and work as a cohesive leadership team with recognized roles, in order to set goals and create an action plan or framework for wellness planning, utilize Head Start health and wellness standards and policies as a rubric by which to score/assess their Center’s health and wellness policies and practices, and from which determine areas in need of intentional, focused improvement, develop proficiency in demonstrating hidden sugar in beverages (and reading food labels for sugar and servings)

⁷ CMOM provided the application at the refresher trainings and stipulated that members commit to attending three 4-hour training sessions and participate in demonstrations at their site. In exchange members would receive a \$25 food gift certificate. 85% of those signing up had volunteered and 15% had been selected by their administrators to serve

and art projects to increase nutrition knowledge, function as “ambassadors” or models in building internal support for positive health messages, developing site –specific wellness policies and strategies for sustaining and embedding healthy practices (policies) into the day- to -day life and activities of each Center and community, and learning strategies for effectively conveying healthy eating and wellness policies.

- Based on observations, all WLC trainings were hands-on, highly interactive, well- paced, and task-oriented.
 - CMOM trainers introduced and led portions of all workshops, but routinely stepped aside, reminding members, “you are in charge” thereby allowing members to build leadership skills and team cohesiveness by working out roles, responsibilities, vision, tasks, assignments and next steps without direct CMOM direction. During these periods, CMOM made clear they were available if needed to provide feedback or guidance.
 - CMOM’s approach was inclusive and routinely worked to activate prior knowledge from Year 1.
 - CMOM scaffolded WLCs in their work by providing each WLC with a set of tools; templates, forms, rubrics, and handouts to guide and support WLC activities, processes, and outcomes (A listing of forms and handouts may be found at the CMOM HEHS website)
 - Cross-site trainings (see Trainings 2 and 3 below) provided opportunities for peer networking, information sharing, peer support and feedback beyond one’s own Center, and were noted by some WLCs as an impetus for completing tasks.
 - All trainings included a “Family Meal.” Foods served at trainings were similar to the healthy, yet mostly unfamiliar foods introduced during Year 1 trainings. Observations revealed a clear change in reaction to foods served: In Year 1 foods such as hummus and combinations of vegetables with whole grains such as bulgur had been met with deep skepticism and strong resistance, with even a sense of danger in just trying them. In Year 2 participants expressed excitement at the foods served, reacted to hummus and bulgur as delicious, routine fare, and expressed enthusiasm to try new foods and new combinations.
- ⊕ WLC Training 1 was conducted with each individual WLC at their Center and provided an overview for team building and a framework for wellness planning.⁸
- The first training focused on personal introductions, activities geared towards establishing and clarifying roles, rules, and responsibilities in creating a cohesive and effective leadership committee, creating and conveying a vision and purpose for their WLC (through creating a vision board and naming their WLC), strategizing the task of assessing the strengths and weaknesses of their Center’s nutrition and physical activity standards and policies in helping guide them to develop policies for their Center. Members were also given their first opportunity to try –out

⁸ Prior to WLC Training 1, staff and parents from within each Center had signed up to become members of their WLC. The application was provided at the refresher trainings and stipulated that members commit to attending three 4-hour training sessions and participate in demonstrations at their site. In exchange members would receive a \$25 food gift certificate. As discussed in the WLC Outcomes section of this report, approximately 85% of those signing up had volunteered and approximately 15% had been selected by their administrators to serve.

and practice the hidden sugar demonstration they had been shown in Year 1. (Observed initial attempts at the hidden sugar demonstrations were done hesitatingly, with limited degrees of success, and extensive scaffolding by CMOM).

- ⊕ WLC Training 2 was conducted on March 27th and repeated on March 29th at CMOM with 4 WLC participating on each date.
 - The focus of WLC Training 2 was to encourage teams to report on progress and challenges, share effective strategies, further build leadership and capacity to develop and write wellness policies, and increase health content knowledge. Participants spent time working on policies and practicing the hidden sugar demonstration they would eventually present to staff and families. They also competed as teams in an art nutrition education activity for large groups that they would eventually conduct at their own Centers.
 - Progress reports offered by WLCs reflected different levels of activity with some committees having met several times and able to complete the scorecard assessment, while others not having met at all since WLC Training 1. A primary obstacle reported was lack of time to meet. WLCs with higher levels of on-task activity were asked to share their strategies to assist other WLCs.

- ⊕ WLC Training 3 was conducted on May 7 and again on May 8th at CMOM with 4 WLC participating on each date.
 - In this last WLC training, all teams arrived with completed tasks, including their written proposed wellness policies, as well as their completed scorecard assessment of their Center's standards and polices. At least one team had created its own props for a sugar demonstration. Demonstrations were practices and feedback given using the rubric of effective workshop behaviors CMOM had provided at prior trainings. Time was also spent on practice in communicating and discussing site specific wellness policies and strategies for implementation at parent and staff meeting.

B. WLC Formation, Attendance, Purpose, and Functioning

- Formation and development of "Wellness Leadership Committee" at each of the eight demonstration sites, derived from a nucleus of diverse stakeholders, from within each center/community.
 - ⊕ Based on observations, focus groups, and document review, a cohort of stakeholders from within each Center formed a Wellness Leadership Committee, and through training and technical assistance, developed the capacity to work together as a leadership team to build Center support for positive health messages and to formulate, develop and communicate healthy eating and wellness policies for their site, and begin to promote sustainability of those policies and practices to improve health and wellness.
- As shown in Tables 3 and 4, WLCs were comprised of all stakeholder groups (classroom staff, administration, family/social service, parents, kitchen staff, food/nutrition) who influence children's health, and ranged in size from five to fifteen members each.

Table 3
Position of WLC Members Attending WLC Trainings by WLC Training

Position	Training #1	Training #2	Training #3	TOTAL ⁹
Assistant				
Director/Director*	4	3	1	8
Assistant Teacher	9	6	7	22
Community Rep	1			1
Cook/Food Service	6	7	6	19
Family worker	12	11	12	35
Health Aide	1		1	2
Nurse Consultant	1		1	2
Nutrition Consultant	1			1
Parent	10	7	1	18
Parent Coordinator	1	1	1	3
Policy Council/PC Parent	1	4	3	8
Teacher	14	9	8	31
TOTAL	61	48	41	150

As shown in **Table 3** above,

- ⊕ Classroom staff (teachers and assistant teachers) were the largest group to be members of and attend WLC trainings, followed by family/social workers.
- ⊕ While a number of parents attended the first WLC training, by the end, few parents regularly attended trainings and many became inactive or no longer were members of their WLC.
 - During focus groups, WLC noted that it was difficult for many parent to sustain their involvement due to work, or the necessity of WLC members to meet in ongoing, informal (non-scheduled) ways when they could catch each other during the day.
- ⊕ Only one administrative staff member was able to attend all three trainings. WLC trainings were generally 3 hours in length and 2 trainings (Trainings 2 and 3) were held at CMOM on staff development days which made attendance by administrators difficult.

⁹ Totals may reflect the same individual attending more than one training.

Table 4

Head Start Sites	Training 1	Training 2	Training 3	TOTAL
Site 1	4	5	2	11
Site 2	11	7	5	23
Site 3	5	6	5	16
Site 4	7	8	6	21
Site 5	11	6	10	27
Site 6	15	11	10	36
Site 7	8	5	3	16
TOTAL	61	48	41	150

(total repeat attendees)

We would like to see more parent participation in the leadership committee and one of our goals as a committee for the future is to get at least one or two parents to work with us- WLC member

- ⊕ The size of WLCs ranged from 5 to 15 members.
- ⊕ Training 1, which was conducted at each Center, had the largest overall attendance of the 3 WLC trainings.
- ⊕ By the conclusion of trainings, fifty-one (51) WLC members had attended all three trainings and/or had participated sufficiently to have qualified them to receive certificates of completion (and gift certificates).

1. Joining the WLCs

➤ Close to 100%¹⁰ of respondents identified Year 1 HEHS activities (CAS and CMOM trainings) and outcomes as a contributing factor to their motivation and willingness to join the WLC . They specifically identified their increased knowledge of nutrition, wellness, the relationship of diet to diseases, as well as enjoyment and value of the trainings as being a reason for “joining” and attributed Year 1 as the “foundation for being successful this year.” “Without last year, there would be no WLC, I don’t think any of us would have joined and we could not have accomplished what we did this year.”

- ⊕ Approximately 85% of WLC members volunteered to become members and 15% were selected or recommended by their administration to participate.
- ⊕ Regardless of route to membership, all expressed personal reasons for continuing. Many identified their own or a family member’s illness, often diabetes, heart disease, or high blood pressure, or their own or their child’s struggle with weight for wanting to invest time and effort to improve health and wellness in themselves, their families, and their Centers.

2. Becoming a Cohesive and Productive Team

- WLCs from all 8 demonstration Centers progressed in their efforts and capacity to function cohesively and in committed teams to formulate and communicate site-specific healthy eating and wellness policies and to present educationally based- fun workshops that promoted positive health messages.

¹⁰ Three of the WLCs members had not attended Year 1 trainings.

We see ourselves as role models at [center] and our personal choices can impact parents and other staff members. I am having many discussions with parents about some of the changes I have made in my diet and provide them with suggestions that they can implement for themselves - WLC member

The trainings have forced us to look at our lifestyles and decide the changes that will make a difference in the way we take care of ourselves. These changes can be challenging and, as a result, some people have bought into the program and others are more resistant. We realize as committee members one of our goals is to learn how to address the resistance that some people feel - WLC member

- ✦ Content analysis of observed WLC trainings and focus groups revealed that WLCs became increasingly cohesive, on-task teams across all demonstration Centers as trainings progressed with an increased sense of seriousness, clearer purpose, and investment/commitment observed among *all* WLCs over time and trainings.
 - Based on observations at the mid-point of WLC training (WLC Training 2) and as reported in interim focus groups,¹¹ the level of participation and task completion across and within WLCs was uneven. Progress reports shared by WLCs at the start of WLC Training 2 reflected different levels of activity with some committees having met several times and able to complete the scorecard assessment, with others not having met at all since WLC Training 1. Some WLCs cited lack of time, some confusion as to the meaning of policy and their role, lack of support from administration, a need for more technical assistance “to get going”, and a lack of follow-through by some members.¹²
 - Additionally, results of interim focus groups conducted following WLC Training 2 revealed higher levels of persistence and seriousness in some WLCs to figure out and follow through on ways to meet and complete tasks. For example, to convey the seriousness of their work and enlist the support of administration one WLC wrote memos to the administrator detailing need, purpose, and proposed meeting dates, resulting in cooperation in granting time needed.
 - Based on final focus group comments, to become more cohesive, at least two WLCs reorganized their teams, dropping a member if that member was consistently not “pulling their weight” and subsequently taking on additional roles to ensure all tasks were completed. As noted earlier, often a parent member became less active or a non-member or in one case, a consulting staff member had been reassigned.
 - By the 3rd (and final) WLC training, there were high levels of energy, clarity of purpose, and on-task activity and completion observed and reported across all WLCs.

¹¹ Interim focus groups were conducted individually with each WLC following WLC Training 2; 4 were conducted on March 27th and 4 were conducted on March 29th.

¹² Interim focus groups conducted on March 27th revealed some confusion among WLCs regarding what was meant by policy, their concerns about their capacity to implement the policies, and concerns that they might not be knowledgeable enough about nutrition to teach others. These results were shared with CMOM who tweaked their WLC Training 2 on March 29th to address these concerns and clarify expectations through a more in-depth discussion of their role (they can inform based on what they have learned, but be clear they are not nutritionists), what is meant by policy, and the kinds of policies they are being asked to create. That open airing and clarification of concerns was reported to have helped struggling WLCs move ahead with more confidence and focus.

The process and factors reported during final focus groups to have impacted increased cohesiveness and on-task activity are described in the sections that follow.

3. Developing Common Purposes

- Wellness Leadership Committees were found to have developed a set of common purposes and related visions within and across Centers through a variety of: hands-on team building activities, repeated opportunities to practice and deepen nutrition and wellness knowledge and develop and strengthen training/demonstration skills, cross-training with other WLCs, and constructive, targeted, and supportive feedback on skills and knowledge acquisition and demonstration.
- ⊕ Based on content analysis of focus group and survey responses across all Centers, the purpose of the WLC and individual's perceived role in the WLC was to serve as a leader and/or resource, equipped to model, inspire, support, inform, strengthen, demonstrate, teach, instill, and monitor best practices and healthy habits within themselves, each other, their families, their center, and ultimately their communities.
- ⊕ More than three-quarters saw a primary strategy of working towards those roles through activities related to needs assessment and policy work, including:
 - Identifying and creating policies to improve nutrition and wellness in our center (88%)
 - Helping to create or strengthen policies to improve nutrition and wellness (85%)
 - Helping us see where we need to make improvements/changes in our center to improve wellness (77%)
 - Helping us see where we are strong in healthy eating and wellness practices (77%)
- ⊕ The vast majority of responding WLC members also identified their purpose/role as *long term* in relation to the overlapping roles of being a resource, energizer, assister, capacity-builder, and disseminator/demonstrator of information:
 - Helping us develop the capacity to carry out nutrition and wellness policies (81%)
 - Providing resources for staff (77%)
 - Demonstrating the hidden sugar in beverages (85%)
 - Involving, informing, and energizing parents and staff regarding wellness policies (73%)
 - Being a resource for families (77%)
 - Being models or ambassadors of healthy eating and wellness practices (69%)
 - Helping the center get ready for the Cook-Off (73%)
 - Keeping the center on track in strengthening our nutrition and health practices (65%)
 - Helping to identify community partnerships that support HEHS (62%)

Observations: At the first WLC training, members were asked by CMOM to work together as a team to create a vision board, complete with a name for their WLC to depict what they “want to achieve with the committee for your school, your community, and in your life.” Placing a cut out picture of a light bulb squarely the middle of the vision board poster, the member asserted, - *we will light the way...the light bulb should be in the center...we are the center... we all come from different backgrounds and we are supposed to disseminate information so that the*

C. Identifying and Developing Wellness Policies

As discussed at the trainings, a goal of each WLC was to “review, amend, develop, and communicate wellness policies to improve and sustain healthy practices.” It is, however, worth noting that during focus groups, policies were described as a vehicle through which WLC members saw themselves achieving goals of deepening their own knowledge, disseminating nutritional information and leading and keeping their Centers on track in strengthening and sustaining nutrition and health practices. They did not discuss policies as an end all and be all but as a part of a larger context of change – “to model the change you want to see”, “stop the epidemic of obesity, diabetes, and denial”, “to be informed and act responsibly.” Having said that, the following were described by WLC members as helping them develop policies and become more informed generally:

- **Wellness Policy Development Tools:** As part of their hands-on trainings, the WLCs were given a set of Center Health improvement plan tools adapted by CMOM from the NYC Dept. of Health Growing Healthy Children. The tools were designed to scaffold and guide WLCs in an iterative, but step by step process of policy development that began with a needs assessment. The tools provided a framework that was perceived by WLC members as both “very useful”, “practical”, “Informative”, “top-down and bottom-up”.
- **Top down and bottom up process:** The process itself was top-down as the assessment tool (scorecard) was grounded in Head Start standards and recommended practices, yet bottom-up in that the policies were created at the ground or Center level based on needs that emerged from their assessment.
- **Creating ownership of developed policies:** Rather than being told policies by an external entity, this process reportedly enabled the WLCs to “see for ourselves where we were at, think through their wellness goals as a team, and then devise policies that were “logical” “meaningful” and “ones we understand”, “own” and “believe in” such a systematic sequence of activities reportedly enabled a logic and belief in the policies, because “the policies were created by people who have to practice the policies and [we] saw the logic and value of the policies through the assessment process.”

When we began observing classrooms to do the scorecard assessment, teachers were initially very reluctant and defensive in having WLC members in the classrooms. The two factors that changed the resistance from staff were: the strong support from the administration and the non-confrontational style of the leadership committee. The committee work together to develop strategies on how to decrease the possible intimidation that might be felt by other staff members. One successful suggestion was spending a few minutes talking with the teacher before the scheduled observation to answer any questions - WLC member

HEHS helped us examine our policies and procedures in providing a healthy environment at the center - WLC member

The trainings have also helped us focus as a group on the issues we feel are most important at our center - WLC member

1. Scorecard Needs Assessment

- The process of developing wellness policies emerged from use of assessment tools provided by CMOM, primarily “The Scorecard”, an assessment tool based on a CMOM adaptation of the NYC Head Start Nutrition and Physical Activity Requirements.
- ⊕ WLC members were provided with the tool in order to review and rate the extent to which their Center practiced the listed nutrition and physical activities standards and policies. Such an organized assessment provided a foundation from which WLCs reported they were able to more systematically become aware of areas in their center in need of strengthening, which in turn became the basis of proposed policies.
 - ⊕ CMOM discussed the scorecard during Training 1, giving examples of how to interpret the ratings, suggestions for collecting data to complete the ratings, and the value of collecting and honestly rating Centers in order to identify areas that might need strengthening to help them develop a specific action plan (in the form of policies) to address those areas of weakness. WLCs were given latitude in how to collect data.
 - The scorecard review and rating was conducted differently by WLC s; approximately one-third reported talking with staff and/or looking at posted menus to get ratings, one-third reported observing classroom practices from outside the classroom, and one-third reported sitting in classrooms, and/or directly observing outdoor and indoor physical activity periods.
 - Ratings were primarily done individually or in teams of two, and then all members ratings were compared to one score per Center.
 - In one-third of WLCs, only one member was assigned the task of conducting the ratings.
 - About two-thirds of WLCs reported little to no obstacles in performing the assessment, while the other third reported that non-WLC staff questioned the authority of WLC members to be “evaluating” them. To address these concerns, the WLC enlisted the support of administration in explaining the purpose of the scorecard exercise to the full staff for transparency and cooperation. That action was effective in creating cooperation and even welcoming of WLC members into the classroom.

Value and Results of Scorecard Assessment

- ⊕ 100% of WLC informants reported that the activity “increased” or “greatly increased” their knowledge of Head Start Nutrition and Physical Activity Requirements; prior to assessing their Center, over 85% of WLC informants

The leadership training has helped us focus on how to work together to spread the message of healthy eating at our center. Before this year we all had the motivation to change the policies in our center but the training this year gave us the opportunity and the tools to learn how to work together and best put forth the concepts we have learned - WLC member

reported they had not been familiar with the range and/or specifics of these Nutrition and Physical Activity Standards

- ⊕ 100% of WLCs noted the value of having the tools to provide a foundation from which to assess their centers, to help guide and ground their policy work.
- ⊕ Across all WLCs, informants noted “being pleased”, and some “surprised” at how well their Centers were complying with the standards based on their assessment.
 - On a scale of 0-5, with 5 almost all the time, the vast majority of WLCs rated 90% or more of the scorecard items (standards) as 5; with two- three items rated 2-4, except one WLC that rated all items 4.13.

D. Wellness Policy-Outcomes (Nature and Number of Polices Created)

➤ All WLCs created a set of policies that built upon or were an enhancement of Head Start Standards and Recommended Practices, as derived from their Scorecard assessment exercise.

⊕ Current NYC standards and recommended practices were perceived as a useful framework by which to measure current practices, WLCs were encouraged to improve upon them as they currently stood; to create enhanced policies that were beyond existing standards or practices.

⊕ Across all WLCs, the number of polices created ranged from four (4) – eight (8), with 4 policies most often created (mode), and a total of 38 policies put forth by all WLCs combined.

➤ CMOM encouraged and provided WLCs with step by step procedures to create policies that were *meaningful* to each Center, *realistic, approachable /relatable, practical*, and progressive in nature, making implementation more likely.

⊕ Part of WLC training was transforming WLC members to feel empowered and confident in their ability to guide and lead their Center to sustain healthy practices through policies designed to improve nutrition and wellness. Rather than feel their policies needed to be “perfect” and “have technical policy language”, which may immobilize people, CMOM’s stance was perceived as *non-judgmental* but *empowering*, allowing all WLCs to report feeling a sense of accomplishment and identification with the policies they put forth, making them easier to explain and support, while recognizing that policies could change and progress with time.

- Several WLCs initially felt that creating “policies” was unrealistic and “out of their realm.” Through CMOM’s ongoing discussion of perceptions of “policy”, HEHS activities that encouraged WLCs to bring their doubts and concerns to the fore, and CMOM

¹³ Based on conversations with Center staff and WLCs it is questionable as to whether scores would have been as high had the assessment taken place prior to or early in Year 1 of HEHS. Centers have repeatedly reported an improvement in healthy eating behaviors since HEHS began as well as compliance with Head Start requirements. Additionally, ratings need to be interpreted with care due to the variety of ways assessments were performed, lack of inter-rater reliability, and possible reluctance of WLCs to rate their centers rated low.

targeted technical assistance for WLCs, informants reported that their initial “blocks” were removed, and they were able to move forward.

- Centers created polices in the following categories: purchased foods, beverages, meals brought into center, physical activity, nutrition education, mealtime environment, and parent involvement (See Table 5 below).

Table 5
Wellness Leadership Committee Policies
Meeting NYC Policy Standards and Policy Enhancements

	Policy to get Center to have existing NYC Standard Fully in Place	Policy that extends /enhances existing NYC standard	# of WLCs creating policies in category	# of polices developed in category overall
Category				
Purchased Foods	<ul style="list-style-type: none"> • No frozen or canned vegetables served at mealtimes and snacks • Serve canned fruit only in water/juice • Sliced sandwich bread must be whole wheat/whole grain 	<ul style="list-style-type: none"> • Only whole grains food items to be ordered for the center. • Add whole grain wraps/flatbread from new vendor • Introduce more beans in a variety of ways into the menu • Examine purchased food labels and distribute information to teachers • Protein items in meals to be more bean based. • Eventually have the center serve only fresh fruit • Baking homemade whole-grain items such as whole-wheat banana muffins with wheat flour and applesauce 	5	10
Beverages	<ul style="list-style-type: none"> • No more than 6 ounces of 100% juice per day • Zero tolerance policy for beverages with artificial sweeteners for Center meals or events (with adjustment period) • Pitchers of water available in the classroom throughout the day 	<ul style="list-style-type: none"> • Cut out juice entirely and replace with fresh fruit and/or water • Teachers will encourage more water intake daily • Snacks: water only, no juice (slices of orange or lemon in water) • Instead of juice on trips, provide water 	4	7
Meals brought into Center		<ul style="list-style-type: none"> • Educate parents at meetings, have visuals in the classroom/parent room, post throughout the center • Zero tolerance policy for staff: staff not permitted to bring in sweetened beverages from outside 	2	2
Physical Activity	<ul style="list-style-type: none"> • Two 30-minute periods of physical activity are scheduled each day (one structured and one unstructured) 	<ul style="list-style-type: none"> • Children will engage in 15 minutes of additional structured physical activity during outdoor play • Workshops to help parents integrate physical activity at home with their children • All scheduled gym time will consist of structured/guided physical activities; examples of equipment used for structured activities include balls, hula hoops, jump ropes, cones, tricycles, etc 	4	7

		<ul style="list-style-type: none"> • Children should have physical activity outdoors if weather is about 45° • 30 minutes of indoor activity and 30 minutes of outdoor activity: Also, bring attention to the administration to create more indoor activity space • Increase use of gymnasium; increase supplies for activities outdoors (i.e., balls, hula hoops, jump rope) 		
Nutrition Education		<ul style="list-style-type: none"> • Quarterly wellness workshops for parents and staff • Provide menu recipes to parents to encourage home preparation with children • Incorporate more cooking activities in classroom lesson plans • Cooking in class at least once a month; (if complications arise due to ordering food then each class will have the same recipe for the month and kitchen can order the same item in bulk) • Each class is mandated to teach health and nutrition lesson at least one month of the year • Add/enhance nutrition related activities for children in classrooms; monthly lesson plans will include four nutrition-based activities per month, including birthday celebrations • Nutrition must be included in special events especially the closing exercise 	5	7
Mealtime Environment		<ul style="list-style-type: none"> • Multicultural lunch once a month: teach children about various cultures, have parents volunteer • Daily meal period will include discussions with children regarding various items served for the meal; will explore where foods came from and how they were prepared • Prior to serving, educating children on the food they are consuming if it is on the menu daily meal period • Educate nutritional/teachings staff Monitor the presentation of the food 	3	4
Parent Involvement		<ul style="list-style-type: none"> • Include more healthy food/snack choices for parent meeting to introduce new foods to families • Healthier snacks for parents will be made available as a way to provide them with ideas to use with their families • A parent nutritional committee will be established 	3	3
Celebrations		<ul style="list-style-type: none"> • Each classroom will have one party per month to celebrate the birthdays of all children who have a birthday that month. • Only healthy snack will be served at these birthday celebrations • Limit parties to 2 per month 		6

Excerpts of speech delivered at Cook-Off by a WLC- The Ultimate Life Changers strive to promote healthy choices for a healthy lifestyle in our homes, at work, and in the community. The team worked together; meeting on a regular basis to discuss and finalize strategies for our presentations to the staff and the DAPC. As a result of the formation of this group, our students were encouraged to eat more fruits, vegetables, and instead of juice, drink more water. Teachers incorporated and emphasized healthy choices in their lesson plans and continued to encourage students to try all vegetables served for lunch. In the new school year, 2013 the group plans to implement our new policies, which were introduced during staff and DAPC presentations. A bulletin board located in the vestibule will serve as a source of information about healthy choices. We also plan to partner with the farmers' markets in the community where parents and staff can purchase affordable fruits and vegetables. On behalf of the Ultimate Life Changers, the Directors, Staff, and students at X Head Start, we would like to thank [team at CMOM and CAS] for giving us the opportunity to be part of this program to help bring about positive and healthy changes in the lives of the people we love.

- Single serving packets of healthier snacks, such as yogurt and fruit cups will be made available if needed
- Classroom staff will consistently implement the centers celebration policy to ensure compliance with all requirements. Each classroom will be permitted to have one party per month to celebrate the birthdays of all children who have birthdays that month.
- Families must choose from a list of foods to be provided by the center's kitchen. Families of children celebrating a birthday must collaborate planning the celebration (including theme, food and activities)

- ⊕ For the WLCs that rated their Centers with a high level of compliance with existing standards, all identified ways to build upon or enhance their current practices and/or the Head Start standard as it currently stood.
 - For example, the scorecard provided to WLCs did not explicitly have standards for increasing parent involvement, access, and exposure to new and healthy foods. One WLC created an enhanced policy to: Include more healthy food/snack choices for parent meetings to introduce new foods to families. Their feeling was that parents (similar to some staff) have negative assumptions about healthy foods, which could create resistance and annoyance with celebration or other wellness policies. The WLC created the policy to counteract those assumptions, lower resistance, and increase support ("embrace") of healthy foods and wellness policies.
- ⊕ For WLCs that found a lower level of compliance with a standard, their policies were designed to bring them up to full compliance and in most cases, to improve and move beyond the existing standard.
 - For example, a current standard is that "Children shall receive no more than 6 ounces of 100% juice per day." One WLC recognized that at their Center, this standard was rarely in place. Their policies reflected a two-step approach; first to fully achieve no more than 6 ounces of 100% juice served to children per day, and next to eliminate juice completely in favor of fresh fruit and water.
- ⊕ WLCs reported that they kept in mind and found the CMOM guidance very helpful to develop policies that were practical and logically moved their Center to improved wellness practices, yet were not so immediately overwhelming, based on where they

currently were.

As a result of the training I feel more confident to both check ingredients that we are using and to ask the administration to make changes if there are better products that we can use in our menus. I believe that the leadership team has given me more confidence to approach the director with these issues - WLC member

1. Ownership and Belief Policies Would be Implemented

We want to present policies in ways that people embrace them, rather than have us enforce them - WLC Member

- Asked how likely they believed the policies would be implemented, 100% of WLC focus group informants indicated they feel invested and want to participate in and/or lead the operationalizing of policy objectives into practice.
- According to survey responses, 80% of WLC members feel it is their responsibility to implement proposed policies and 89% see a role for themselves in helping to make sure policies are implemented.¹⁴
 - ⊕ WLC attribute their sense of investment, empowerment, and leadership confidence to a variety of factors including: the hands-on, energetic, informed, caring, and respectful training and useful resources they received (CMOM WLC, CAS on-site cooking workshops, and Year 1 trainings), the “collective confidence” and support they have as a team, having a member of the administration on their WLC, feeling that CMOM is a true partner whom they do not want to let down, feeling they have a realistic plan and meaningful policies that will enable them to make a difference, cross-trainings and energy/peer pressure from other WLC, the energy from the Cook-Off event, and their overriding and deep desire to improve their children’s health.
 - ⊕ During focus groups, WLCs expressed a sense of personal and group transformation:
 - The successful completion of all the HEHS Year 2 activities and tasks (policy development and presentations/demonstrations to staff and parents, creation of recipe and accomplishment of making and sharing healthy recipe at Cook-Off) and Year 1 training created a transformative sense of accomplishment and confidence in their ability to “see things that needed to be done” and a determination to follow-through.¹⁵

Having the action plan of creating working committees to implement changes makes this workshop feel real and give us a sense of empowerment- WLC member

We know nowwhat is healthy and unhealthy for ourselves and our children ... We can't act as though we don't knowWe have really been changed by HEHSWe are determined to see things [the policies] through – WLC member

¹⁴ In some cases WLC members expressed concerns and obstacles to policy implementation and some continued to wonder about their authority. During trainings, CMOM had given motivational approaches such as be the change you want to see, if you believe in the changes, they will happen. When WLCs presented their policies, CMOM also asked them to specifically think about how they would enable or support that policy to actually happen. For example, a policy for one WLC is to add 15 minutes of structured activity to physical activity time. Asked how they would enable that to occur, the WLC indicated they would give classroom staff specific strategies, games, and materials to provide the 15 added minutes of structured outdoor activity.

¹⁵ Note: According to WLC focus group members, some aspect of a policy or policies they had created had already begun some level of implementation (e.g., birthday policies). However, it is beyond the scope of this year’s report to assess and present data on the extent of newly created policy implementation.

Initially I didn't think the leadership committee was going to be a big deal. I thought it was going to be another program that just fell through the cracks and wasn't going to amount to anything". However, when I saw the commitment level that was being demonstrated by the trainers (particularly the cooking demo by CAS at the center) I felt that this was something that was going to be real and be potentially helpful for the center and that's when I really began to take the WLC seriously - WLC member

E. WLC-led Demonstrations/Presentations

In line with the task of developing (and implementing) sustainable wellness policies, WLC training was designed to build the capacity of members to effectively demonstrate, inform, educate, and engage parents and staff in order to build their support for effective nutritional/obesity prevention practices and to serve as a nucleus of nutrition and wellness leaders. A significant portion of WLC trainings was devoted to learning to effectively lead a demonstration of hidden sugar in beverages and leading an art-based nutrition/wellness learning activity and conduct such a demonstration and art-based activity for parents and staff.

- 100% of WLCs led two workshops- one for staff and one for DAPC parent committee/ parents - in which they presented a nutrition demonstration (Hidden Sugar in Beverages), introduced, explained, and got feedback on the wellness polices, and led a large group nutrition art activities.
 - ⊕ In 100% of WLC led-workshops, WLC members carried out nutrition and education activities and used the opportunity to introduce the site specific wellness polices and strategies for sustaining and embedding the policies into the day-to-day activities of the center.
 - 100% of WLCs led the *Hidden Sugar in Beverages* workshop they had demonstrated for them in Year 1 and learned and practiced as part of WLC training in Year 2.
- WLCs led the audience in either the Go Slow Whoa spotlight activity or the Body Benefits activity.
- WLC teams led fun, engaging, and approachable nutrition demonstrations. Each had their own style and spin, but all used the CMOM hidden sugar model as their foundation.
 - Two of the WLCs adapted the demonstration based on audience members having prior experience with the hidden sugar demo by extending the demo to show or include hidden salt;
 - Five of the WLCs adapted the demonstration by adding or substituting popular beverages (compared to only those in the CMOM hidden sugar kit) in their community (e.g., Vita Water, SunnyD, CapriSun) to demonstrate hidden sugar in drinks.
- At 100% of presentations, based on observations, the audience was engaged, responsive, and concerned with the information they heard. While there was less surprise at the amount of sugar in beverages for audiences that had previously seen the demo by CMOM, having their own WLC members conduct the demo with their own spin seemed in most cases, to bring renewed interest and positive reaction from the audience.
 - ⊕ WLCs reported that part of their work was to present the polices and support, extend, and sustain healthy eating and wellness practices learned and applied in Year 1 in ways that were approachable, fun, informative, meaningful, and non-judgmental; in other words, the way they had experienced the CMOM and CAS trainings. Combined with the task of presenting policies was their role of disseminating nutrition and wellness information in ways that.
 - ⊕ Especially when asked medical questions, WLCs explained to audiences that their role was not as nutritionists or medical experts, but as educators providing tools, information and options to

families and staff to help them make healthier choices. Across the board, WLCs conducted themselves as they had been trained; if asked about medical issues, they explained that people needed to talk with medical people about medical issues.¹⁶

- ⊕ DAPC/Parent Workshop: WLC members from each Center led a presentation at the monthly DAPC parent committee meeting or at another parent gathering. The goal was to demonstrate, inform, and build “support among parents to implement healthier behaviors in the school and community.” For the parent presentation, members of the WLC will “carry out nutrition and education activities and introduce the site specific wellness polices and strategies for sustaining and embedding the policies into the day- to-day activities of the center.
 - ⊕ A total of eighty-seven (87) parents (DAPC and other parents) attended the WLC parent presentation, plus a total of 47 WLC members who took part in leading the demonstration/workshop (See Appendix A).
 - ⊕ Staff Workshop: WLC members from each Center led a presentation to the staff at their Center. The goal was to demonstrate, inform, and “build internal support for positive health messages while introducing the site specific wellness polices and strategies for sustaining and embedding the policies into the day-to-day activities of the center.”
 - ⊕ A total of 119 staff attended the WLC-led staff presentation, plus a total of 41 WLCs who participated in leading some aspect of the workshop (See Appendix A)
- 100% of WLCs showed improvement in demonstration skills, fuller knowledge and understanding of hidden sugar in beverages, and all reported greater confidence in leadership skills since conducting the workshops, though some would have liked to have more training in how to extend the demonstration.
- ⊕ Based on a rubric of behavioral criteria that contribute to a well led workshop (e.g., eye contact, engaging all participants, speaking loudly and slowly), all WLCs showed marked improvement from their initial attempts during trainings to their “live” demos for staff and parents in all criteria from improved eye contact, to engaging participants.
 - ⊕ Members reported that they had been nervous prior to the presentations as for the majority of members, such leadership and speaking was reportedly outside their experience and role in the Center.
 - ⊕ Written feedback from WLC members provided to CMOM indicated very positive experiences, which in turn, contributed to WLCs increased confidence in their own abilities. (In one case it was reported that a reluctant administrator was impacted by the demonstration to an extent that she expressed a more robust acceptance of the policies and a recognition of the poor example of her beverage drinking habits.)

¹⁶ Combined with presenting polices, was the role of WLCs in disseminating nutrition and wellness information, not as nutritionists but as educators. Trainers were clear that the role was not to give medical advice if asked about a diet for diabetes, etc. Noted earlier was the concern that had arisen about what to do if the audience asked questions they did not know or was medical in nature. Trainers told WLCs they their job was not to diagnose or provide any kind of medical advice but to give parents tools , information, and options to help families, children, and staff make healthy choices. WLCs seemed relieved to know they should say if they did not know an answer and it was suggested they listen to the kinds of questions people are asking and then figure out and get assistance with where resources are in relation to getting information on those kinds of questions (e.g., CMOM staff, CAS staff, Nutritionist, nurse, local hospital, other community resources). For future work however, WLCs expressed interest in increasing their knowledge.

- ⊕ While two WLCs extended the demo to discuss the hidden salt in foods¹⁷, during focus groups four other WLCs indicated that because the demo went so well, they would have liked to have learned how to do research or been given training and props to be able to conduct hidden demonstrations on other foods such as salt and fat.

This [HEHS] will have a domino effect....it is starting with us in our center doing demonstrations... and now we are going to spread the word to people outside our Center in our community...then they can tell more people....

Tables in the Appendix A show attendance at WLC demo workshops, and the well-received reactions to nutrition information and policies presented.

¹⁷ Asked about their extending of the sugar demo to salt, they indicated they had some resources to help them prepare and had begun to talk about the hidden salt in foods due to seeing it in the Head Start standards (scorecard). These extensions on the hidden sugar demo did not involve the extensive props and charts of the hidden sugar demo.

III. COOK-OFF!

Referred to in earlier sections of this report, the culminating activity for HEHS was a Cook-Off held at CMOM and overseen and led by CAS. Awards for best in show in a variety of categories were given to all Cook-Off teams, with awards generally being an appliance to help Centers make healthy foods. At the culminating Cook-Off event, certificates of completion were awarded to WLC members who had completed sufficient trainings and were active in completing WLC projects (policy and demonstrations). The event was an opportunity to recognize all the WLC members and each WLC spoke about their journey with excerpts of a speech and pictures of the event provided in Appendix B.

- Survey results indicate that 82% of staff overall found the experience of the Cook-Off – both preparing and attending - created a team spirit of healthy eating, was informative and fun.
- Attendance: Plans called for approximately 50 attendees; close to 200 people attended.
- All Centers presented their original recipe within the guidelines required by CAS, including:
 - Must provide fun, safe, and hands-on cooking experience with kids
 - Must include at least 2 fresh fruits and/or vegetables of different colors
 - Must use whole grains , such as whole wheat flour, brown rice, cornmeal, and whole wheat or corn tortillas
 - No meat or fish (eggs, beans, and low-fat dairy are permissible)
 - No processed foods such as processed cheese spreads, fried chips, pre-made sauces.
- ⊕ *The event was very exciting and an excellent way to meet other wellness committees in a different setting. “The other staff at our center were very supportive of our work in preparing for the event and two other coworkers not part of the Cook-Off team or WLC attended the event with us. “It was an easy way to see how much we learned by preparing foods with the children at the center.*
- ⊕ *After hearing about the success of the event, we [the WLC] received feedback from other staff members at the center that they would like to have attended the cook-off as well.*
- ⊕ *The Cook-Off was coordinated by the WLC along with the help of the cooking staff. The winning recipe included all organic items and whole-wheat quinoa - amazing and our kids made it in their classrooms and loved it!*
- ⊕ *Very impressive to see so much tasty nutritious food.*
- ⊕ *Working with children to create the dish offered an effective learning experience for our center’s children. It reinforced concepts of color, sizes, counting and measuring, science in terms of texture and the effects of cooking.” The staff shopped with children for the Cook-Off and discussed with them the importance of looking at the texture and quality fresh foods.*

The Cook-Off From an Observer's Journal; June 20, 2012

The air was warm and humid, but inside the Children's Museum of Manhattan the fresh air of discovery seemed to infuse the room. Staff and students from 8 Head Start sites were showcasing their new knowledge of how to eat and cook healthier foods by presenting their newly created healthy recipes. The pride of all the Head Start participants, ranging from preschoolers to seasoned early childhood educators and support staff seemed apparent as they excitedly entered the space to begin setting up their recipe display stations. The room began to look, sound, and smell like a party.

It was the evening of the Healthy Eating Healthy Start "Cook-Off", and everywhere artful displays showed the journey each Center had taken to collaboratively create their new recipe with children, staff, and parents. The aromas and colorful presentations tempted the hundreds of guests to sample delectable, hearty, and healthy fare prepared by the cooking teams from each Center.

According to participants and guests, the food treats offered were *beautiful and irresistible*. *Imagine children actually asking for second helpings of Kale salad" and I never thought I would enjoy eating quinoa, but it's very good* were just some of the comments overheard. The youngest team members (Head Start students) smiled as they donned tiny hairnets and aprons to help serve. Everywhere people lined up to sample juicy, crunchy, colorful, and vividly flavored foods and beverages containing fruits, vegetables, whole grains, and beans.

Creating a healthy, attractive, and delicious tasting recipe from fruits, vegetables, whole grains, and beans along with posters of the journey of creation and preparation were part of the guidelines of the Cook-Off contest, as designed by CAS. The event allowed all WLC member to be recognized for their work with certificates of completion and a \$25.00 gift certificate. Based on the journey and feeling of pride and accomplishment expressed by each WLC as they spoke about their committee and Center's journey, the Cook-Off contest seemed to be one in which everybody appeared to have won.

IV. Center Staff and Parent Experiences: Reactions, Emerging Outcomes, and Perceived Support, Obstacles, and Challenges

The following section presents findings to:

A. WLC Member Reactions to Training

B. Staff reactions to WLC activities, purpose, and proposed policies (by overall staff reactions and reactions by each stakeholder group)

C. Parent reactions to WLC activities, purpose, and proposed policies

A. Reactions to Training by WLC Members

During final focus groups, WLC members were asked their reactions to the WLC trainings and to HEHS overall.

➤ WLC members voiced overwhelmingly positive reactions to the WLC Model and to the trainers:

⊕ WLC Model

- WLC model was important to the success of the program because it provides a core group to help staff stay focused on nutritional goals.
- Having the action plan of creating working committees to implement changes makes this workshop feel real and give us a sense of empowerment.
- Learning the power of working as part of a committee – “we are much more effective working together than if we were trying to implement these changes alone.”
- The team trainings “encouraged fellowship among the staff”, “People were making more personal changes in their health habits and receiving support for those efforts by other staff members. We found more group efforts among staff to make positive changes (i.e., joining a local gym, drinking filter water).
- By developing a leadership committee, “the program indicated its level of dedication and legitimacy in being serious about making lasting change at the site.”
- The leadership training has “helped us focus on how to work together to spread the message of healthy eating at our center. Before this year we all had the motivation to change the policies in our center but the training this year gave us the opportunity and the tools to learn how to work together and best put forth the concepts we have learned.”
- The trainings have also helped us focus as a group on the issues we feel are most important at our center.

⊕ Training and Trainers

- This has been the best training I have ever attended because it was very hands on.
- Information presented is very clear and the teachers are very accessible both during the classes and afterwards.
- The teaching style of the CMOM and CAS trainers provided effective role models on how to interact with others about nutrition and health. The trainers’ approach was “very professional, lively and provided simple and fun activities that everyone could participate in.” As compared

with other professional developments offered (such as from ACS) the HEHS workshops were “very hands-on and practical” and “not focused on lecturing to the class”.

- Enjoyed the hands-on experience of working with food and learning new recipes. The on-site CAS training was a “turning point”. Learning how to make a pita pizza with new/different ingredients and “realizing that it is easy and fun to prepare.

Challenges, Obstacles, Some Lessons Learned

Asked about challenges and obstacles, members responded with lessons learned, obstacles, how some obstacles were overcome, persistent challenges, and what they plan to do to address some of them. It was often difficult to simply isolate obstacles from lessons learned or ways challenges were overcome, or plans to address the challenges in the future. Therefore there is overlap in the lessons learned and challenges that follow. Members also expressed recommendations for ways to improve, expand, and/or sustain the goals of HEHS. Recommendations are presented following Conclusions in Section x

- ⊕ **Not conveying judgment:** *An important lesson from the workshops was not to focus on weight loss/obesity but rather on making changes that can improve one’s health as “no one likes to be judged”; one of the important lessons learned from workshops was the need to be sensitive of how their message of healthy eating and exercise is perceived by others.*
- ⊕ **Showing not just talking/lecturing:** *The importance of showing how to make changes such as cooking styles is “especially helpful” in implementing changes. For example, teachers are becoming more accepting to the menu modifications because “they discovered that the new recipes taste good”.*
- ⊕ **Addressing, not ignoring resistance:** *The trainings have forced us to look at our lifestyles and decide the changes that will make a difference in the way we take care of ourselves. These changes can be challenging and, as a result, some people have bought into the program and others are more resistant.” “We realize as committee members one of our goals is to continue to learn how to address the resistance that some people feel.”*
- ⊕ **Keeping parents involved:** WLCs that had been effective in attracting parents shared they had learned *the importance of being persistent with pursuing families for volunteering and participating at events.*
- ⊕ **Administrator support:** WLCs voiced the importance of administration support; if it was not there initially, they learned the importance of building it. One effective strategy shared with other WLCs was to inform administration in writing well beforehand of upcoming meetings, purpose of meetings, and outcomes of meetings in order to get coverage. Most suggested having at least one administrative level person on the committee.
- ⊕ **Mixed issues of participation by associated HEHS Centers:**
 - One issue was that one WLC was made up of people from two different, but associated sites. Some committee members felt that having members from two different sites was advantageous to building community across the two different locations, while others felt it made meetings extremely difficult, and recommended separate WLCs for each Center. One strategy was to meet as a group after the CMOM trainings because it was one of the few opportunities that they met together. “We kept each other informed mostly through face-to-face conversations and meetings.”
 - They found that having a director from one of the sites assisted in facilitating the scheduling of WLC members because she was able to coordinate substitutes for that center’s staff. The WLC

agreed that it would be beneficial to have at least one administrator on the committee to ensure management support.

- ⊕ **Lack of time to meet:** To address that problem, instead of meeting as a full WLC for all activities, members met in pairs or smaller groups. They would then disseminate that information to other members. Asked how one WLC dealt with lack of time they explained: one or two of us meet for five or ten minutes- "we get right to business as we have little time and we've found we get more done – no gossiping or socializing- just focused and task oriented." Another WLC shared a procedure they found very effective: they wrote a formal memo to the administrator outlining meeting dates and purposes for meetings so coverage was available for them to meet.
- ⊕ **Remaining on Track:** In addition to the training, one of the key factors for keeping the committee on-task was the follow-up both from CMOM and United Way. Making phone calls and sending emails to the committee to confirm that we were setting up appointments to meet as a group and working on the scorecard assessments.
- ⊕ **Importance of ground rules for productive committees:** In a committee of 14 people, at times the size of the committee was difficult to manage but learning to develop ground rules for remaining focused on their tasks was critical.
- ⊕ **Non-productive members:** To become a cohesive, productive team, some WLCs realized they needed to reorganize their teams, eventually dropping a member if that member was consistently not "pulling their weight" and subsequently revising their roles to ensure all tasks were completed.
- ⊕ **Parent Resistance:**
 - **Celebrations.** WLCs were aware that parents might resist some new policy changes, such as that for celebrations. They are aware that parents in the community feel this is a time to provide and indulge in typical birthday sweets and treats at they may feel they show their care and love based on an extravagant cake or candy filled goody bags. Centers are in different stages in altering the celebration policy and all have found it very difficult to get everyone on board. WLCs feel that with a new group of parent entering their Centers it will be easier if they first are all clear on the policy and resolute in ensuring it is followed, while understanding and not judging parents. Making exceptions created havoc and is a problem that they want to avoid, while at the same time, not embarrassing parents. They plan on:
 - Emphasizing the celebration rather than the food.
 - Providing a list of celebration activities, including physical activities parents can do with their child's class to celebrate their child's birthday, switching any cake for Center made cupcakes (in some cases the parents are not permitted to bring anything from home but can bring ingredients or request ingredients).
 - Limiting birthday celebrations that include a birthday (cake) to once a month.
 - Parents as Partners: Explaining the rationale to parents rather than just telling them this is the policy.
 - Cultural influence on diet and food preparation: *We need to emphasize that you are not going to lose your culture by eating healthy.*
 - Many people resist trying new foods due to cultural resistance. *"...need to understand that we are not trying to change one's culture but to show healthy alternatives."* (Smaller portion size, incorporating more vegetables and fruits in meals.) Plans are to try to develop teaching demos on alternative menu ideas that are culturally consistent with the community (e.g., learn and teach how to cook arroz con gandules (Rice with pigeon

peas) in a way that maintains cultural heritage- just healthier). However, obstacle remains of how to translate cultural recipes into healthy foods.

- ⊕ **Lack of parent involvement:** Staff noted that it is difficult to get parents to attend meeting about healthy eating/wellness. At last two WLCs realized they have better attendance at classroom level meetings than at school-wide level meetings, and have therefore decided to make HEHS related topics a part of classroom level meetings rather than school-level meetings. A third WLC decided to offer new healthy recipe tastings to parents when they drop off and pick up their children.
- ⊕ **Staff Resistance:** Staff resistance to change is also a concern. To address that WLCs plan to implement policies with consistency and no exceptions, and having all staff all on the same page in understanding the importance of adhering to the policy; recognizing the difficult position some staff may feel the policy puts them in and having administration and WLC support in adhering to the policies.

More Unresolved Obstacles and Challenges

- ⊕ **Lack of money/resources:** At least three WLCs noted they would like to make healthy meals for parents to better engage them and to address the myth that healthy food does not taste good. They do not currently have adequate budgets for such activities for parents. (\$500.00 was suggested as a reasonable budget for parent tastings of healthy foods.)
- ⊕ **Concerns about Policy Implementation:** WLCs did identify obstacles to policy implementation and some wondered about their authority to implement policies put forth.
 - Beyond Center resistance/obstacles:
 - One WLC questioned its authority to plan meals when they were planned outside their Center and one Center had applied for a change to make a space into a useable area for indoor use to increase physical activity (in-line with a new policy) but felt it would take much time to pass through the bureaucracy to be able to make that space change.
 - In some cases WLC members expressed concerns about staff reductions from Early Learning and the possible impact it might have on kitchen staff time and capacity to make, for example, homemade foods and assist with classroom cooking activities- often aspects of the new policies created.

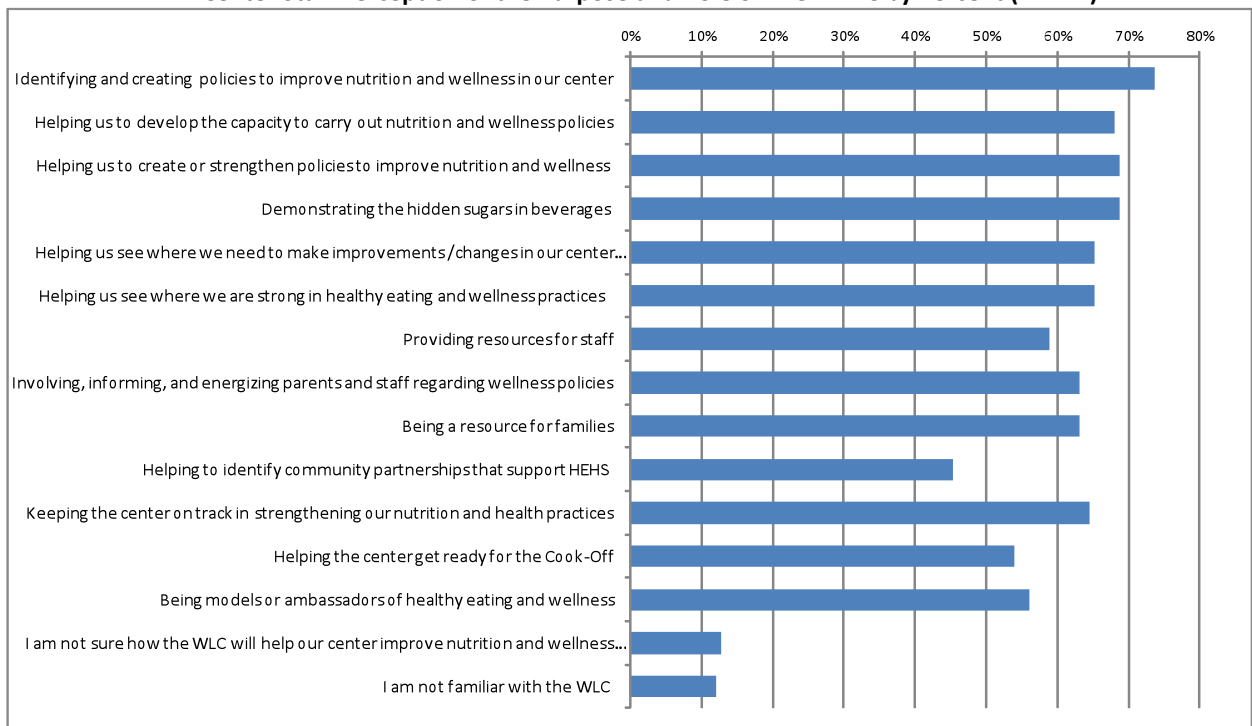
To gauge the level of support and awareness of the work of the WLCs, Center staff and parents were asked a series of survey questions about the purpose, work, and reactions to the their WLC. (Each WLC created a unique name for their Committee. Survey responses need to be interpreted with caution as some respondents may have known the WLC by a particular name and not by WLC, which may have resulted in no entry/don't really know.)

B. Staff reactions to WLC activities, purpose, and proposed policies (by overall staff reactions and reactions by each stakeholder group)

Awareness and Perceived Purpose of WLC by Center Staff

- 85% of Center Staff respondents indicated they were very aware (59%) or aware (26%) of the work of the WLC in their Center.
- Asked the role of WLC in their Center, the vast majority of staff saw multiple leadership roles for their WLC; with top roles similar to those identified by WLC members, and involving policy work and support. Staff responses also indicate they see a long term role for their WLC in improving and sustaining nutritional and wellness practices:

**Table 6
Center Staff Perception of the Purpose and Role of Their WLC by Percent (N=141)**



⊕ Two-thirds or more see wellness policy and practices work as part of the role of their WLC:

- Identifying and creating policies to improve nutrition and wellness in our center (74%)
- Helping us strengthen [existing] policies to improve nutrition and wellness (69%)
- Helping us see where we are strong in healthy eating and wellness practices (65%)

- Keeping the center on track in strengthening our nutrition and health practices (65%)
 - Involving, informing, and energizing parents and staff regarding wellness policies (63%)
- ⊕ The majority also see their WLC as models, demonstrators/teachers, and as resources.
 - Demonstrating hidden sugar in beverages (69%)
 - Being a resource for families (63%)
 - Providing resources for staff (59%)
 - Being models or ambassadors of healthy eating and wellness (56%)
 - Helping the center get ready for the Cook-Off (54%)
- ⊕ Fewer see the role of the WLC as helping to identify community partnerships that support HEHS (45%).
- ⊕ A low percentage of Center respondents were not sure how the WLC *will help our center improve nutrition and wellness practices* (13%) and/or were not aware of the WLC (12%).
- Asked how effectively their WLC has carried out those roles¹⁸,
 - ⊕ Close to seventy percent (67%) found their WLC to be very effective (47%) or somewhat effective (20%).
 - ⊕ Nine percent (9%) felt the WLC was either just getting started.
 - ⊕ Twenty-four percent (24%) either felt they don't really know (6%) or did not respond (18%).
- When asked specifically about their role as leaders, close to ninety percent (86%) of staff overall agreed that their Wellness Leadership Committee has taken a leadership role in modeling and teaching healthy eating and wellness practices.

Staff Awareness of Policies Created and Reaction to those Policies

- Overall, close to sixty percent (58%) of staff survey respondents indicated they were familiar with the wellness policies developed by their WLC. However, just over forty percent (42%) were either not familiar (18%) and or did not respond (24%).
 - ⊕ Looking at staff more specifically,
 - 70% of responding administrators and kitchen staff reported being familiar with the policies.
 - 63% of family workers indicated familiarity.
 - 51% of classroom staff, the lowest percentage, reported being familiar with policies.

Staff Reactions to the Wellness Policies

¹⁸ These results need to be interpreted in light of the objectives of training of the WLC in Year 2, which were primarily to equip WLC members to take a leadership role in identifying, creating, and/or strengthening wellness policies and to be leaders in modeling and teaching healthy eating. It is important to note that accomplishments of some of these roles could be rated, while other roles were more long term and just in the beginning stages. For example, an objective of the trainings was to first help centers see where they needed to make improvements and to create or shore-up policies to improve or strengthen wellness-related practices; the capacity of the centers to carry them out was and is a next step. During focus groups all WLC indicated they had begun to implement some level of their policies. However, it was beyond the scope of this year's evaluation to assess implementation of policies.

- Overall reactions to the policies by those familiar with them were very positive, though a high percentage wondered how easy it would be to stick to them:
 - ⊕ 99% reported the polices were *important*.
 - ⊕ 97% reported them to be *clear, specific, and practical*.
 - ⊕ 97% perceive they *will help improve the nutrition and wellness of our children, families, children, and staff*.
 - ⊕ 98% reported [some] will not be hard to carry out.
 - ⊕ 80% indicated the polices will be hard to stick to.
 - ⊕ 63% felt the polices were not different from what they have currently.¹⁹
- Overall, sixty percent (60%) of all respondents feel it is their responsibility to make sure those polices were carried out, while more than one-third either feel it is not (9%), are unsure (11%), or did not respond (21%).
 - ⊕ Looking at differences among staff, the highest percentage of staff indicating it was their responsibility to ensure polices were implemented were kitchen staff followed by administrators, family/social workers and classroom staff.
 - Kitchen staff - 70% of responding kitchen staff feel it is their responsibility, while 20% feel it is not, and 10% are unsure.
 - Administrators - 64% of responding administrators feel it is their responsibility, while 10% are unsure, and 26% did not respond.
 - Family/Social workers - 63% of responding family/social workers feel it is their responsibility, while 3% feel it is not, 10% are unsure, and 23% did not respond.
 - Classroom Staff - 63% of responding family/social workers feel it is their responsibility, while 9% feel it is not, 9% are unsure, and 19% did not respond.
 - ⊕ Interestingly, although about one-third of responding administrators did not indicate responsibility to makes sure polices were implemented, close to 80% (78%) of respondents overall reported their directors *have been clear in explaining the work and importance of the WLC and their commitment to implementing and enforcing the polices created by our WLC*.

Slightly different than responsibility, staff were asked if they see a role for themselves in making sure polices were carried out.

- Seventy percent (70%) overall see a role for themselves in carrying out the policies, specifically:
 - ⊕ 90% of with kitchen staff see a role for themselves in carrying out policies.
 - ⊕ 82% of administrators see a role.
 - ⊕ 70% of family/social workers see a role.
 - ⊕ 68% of classroom staff see a role.

C. Parent reactions to WLC activities, purpose, and proposed policies

¹⁹ During focus groups with WLCs, they indicated that some of the polices were similar to what they currently had but were either more specific or made some modification that they felt was needed based on the scorecard assessment they conducted.

A parent survey was distributed to parents who had attended the WLC demonstrations. It was decided to distribute the survey only to parents who had participated to get their reaction to the polices presented at the workshop demonstration. The initial plan was to only present the workshop to DAPC parents who would then vote on the polices, therefore the sample was small. At least one center did open their workshop to parents beyond the DAPC as they conducted their workshop during a health fair event. The results that follow need to be interpreted in light of the small population of parents who received the survey.

Awareness and Perceived Purpose of WLC by Parents

- Ninety-five percent of responding parents (95%) indicated they were very aware (56%) or somewhat aware (37%) of the work of the WLC in their Center.
 - ⊕ Asked how they became aware of the WLC, 74% had attended the WLC workshop; 20% had received a flyer about the WLC; 26% were told about the WLC by their child’s teacher; and 31% were told about the WLC by their family/social worker.
- Asked the role of WLC in their Center, the vast majority of parents saw multiple leadership roles for their WLC; with top roles similar to those identified by their WLC, and involving policy work, education, and support. Staff responses also indicate they see a long term role for their WLC in improving and sustaining nutritional and wellness practices:
 - ⊕ Helping to educate families about healthy eating and wellness (69%).
 - ⊕ Helping us strengthen [existing] polices to improve nutrition and wellness (69%).
 - ⊕ Demonstrating hidden sugar in beverages (33%).
 - ⊕ Helping us see where we are strong in healthy eating and wellness practices (27%).
 - ⊕ Being models or ambassadors of healthy eating and wellness (26%).
 - ⊕ Only 3% were not sure how the WLC *will help our center improve nutrition and wellness practices*

Parent Awareness of and Reactions to Policies Created and Reaction to those Polices

- Nearly three-quarters (74%) of responding parents indicated they were familiar with the wellness policies developed by their WLC, 7% were not sure, and 19% did not respond.
- Overall reactions to the policies by those familiar with them were very positive, with a majority perceiving they were not different than the ones they currently have:
 - ⊕ 90% reported them to be *clear, specific and important*.
 - ⊕ 87% reported the polices were *practical*.
 - ⊕ 81% perceive they *will help improve the nutrition and wellness of our children, families, children, and staff*.
 - ⊕ 61% reported [some] will not be hard to carry out.
 - ⊕ 60% felt the polices were not different from what they have currently.²⁰
 - ⊕ 39% indicated the polices will be hard to stick to
- Over eighty percent of responding parents see a role for themselves in helping to carry out those policies and close to seventy percent also feel it is their responsibility to make sure the policies are carried:

²⁰ During parent demonstrations, the WLC members were observed to present the policies in non-threatening ways, often as enhancements or extensions to what they currently had so as not to make the polices seem overwhelming or unachievable. WLCs had noted that in some cases the policies were similar but they now planned actual and/or consistent “enforcement” of those policies.

- ⊕ Eighty-four percent (84%) of responding parents see a role for themselves in helping to carry out wellness policies, while 13% are unsure, 1% does not see a role and 1% did not respond.
- ⊕ Close to seventy percent (69%) of parent respondents feel it is their responsibility to make sure those policies were carried out, while 4% feel it is not, 16% are unsure, and 11% did not respond.

V. EMERGING OUTCOMES AND IMPACT

Emerging outcomes and impact of HEHS and perceived obstacles, and challenges by each stakeholder group in the following order:

- C. Classroom Staff (head teachers, assistant teachers, teaching assistants)
- D. Administrators (directors, educational/program directors)
- E. Family/social workers
- F. Kitchen staff
- G. Parents/guardians

A. CLASSROOM STAFF (Head Teachers, Assistant Teachers, Teaching Assistants)

- Improvement was reported by ninety-percent or more of classroom staff in their knowledge and ability to teach children about a variety of nutrition, health, and wellness topics as a result of their participation in HEHS.

Table 6
Percent of classroom staff indicating implementing nutrition/health related activities since HEHS (N = 78)

	Very often		Often		Sometimes		Rarely		Not at all		No Entry		Total	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Discuss healthy eating with children in my	34	44%	34	44%	10	13%	0	0%	0	0%	0	0%	78	100%
Make foods/snacks from scratch with children in my class	20	26%	13	17%	23	29%	19	24%	3	4%	0	0%	78	100%
Read aloud to children from books with a healthy eating theme	27	35%	27	35%	20	26%	3	4%	0	0%	1	1%	78	100%
Provide time and activities for children to be physically active for at least 1 hour	55	71%	16	21%	4	5%	3	4%	0	0%	0	0%	78	100%
Have children sing healthy eating songs	27	35%	23	29%	19	24%	7	9%	2	3%	0	0%	78	100%
Invite kitchen staff to talk to children about the day's meal	21	27%	16	21%	13	17%	14	18%	14	18%	0	0%	78	100%
Create healthy eating lesson plans	21	27%	23	29%	20	26%	13	17%	0	0%	1	1%	78	100%
Have children make hands-on, art nutrition or healthy living projects	17	22%	25	32%	23	29%	10	13%	1	1%	2	3%	78	100%
Use gross motor equipment in classroom or playground	51	65%	18	23%	6	8%	2	3%	0	0%	1	1%	78	100%
Talk with other staff about nutrition-related activities or ways to implement HEHS	23	29%	26	33%	20	26%	4	5%	5	6%	0	0%	78	100%
Talk with parents about healthy eating and wellness	18	23%	28	36%	16	21%	11	14%	5	6%	0	0%	78	100%

- Over 80 % to 100% of classroom staff (70% to 100% in Year 1) reported implementing a range of nutrition and wellness related activities in their classroom; a reported increase even over the positive results of Year 1 of HEHS (see Table 4).
 - ⊕ In Year 1, five out of 11 nutrition and wellness related activities listed in Table 6 were reported by at least 50% of staff to be occurring *very often* or *often*. In Year 2, nine of the 11 activities were reported to be occurring *very often* or *often* by classroom staff:

- Provide time and activities for children to be physically active at least one hour per day
 - Year 2: (92%: 71% very often; 21% often)
 - Year 1: (87%: 62% very often; 25% often)
 - Discussing healthy eating with children in my class
 - Year 2: (88%: 44% very often; 44% often)
 - Year 1: (90%: 43% very often; 47% often)
 - Using gross motor equipment in the classroom or playground
 - Year 2: (88%: 65% very often; 23% often)
 - Year 1: (86%: 54% very often; 32% often)
 - Reading aloud to children from books with a healthy eating theme
 - Year 2: (71%: 35% very often; 35% often)
 - Year 1: (61%: 22% very often; 39% often)
 - Have children sing healthy eating songs
 - Year 2: (64%: 35% very often; 29% often)
 - Year 1: (53%: 13% very often; 40% often)
- ⊕ In Year 1 the following activities were implemented less often by a majority of staff. In Year 2, many of those same activities were reported to be implemented more often than in the previous year²¹:
- Creating healthy eating lesson plans
 - Year 2: (27% very often; 29% often, 26% sometimes)
 - Year 1: (13% very often; 31% often; 37% sometimes)
 - Having children make hands-on, art nutrition or healthy living projects
 - Year 2: (22% very often; 32% often; 29% sometimes)
 - Year 1: (7% very often; 37% often; 42% sometimes)
 - Talking with staff about nutrition related activities or ways to implement HEHS
 - Year 2: (29% very often; 33% often; 26% sometimes)
 - Year 1: (11% very often; 30% often; 34% sometimes)
 - Making foods from scratch
 - Year 2: (26% very often; 17% often; 29% sometimes)
 - Year 2: (9% very often; 18% often; 45% sometimes)
 - Inviting kitchen staff to talk with children about the days meals
 - Year 2: (27% very often; 21% often; 17% sometimes)
 - Year 1: (7% very often; 10% often; 25% sometimes)
 - Talking with parents about healthy eating and wellness
 - Year 2: (23% very often; 36% often; 21% sometimes)²²

CHANGES TO CENTER

Classroom staff were surveyed in Year 2 regarding perceived changes to their Center as a result of HEHS activities.

²¹ On a scale of 1-5 with 5 “very often”, 4 “often”, 3 “sometimes”, 2 “rarely”, and 1 “not at all”, less frequently implemented activities were those with means of 3.4 or less due to higher percentages responding “sometimes”, “rarely”, or “not at all”.

²² N/A

- Ninety percent or more of classroom staff reported a variety of positive wellness-related changes and impacts to their Center over the two years since HEHS began (See Table 7 below):

**Table 7
Percent of Classroom Staff Perceiving Changes in Center Nutrition and Wellness Practices**

	Strongly		Agree		Disagree		Unsure		No Entry		Total	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
The HEHS Cook Off created a team spirit of healthy eating, was informative, and fun.	22	28%	39	50%	1	1%	0	0%	16	21%	78	100%
Our Wellness Leadership Committee has taken a leadership role in modeling and teaching healthy	23	29%	43	55%	1	1%	0	0%	11	14%	78	100%
My directors have been clear in explaining the work and importance of the Wellness Leadership	24	31%	40	51%	3	4%	0	0%	11	14%	78	100%
Kitchen staff have been preparing healthier meals	33	42%	40	51%	0	0%	0	0%	5	6%	78	100%
Staff have been encouraged to use healthy eating and exercise activities in their work.	32	41%	39	50%	2	3%	0	0%	5	6%	78	100%
Classroom staff are routinely teaching lessons to children about nutrition and wellness	26	33%	46	59%	0	0%	0	0%	6	8%	78	100%
Family and Social Work staff are offering more workshops to families on healthy eating and	20	26%	43	55%	2	3%	0	0%	13	17%	78	100%
Parents have shown positive interest in the new menus and foods their children are served.	18	23%	37	47%	5	6%	0	0%	18	23%	78	100%
We have changed birthday and social gathering policies to cut down on unhealthy foods	32	41%	40	51%	1	1%	0	0%	5	6%	78	100%
There has been increased time for children to have physical activities	26	33%	41	53%	5	6%	0	0%	6	8%	78	100%
Healthy eating pictures and messages have been posted throughout our Center	19	24%	45	58%	2	3%	0	0%	12	15%	78	100%
Healthy eating and exercise have become daily topics of conversation among Center staff	19	24%	41	53%	7	9%	0	0%	11	14%	78	100%

- Kitchen staff in our center are making healthier meals and snacks since HEHS began
 - (93%: 42% strongly agree; 51% agree)
- Staff have been encouraged to use healthy eating and exercise activities in their work
 - (91%: 41% strongly agree; 50% agree)
- Classroom staff are routinely teaching lessons to children about nutrition and wellness
 - (92%: 33% strongly agree; 59% agree)
- Family and Social Work staff are offering more workshops to families on healthy eating and wellness
 - (81%: 26% strongly agree; 55% agree)
- Parents have shown positive interest in the new menus and foods their children are served
 - (70%: 23% strongly agree; 47% agree)
- We have changed birthday and social gathering policies to cut down on unhealthy foods
 - (92%: 41% strongly agree; 51% agree)
- There has been increased time for children to have physical activities
 - (86%: 33% strongly agree; 53% agree)
- Healthy eating pictures and messages have been posted throughout our Center
 - (82%: 24% strongly agree; 58% agree)
- Healthy eating and exercise have become daily topics of conversation among Center staff

- (77%: 24% strongly agree; 53% agree)

➤ In line with classroom staff reporting improvements in their Centers’ nutrition and wellness practices, their attitudes and beliefs continue to reflect an understanding of the environment, their influence, as well as others, in engaging children in activities that promote healthy eating and wellness. Some statements also inferred perceived extent of progress being made in those areas by other staff and by parents.

Table 8
Classroom Staff Beliefs and Attitudes Related to Nutrition /Wellness and HEHS
(N= 78)

	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	No Entry
The way we introduce new foods can influence our students’ or families willingness to try new foods	58%	40%	0%	0%	0%	3%
Our students’ nutrition behaviors and knowledge continue to improve since HEHS	45%	45%	0%	1%	5%	4%
Parents seem more knowledgeable about the relationship between healthy eating and children doing well academically	29%	50%	3%	1%	14%	3%
HEHS adequately addressed cultural beliefs that can interfere with healthy eating	35%	46%	3%	3%	12%	3%
Teaching children about nutrition and healthy living should be required in all Pre-K classrooms.	58%	38%	0%	1%	0%	3%
Programs like HEHS help prepare early childhood staff to teach about nutrition and health to children and families.	53%	42%	0%	0%	0%	5%
What children eat as youngsters can impact their long term health.	65%	32%	0%	0%	0%	3%
Children need daily physical or gross motor activity in addition to movement and dance.	73%	24%	0%	0%	0%	3%
HEHS has been valuable in helping to improve the nutrition of foods served in our Center and in improving our knowledge of nutrition	55%	40%	0%	0%	3%	3%

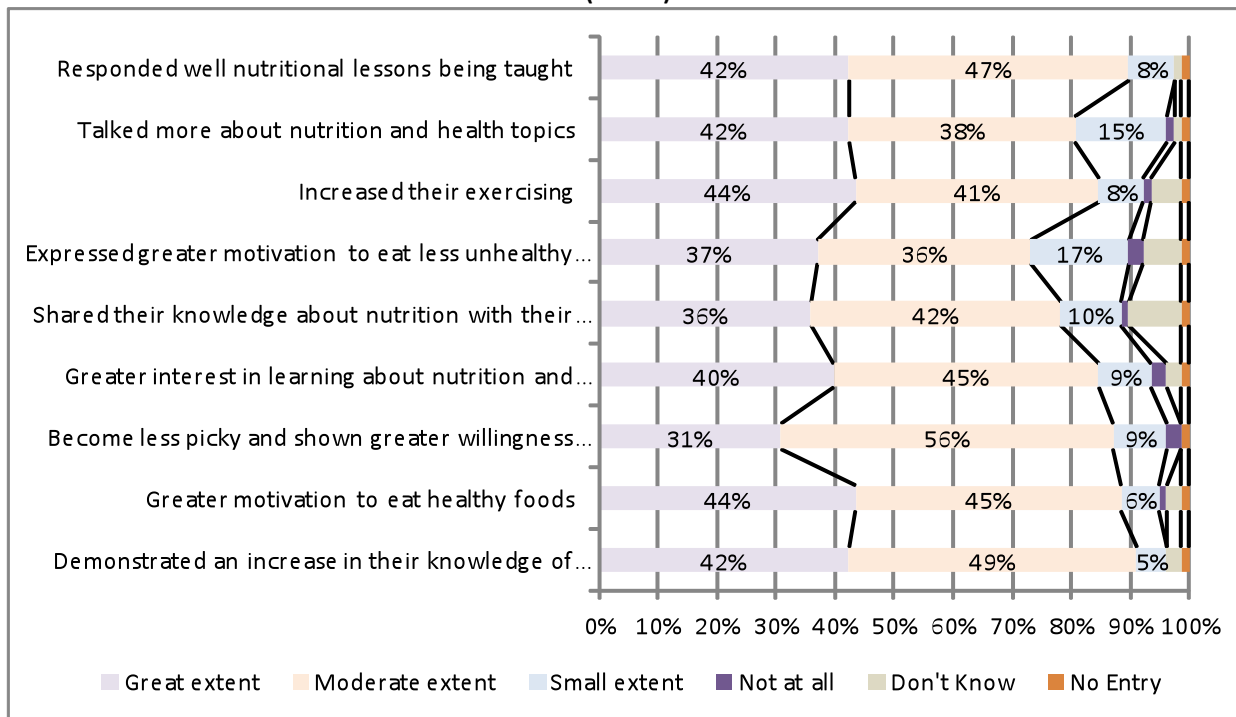
⊕ As shown in Table 8 above, in Year 2 a substantial percentage of classroom staff continue to express agreement with a wide range of statements reflective of environments, changes, curriculum, and interactions that support wellness and promote healthy eating in children, often to a stronger extent than in Year 1:

- The way I introduce new foods can influence my students’ willingness to try new foods
 - (Y2: 98%: 58% strongly agreeing; 40% agreeing)
 - (Y1: 100%: 49% strongly agreeing; 51% agreeing)
- Children need daily physical or gross motor activity in addition to movement and dance
 - (Y2: 97%: 73% strongly agreeing; 24% agreeing)
 - (Y1: 99%; 61% strongly agreeing; 38% agreeing)
- What children eat as youngsters can impact their long term health
 - (Y2: 97%: 65% strongly agreeing; 32% agreeing)
 - (Y1: 99%: 58% strongly agreeing; 41% agreeing)

- Teaching children about nutrition and healthy living should be required in all Pre-K classrooms
 - (Y2: 96%: 58% strongly agreeing; 38% agreeing)
 - (Y1: 99%: 50% strongly agreeing; 49% agreeing)
- Programs like HEHS help prepare early childhood staff to teach about nutrition and health
 - (Y2: 97%: 65% strongly agreeing; 32% agreeing)
 - (Y1: 99%: 46% strongly agreeing; 53% agreeing)
- Our students' nutrition behaviors and knowledge have improved since HEHS
 - (Y2: 90% 45% strongly agreeing; 45% agreeing)
 - (Y1: 92%: 27% strongly agreeing; 65% agreeing)
- HEHS trainings adequately addressed cultural beliefs that can interfere with healthy eating
 - (Y2: 81%: 35% strongly agreeing; 46% agreeing)
 - (Y1: 77%: 18% strongly agreeing; 56% agreeing)
- Parents seem more knowledgeable about the relationship between healthy eating and children doing well academically
 - (Y2: 79%: 29% strongly agreeing; 50% agreeing)
 - (Y1: 74%: 18% strongly agreeing; 56% agreeing)

Reported Benefits of HEHS for Children by Classroom Staff

Figure 1
Classroom Staff perception of benefits of HEHS on children in their classroom
(N = 78)



⊕ According to classroom staff survey respondents, as they think back over the last two years of HEHS, they report that 3, 4, and 5 year old children in their classrooms have and continue to benefit from HEHS by demonstrating improved knowledge, attitudes, and behaviors concerning healthy eating and exercise (See Figure 1). With percentages in most cases higher and in all cases, to stronger extents than those reported last year: More specifically these benefits included:

Children's improved knowledge and interest in nutrition as demonstrated by:

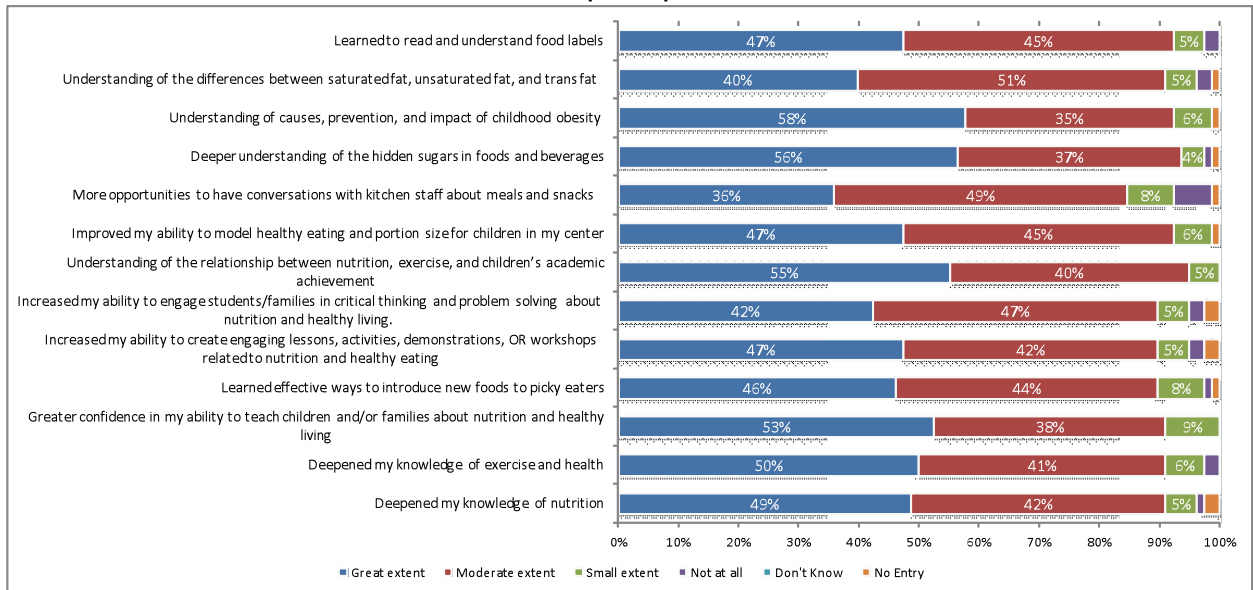
- An increase in their knowledge of nutrition and healthy eating
 - (Y2: 96%: 42% great extent; 49% moderate extent; 5% small extent)
 - (Y1: 99%: 38% great extent; 50% moderate extent; 10% small extent)
- Greater interest in learning about nutrition and healthy eating
 - (Y2: 93%: 40% great extent; 45% moderate extent; 9% small extent)
 - (Y1: 85%: 28% great extent; 57% moderate extent; 15% small extent)
- Responded well to nutritional lessons being taught
 - (Y2: 98%: 42% great extent; 47% moderate extent; 8% small extent)
 - (Y1: 89%: 44% great extent; 56% moderate extent; 10% small extent)

⊕ Improvements were also seen in Year 2 in the percent and extent children were reported by classroom staff to exhibit attitudes and behavior that support nutritional literacy, healthy eating, and wellness in school and at home. Since HEHS began in Year 1 children have and/or continue to:

- Greater motivation to eat healthy foods
 - (Y2: 95%: 44% great extent; 45% moderate extent; 6% small extent)
 - (Y1: 99%: 35% great extent; 54% moderate extent; 9% small extent)
- Become less picky and shown greater willingness to try new foods
 - (Y2: 96%: 31% great extent; 56% moderate extent; 9% small extent)
 - (Y1: 82%: 24% great extent; 54% moderate extent; 9% small extent)
- Increased their exercising
 - (Y2: 93%: 44% great extent; 41% moderate extent; 8% small extent)
 - (Y1: 82%: 35% great extent; 47% moderate extent; 15% small extent)
- Talked more about nutrition and health topics
 - (Y2: 97%: 42% great extent; 38% moderate extent; 15% small extent)
 - (Y1: 81%: 30% great extent; 51% moderate extent; 17% small extent)
- Shared their knowledge about nutrition with their family
 - (Y2: 89%: 36% great extent; 42% moderate extent; 10% small extent)
 - (Y1: 77%: 26% great extent; 51% moderate extent; 14% small extent)

Reported Changes in personal practices by Classroom Staff

Figure 2
Percent of classroom staff reporting benefits in greater understanding and practices related to nutrition/health since participating in HEHS (N = 78)



➤ As shown in **Figure 4** above, as they had in Year 1, a very high percentage Classroom staff in Year 2 continue to report a number of benefits in their nutrition and health related understanding and practices since participating HEHS began:²³

⊕ Close to or over ninety percent or more of classroom staff reported the following benefits to a great or moderate extent:²⁴

- Greater understanding of the relationship between nutrition, exercise, and children's academic achievement (Y2: 95%) (Y1: 92%)
- Greater understanding of causes, prevention, and impact of childhood obesity (Y2: 93%) (Y1: 90%)
- Deepened my understanding of the hidden sugar in foods and beverages (Y2: 93%)
- Learned to read and understand food labels (Y2: 92%)
- Improved my ability to model healthy eating and portion size in the classroom (Y2: 92%) (Y1: 93%)
- Improved understanding of the differences between saturated fat, unsaturated fat, and trans fat (Y2: 91%) (Y1: 82%)
- Deepened my knowledge of nutrition (Y2: 91%) (Y1: 95%)
- Deepened my knowledge of exercise and health (Y2: 91%) (Y1: 94%)
- Greater confidence in my ability to teach children about nutrition and healthy living (Y2: 91%) (Y1: 93%)

²³ Year 1 and Year 2 results reported where applicable and available.

²⁴ Adding results for benefiting a *small extent* would bring all benefits to over 90% for classroom respondents.

- Learned effective ways to introduce new foods to picky eaters (Y2: 90%) (Y1: 92%)
- Increased ability to create engaging lessons and activities related to nutrition and healthy eating (Y2: 89%) (Y1: 92%)
- Increased my ability to engage my students in critical thinking and problem solving about nutrition and healthy living (Y2: 89%) (Y1: 92%)
- Opportunities to have conversations with kitchen staff about meals and snacks (Y2: 85%) (Y1: 67%)

Table 9
Percent of Classroom Staff Reporting Changes in Personal Nutrition/Health Practices since Participating in HEHS (N=78)

	Much more frequently	More frequently	Slightly more frequently	No change, remained the same	Less often	No Entry
	%	%	%	%	%	%
Learning and reading more about nutrition and healthy living	49%	38%	8%	3%	0%	3%
Trying a variety of healthy foods	56%	33%	6%	1%	0%	3%
Cooking at home more often	47%	40%	5%	5%	0%	3%
Exercising more	49%	31%	10%	6%	0%	4%
Talking or thinking about the nutritional value of foods I eat and serve my family	54%	36%	5%	3%	0%	3%
Checking food labels on cans and packages	49%	36%	10%	3%	0%	3%
Shopping at green grocery or farmer's markets	36%	40%	15%	6%	0%	3%
Using correct portion size when I eat	40%	38%	14%	4%	0%	4%
Making meals with my family	45%	35%	9%	5%	0%	6%
Drinking more water and less soda/sugary drinks	59%	21%	14%	3%	0%	4%
Avoiding fast food restaurants	45%	29%	17%	5%	1%	3%

➤ In Year 2, classroom staff have reportedly continued to improve the frequency (much more, more, and/or slightly more) of a variety of healthy eating and wellness practices in their personal lives, compared to before they participated in HEHS.

⊕ For over or close to 90% of classroom staff the health and nutrition practices reported to have increased include:

- Trying a variety of healthy foods
 - (Y2: 97%: 56% much more frequently; 33% more frequently; 6% slightly more frequently)
 - (Y1: 92%: 34% much more frequently; 58% more frequently; 0% slightly more frequently)
- Drinking more water and less soda/sugary drinks
 - (Y2: 93%: 59% much more frequently; 21% more frequently; 14% slightly more frequently)
 - (Y1: 92%: 52% much more frequently; 39% more frequently; 1% slightly more frequently)
- Learning and reading more about nutrition and healthy living
 - (Y2: 94%: 49% much more frequently; 38% more frequently; 8% slightly more frequently)
 - (Y1: 91%: 32% much more frequently; 59% more frequently; 0% slightly more frequently)

frequently)

- Checking food labels on cans and packages
 - (Y2: 94%: 49% much more frequently; 36% more frequently; 10% slightly more frequently)
 - (Y1: 91%: 36% much more frequently; 47% more frequently; 8% slightly more frequently)
- Exercising more
 - (Y2: 90%: 49% much more frequently; 31% more frequently; 10% slightly more frequently)
 - (Y1: 89%: 25% much more frequently; 52% more frequently; 12% slightly more frequently)
- Using correct portion size when I eat
 - (Y2: 92%: 40% much more frequently; 38% more frequently; 14% slightly more frequently)
 - (Y1: 87%: 28% much more frequently; 58% more frequently; 1% slightly more frequently)
- Avoiding fast food restaurants
 - (Y2: 92%: 45% much more frequently; 29% more frequently; 17% slightly more frequently)
 - (Y1: 84%: 33% much more frequently; 1% more frequently; 50% slightly more frequently)
- Making meals with my family
 - (Y2: 89%: 45% much more frequently; 35% more frequently; 9% slightly more frequently)
 - (Y1: 76%: 24% much more frequently; 51% more frequently; 1% slightly more frequently)
- Cooking at home more often
 - (Y2: 92%: 47% much more frequently; 31% more frequently; 5% slightly more frequently)
 - (Y1: 82%: 27% much more frequently; 52% more frequently; 3% slightly more frequently)
- Shopping at green grocery or farmer's markets
 - (Y2: 91%: 36% much more frequently; 40% more frequently; 15% slightly more frequently)
 - (Y1: 76%: 22% much more frequently; 52% more frequently; 2% slightly more frequently)

REPORTED BENEFITS TO FAMILIES AS PERCEIVED BY CLASSROOM STAFF

Table 10

Classroom Staff Reported Benefits to Families in Nutrition/Health Practices Since Participating in HEHS (N=78)

	Great extent	Moderate extent	Small extent	Not at all	Don't Know	No Entry
	%	%	%	%	%	%
Demonstrated an increase in their knowledge of nutrition and healthy eating	35%	45%	8%	0%	13%	0%
Greater motivation to eat healthy foods	36%	36%	18%	0%	10%	0%
Reported or shown greater willingness to try new foods	36%	37%	14%	0%	12%	1%
Greater interest in learning about nutrition and healthy eating.	38%	36%	12%	0%	12%	3%
Reported an increase in cooking at home, or making meals together as a family	29%	37%	18%	1%	14%	0%
Expressed greater motivation to eat less unhealthy and fast foods	31%	38%	15%	1%	14%	0%
Reported or shown an increase in their exercising	33%	37%	13%	1%	15%	0%
Talked more about nutrition and health topics	35%	38%	9%	1%	17%	0%
Responded well to the nutritional workshops family/social workers have provided	36%	37%	10%	0%	13%	4%

- Over eighty percent of classroom staff reported a range of perceived nutrition and wellness benefits to families over the last two years of HEHS:
 - ⊕ Close to ninety percent of classroom staff perceive parents in their center have shown improvement to a great/moderate/small extent in: (See Table 10 above)
 - Greater motivation to eat healthy foods (90%)
 - Demonstrated an increase in their knowledge of nutrition and healthy eating (88%)
 - ⊕ Over eighty percent of parents:
 - Reported or shown greater willingness to try new foods (86%)
 - Greater interest in learning about nutrition and healthy eating (86%)
 - Reported an increase in cooking at home, or making meals together as a family (84%)
 - Expressed greater motivation to eat less unhealthy and fast foods (84%)
 - Reported or shown an increase in their exercising (83%)
 - Responded well to the nutritional workshops family/social workers have provided (83%)
 - Talked more about nutrition and health topics (81%)

SUPPORT, OBSTACLES, AND CHALLENGES PERCEIVED BY CLASSROOM STAFF

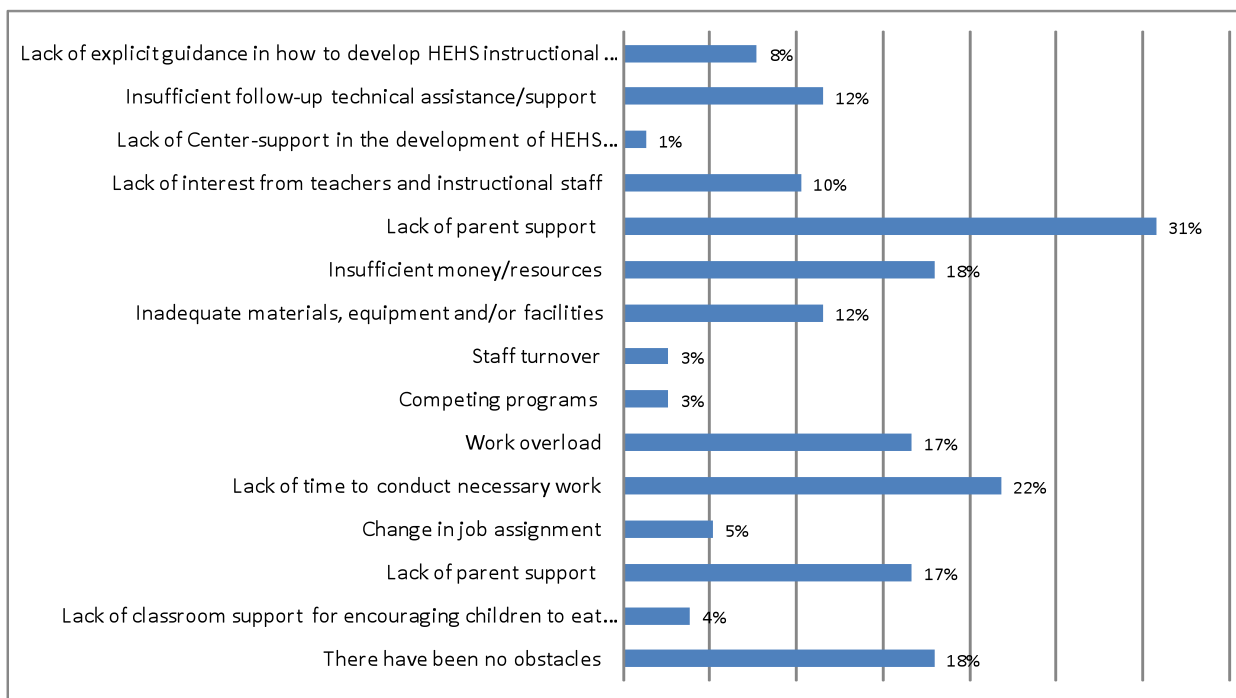
Support Perceived by Classroom Staff

Perceived support by different stakeholders for an initiative can provide insight into how well the program was accepted, along with perceived obstacles and challenges that may have impacted the extent of emerging outcomes.

- Classroom staff survey results in response to the question, "What obstacles, if any, have you experienced in implementing HEHS in your classroom?" suggest that lack of parent support is again the prime obstacle to implementation and sustainability (See Table 11) even while reporting perceived improvements parents have shown or reported in a variety of wellness practices (See Table 12).

Obstacles to implementing HEHS as perceived by Classroom Staff

Table 11
Obstacles reported by classroom staff in implementing HEHS in the classroom (by percentage)
(N = 78)



- ⊕ In Year 2, as in Year 1, 31%, the greatest percentage, reported lack of parent support as an obstacle to implementation; followed by;
- Lack of time to conduct necessary work (22%)
 - Insufficient money/resources (18%)
 - Work overload (17%)
 - Inadequate materials, equipment and/or facilities, insufficient follow-up technical assistance (both 12%)

- ⊕ Ten percent or less reported:
 - Lack of interest from teachers and instructional staff (10%)
 - Lack of explicit guidance in how to develop HEHS instructional activities 8% (4% in Y1)
 - Staff turnover, competing programs (both 3%)
 - Change in job assignment (5%)
 - Lack of classroom support for encouraging children to eat healthier (4%)
 - Lack of site support in development of HEHS instructional activities (1%)
- ⊕ Eighteen percent (18%) of classroom staff respondents reported there were no obstacles to implementing HEHS.

B. Administrators (Directors, Assistant Directors, Education Directors)

Administrators (Directors, Assistant Directors, Education Directors) overwhelmingly had positive reactions to the WLC.

EMERGING OUTCOMES AND IMPACTS OF HEHS REPORTED BY ADMINISTRATORS

CHANGES TO CENTER

- A substantial proportion responding administrators perceived a variety of positive wellness-related changes, practices, and impacts to their Center over the two years since HEHS began (See Table 12 below):

Table 12
Percent of Administrative Staff Perceiving Changes in Center Nutrition and Wellness Practices
(N=10)

	Strongly		Agree		Disagree		Unsure		No Entry	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
The HEHS Cook Off created a team spirit of healthy eating, was informative, and fun.	4	40%	4	40%	0	0%	0	0%	2	20%
Our Wellness Leadership Committee has taken a leadership role in modeling and teaching healthy	2	20%	7	70%	0	0%	0	0%	1	10%
Staff have been encouraged to use healthy eating and exercise activities in their work.	4	40%	5	50%	0	0%	0	0%	1	10%
Kitchen staff have been preparing healthier meals	5	50%	4	40%	0	0%	0	0%	1	10%
My directors have been clear in explaining the work and importance of the Wellness Leadership	2	20%	7	70%	0	0%	0	0%	1	10%
Classroom staff are routinely teaching lessons to children about nutrition and wellness	5	50%	4	40%	0	0%	0	0%	1	10%
Family and Social Work staff are offering more workshops to families on healthy eating and	1	10%	7	70%	1	10%	0	0%	1	10%
There has been increased time for children to have physical activities	0	0%	7	70%	0	0%	0	0%	3	30%
Healthy eating and exercise have become daily topics of conversation among Center staff	7	70%	2	20%	0	0%	0	0%	1	10%
Parents have shown positive interest in the new menus and foods their children are served.	3	30%	2	20%	2	20%	0	0%	3	30%
We have changed birthday and social gathering policies to cut down on unhealthy foods	1	10%	6	60%	1	10%	0	0%	2	20%
Healthy eating pictures and messages have been posted throughout our Center	1	10%	7	70%	1	10%	0	0%	1	10%

⊕ Ninety percent of administrators reported:

- Kitchen staff in our center are making healthier meals and snacks since HEHS began (90%: 40% strongly agree; 50% agree)
- Staff have been encouraged to use healthy eating and exercise activities in their work (90%: 20% strongly agree; 70% agree)
- Classroom staff are routinely teaching lessons to children about nutrition and wellness (90%: 50% strongly agree; 40% agree)
- We have changed birthday and social gathering policies to cut down on unhealthy foods (90%: 70% strongly agree; 20% agree)

⊕ Eighty percent indicated:

- Family and Social Work staff are offering more workshops to families on healthy eating and wellness (80%: 10% strongly agree; 70% agree)
- Healthy eating and exercise have become daily topics of conversation among Center staff (80%: 10% strongly agree; 70% agree)

⊕ Seventy percent noted that:

- Parents have shown positive interest in the new menus and foods their children are served (70%: 0% strongly agree; 70% agree)
- Healthy eating pictures and messages have been posted throughout our Center (70%: 10% strongly agree; 60% agree)
- Fifty percent reported that there has been increased time for children to have physical activities (50%: 30% strongly agree; 20% agree)

- Administrator responses reflect an understanding of their own and their staff's influence and the kind of environment that might support children and families engagement in activities that promote healthy eating and wellness. Some statements also inferred perceived extent of progress being made in those areas by staff members.

Table 13
Administrative Staff Beliefs and Attitudes Related to Nutrition/Wellness and HEHS
(N= 10)

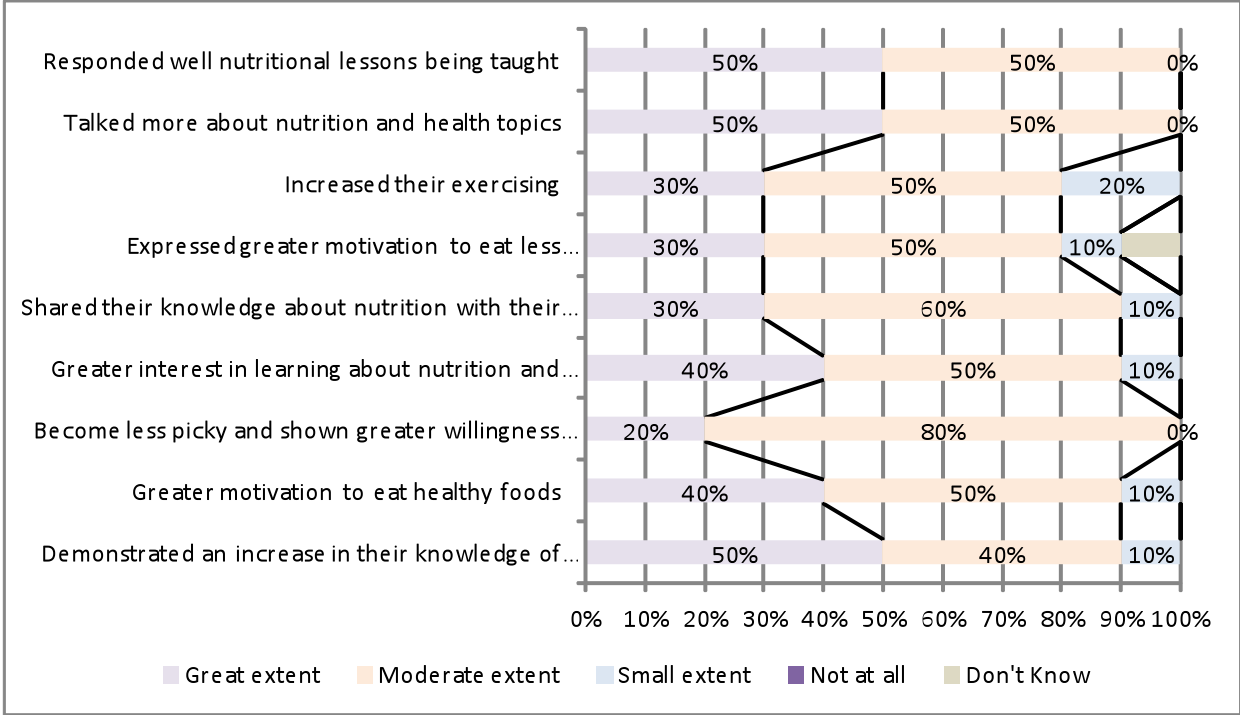
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
The way we introduce new foods can influence our students' or families willingness to try new foods	60%	40%	0%	0%	0%
Our students' nutrition behaviors and knowledge continue to improve since HEHS	40%	60%	0%	0%	0%
Parents seem more knowledgeable about the relationship between healthy eating and children doing well academically	20%	70%	0%	0%	10%
HEHS adequately addressed cultural beliefs that can interfere with healthy eating	10%	60%	20%	0%	10%
Teaching children about nutrition and healthy living should be required in all Pre-K classrooms.	70%	30%	0%	0%	0%
Programs like HEHS help prepare early childhood staff to teach about nutrition and health to children and families.	70%	30%	0%	0%	0%
What children eat as youngsters can impact their long term health.	70%	30%	0%	0%	0%
Children need daily physical or gross motor activity in addition to movement and dance.	70%	30%	0%	0%	0%
HEHS has been valuable in helping to improve the nutrition of foods served in our Center and in improving our knowledge of nutrition	50%	50%	0%	0%	0%

As shown in Table 13 above, in Year 2 a substantial percentage of administrators expressed agreement with a wide range of statements reflective of environments, changes, curriculum, and interactions that support wellness and promote healthy eating in children:

- The way we introduce new foods can influence our students' or families' willingness to try new foods (100%: 60% strongly agree; 40% agree)
- Children need daily physical or gross motor activity in addition to movement and dance (100%: 70% Strongly agree; 30% Agree)
- What children eat as youngsters can impact their long term health (100%: 70% Strongly agree; 30% Agree)
- Teaching children about nutrition and healthy living should be required in all Pre-K classrooms (100%: 70% Strongly agree; 30% Agree)
- Programs like HEHS help prepare early childhood staff to teach about nutrition and health (100%: 70% Strongly agree; 30% Agree)
- HEHS has been valuable in helping to improve the nutrition of foods served in our Center and in improving our knowledge of nutrition (100%: 50% strongly agree; 50% agree)
- Our students' nutrition behaviors and knowledge have improved since HEHS (100%: 40% strongly agree; 60% agree)
- While still positive, a lower percentage of administrators voiced strong agreement that:
 - HEHS trainings adequately addressed cultural beliefs that can interfere with healthy eating (70%: 10% strongly agree; 60% agree, while 20% disagree)
 - Parents seem more knowledgeable about the relationship between healthy eating and children doing well academically (90%: 20% strongly agree; 70% agree)

Reported benefits of HEHS for Children by Administrators

Figure 3
Administrators perception of benefits of HEHS on children in their classroom
(N = 10)



According to administrator survey respondents, and in-line with administrator interviews in Year 1, 90% to 100% report that children in their Centers have benefited from HEHS by demonstrating improved knowledge, attitudes, and behaviors concerning healthy eating and exercise (See Figure 3). More specifically these benefits included:

Children’s improved knowledge and interest in nutrition as demonstrated by:

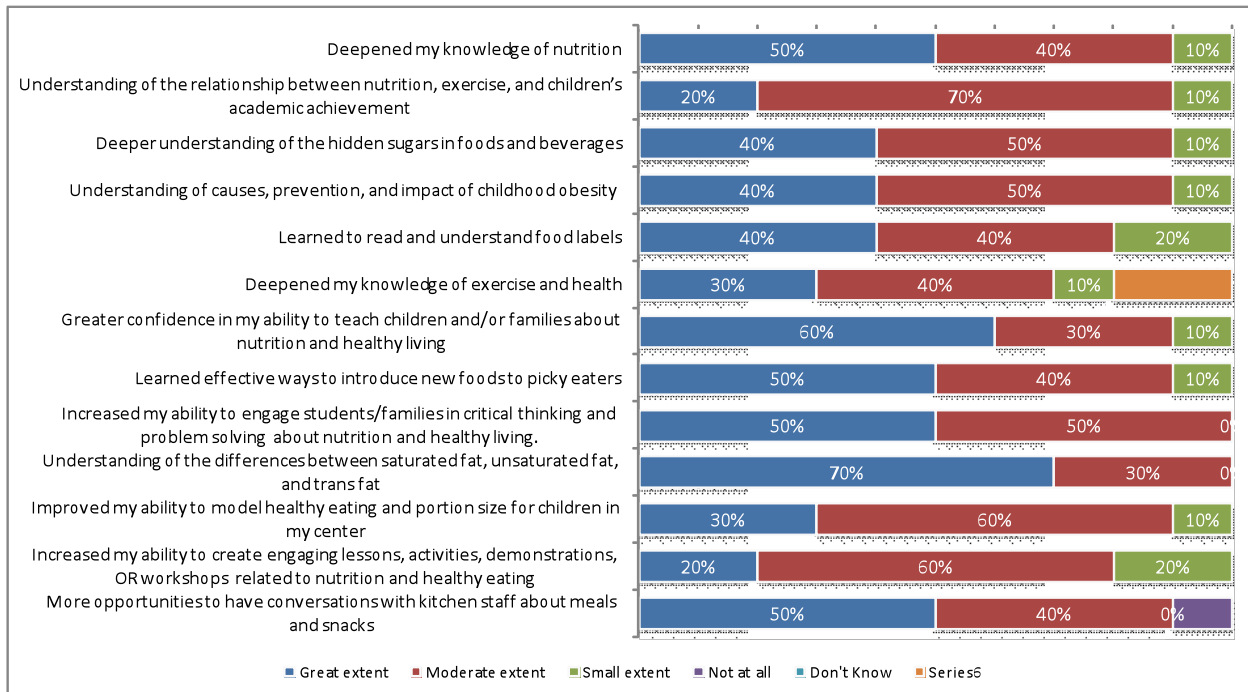
- An increase in their knowledge of nutrition and healthy eating
 - (100%: 50% great extent; 40% moderate extent; 10% small extent)
- Responded well to nutritional lessons being taught
 - (100%: 50% great extent; 50% moderate extent)
- Greater interest in learning about nutrition and healthy eating
 - (100%: 40% great extent; 50% moderate extent; 10% small extent)

✦ Nutrition and wellness benefits of HEHS were also seen in Year 2 in children who have:

- Greater motivation to eat healthy foods
 - (100%: 40% great extent; 50% moderate extent; 10% small extent)
- Become less picky and shown greater willingness to try new foods
 - (100%: 20% great extent; 80% moderate extent)
- Increased their exercising
 - (100%: 30% great extent; 50% moderate extent; 20% small extent)
- Talked more about nutrition and health topics
 - (100%: 50% great extent; 50% moderate extent)
- Shared their knowledge about nutrition with their family
 - (100%: 30% great extent; 60% moderate extent; 10% small extent)

Reported Changes in personal practices by Administrators

Table 14
Percent of Administrators reporting benefits in greater understanding and practices related to nutrition/health since participating in HEHS (N = 10)



➤ As shown in **Table 14** above, as they had in Year 1, a very high percentage Administrators in Year 2 continue to report a number of benefits in their nutrition and health related understanding and practices since participating HEHS began:

- ⊕ Ninety percent or more (90%-100%) of administrators reported the following benefits to a great or moderate extent:²⁵
 - Increased my ability to engage students/families in critical thinking and problem solving about nutrition and healthy living (100%)
 - Understanding of the differences between saturated fat, unsaturated fat, and trans fat (100%)
 - Deepened my knowledge of nutrition (90%)
 - Deeper understanding of the hidden sugar in foods and beverages (90%)
 - Understanding of causes, prevention, and impact of childhood obesity (90%)
 - Learned effective ways to introduce new foods to picky eaters (90%)
 - More opportunities to have conversations with kitchen staff about meals and snacks (90%)
 - Understanding of the relationship between nutrition, exercise, and children’s academic achievement (90%)
 - Greater confidence in my ability to teach children and/or families about nutrition and healthy living (90%)
 - Improved my ability to model healthy eating and portion size for children in my center (90%)
- ⊕ Eighty percent (80%) of administrators reported the following benefits to a great or moderate extent.
 - Increased my ability to create engaging lessons and activities related to nutrition and healthy eating (80%)
 - Learned to read and understand food labels (80%)
- ⊕ Seventy percent (70%) of administrators reported that the program *deepened my knowledge of exercise and health.*

²⁵ Adding results for benefiting a *small extent* would bring all benefits to over 90% for classroom respondents.

Table 15
Percent of Administrators Reporting Changes in Personal Nutrition/Health Practices Since Participating in HEHS (N=10)

	Much more frequently	More frequently	Slightly more frequently	No change, remained the same	Less often	No Entry
	%	%	%	%	%	%
Learning and reading more about nutrition	30%	30%	20%	10%	0%	10%
Trying a variety of healthy foods	40%	50%	10%	0%	0%	0%
Cooking at home more often	40%	40%	10%	10%	0%	0%
Exercising more	20%	40%	10%	20%	0%	10%
Talking or thinking about the nutritional value of foods I eat and serve my family	40%	30%	20%	0%	0%	10%
Checking food labels on cans and packages	60%	10%	20%	0%	0%	10%
Shopping at green grocery or farmer's markets	50%	30%	0%	20%	0%	0%
Using correct portion size when I eat	40%	30%	10%	20%	0%	0%
Making meals with my family	30%	50%	0%	20%	0%	0%
Drinking more water and less soda/sugary drinks	70%	20%	0%	10%	0%	0%
Avoiding fast food restaurants	60%	20%	10%	10%	0%	0%

➤ In Year 2, administrators reported improvements in the frequency (much more, more, and/or slightly more) of a variety of healthy eating and wellness practices in their personal lives, compared to before they participated in HEHS.

⊕ Ninety percent or more of administrators reported increases in the following health and nutrition practices:

- Trying a variety of healthy foods
 - (100%: 40% much more; 50% more; 10% slightly more)
- Drinking more water and less soda/sugary drinks
 - (90%: 70% much more; 20% more)
- Avoiding fast food restaurants
 - (90%: 60% much more; 20% more; 10% slightly more)
- Checking food labels on cans and packages
 - (90%: 60% much more; 10% more; 20% slightly more)
- Talking or thinking more about the nutritional value of foods I eat and serve my family
 - (90%: 40% much more; 30% more; 20% slightly more)
- Cooking at home more often
 - (90%: 40% much more; 40% more; 10% slightly more)

⊕ Eighty percent administrators reported increases in the following health and nutrition practices:

- Shopping at green grocery or farmer's markets
 - (80%: 50% much more; 30% more)
- Making meals with my family
 - (80%: 30% much more; 50% more)
- Learning and reading more about nutrition and healthy living

- (80%: 30% much more; 30% more; 20% slightly more)
- Using correct portion size when I eat
 - (80%: 40% much more; 30% more; 10% slightly more)
- ⊕ Seventy percent (70%) report exercising more.
 - (70%: 20% much more; 40% more; 10% slightly more)

REPORTED BENEFITS TO FAMILIES AS PERCEIVED BY ADMINISTRATORS

Table 16
Percent of Administrators Perceiving Benefits to Families' Nutrition/Health Practices since Participating in HEHS (N=10)

	Great extent	Moderate extent	Small extent	Not at all	Don't Know	No Entry
	%	%	%	%	%	%
Demonstrated an increase in their knowledge of nutrition and healthy eating	40%	20%	30%	0%	10%	0%
Greater motivation to eat healthy foods	40%	40%	10%	0%	10%	0%
Reported or shown greater willingness to try new foods	40%	30%	20%	0%	10%	0%
Greater interest in learning about nutrition and healthy eating.	40%	30%	10%	0%	10%	10%
Reported an increase in cooking at home, or making meals together as a family	30%	30%	20%	0%	20%	0%
Expressed greater motivation to eat less unhealthy and fast foods	30%	40%	20%	0%	10%	0%
Reported or shown an increase in their exercising	30%	30%	20%	0%	20%	0%
Talked more about nutrition and health topics	30%	40%	20%	0%	10%	0%
Responded well to the nutritional workshops family/social workers have provided	30%	40%	20%	0%	10%	0%

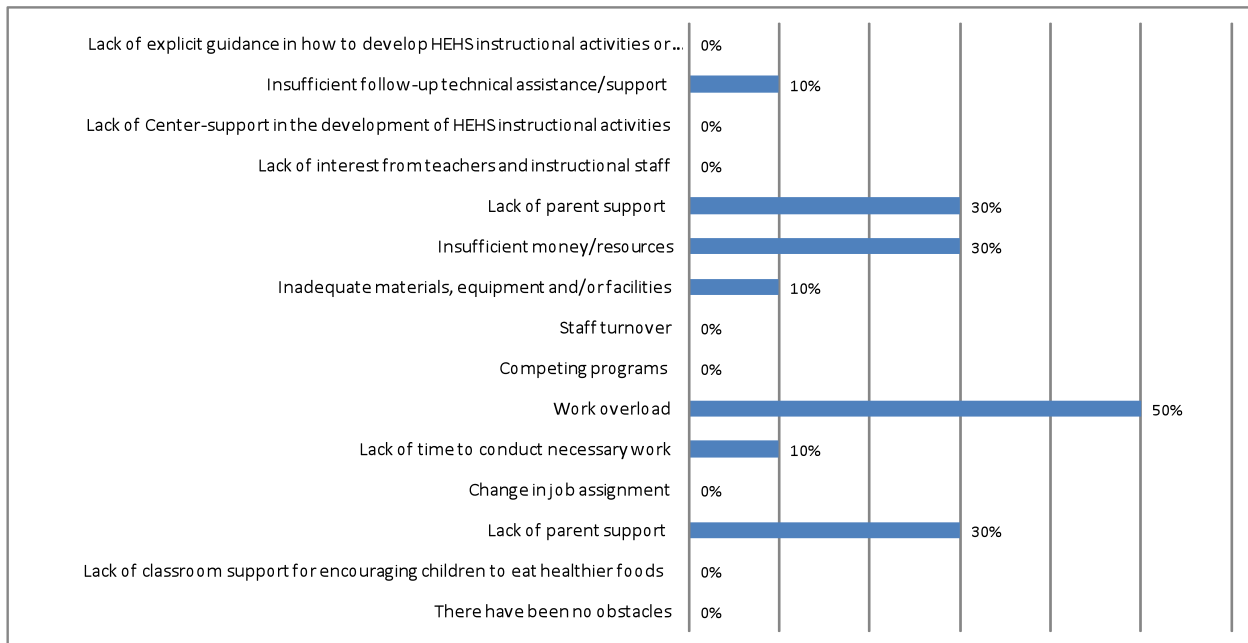
- Eighty - ninety percent of responding administrators reported a range of perceived nutrition and wellness benefits to families over the last two years of HEHS:
 - ⊕ Ninety percent (90%) of responding administrators perceive families/parents in their center have shown improvement to a great/moderate/small extent in: (See Table 16 above)
 - Greater motivation to eat healthy foods
 - Demonstrated an increase in their knowledge of nutrition and healthy eating
 - Reported or shown greater willingness to try new foods
 - Expressed greater motivation to eat less unhealthy and fast foods
 - Responded well to the nutritional workshops family/social workers have provided
 - Talked more about nutrition and health topics
 - ⊕ Eighty percent (80%) of administrators reported families to have:
 - Greater interest in learning about nutrition and healthy eating
 - Reported an increase in cooking at home, or making meals together as a family
 - Reported or shown an increase in their exercising

OBSTACLES, AND CHALLENGES PERCEIVED BY ADMINISTRATORS

- Administrator survey results suggest that work overload has replaced lack of parent support as the prime obstacle to implementation and sustainability (See Table 17) of HEHS. *Lack of parent support* and *Insufficient money/resources*, however are again named as obstacles.

Obstacles to implementing HEHS as perceived by Administrators

Table 17
Obstacles reported by Administrators in implementing HEHS in the classroom (by percentage)
(N = 10)



- ⊕ In Year 2, 50% of administrators identified work overload as an obstacle to implementation, followed by;
 - Lack of parent support, and Insufficient money/resources (both 30%)
- ⊕ Ten percent (10%) reported:
 - Insufficient follow-up technical support
 - Lack of time to conduct necessary work
 - Inadequate materials, equipment and/or facilities

C. FAMILY/SOCIAL WORKERS

In line with positive results of focus groups conducted with family/social workers in Year 1, were survey results of Year 2 regarding perceived changes to their Center as a result of HEHS activities.

- Ninety percent or more of family/social workers reported a variety of positive wellness- related changes and impacts to their Center over the two years since HEHS began (See Table 18 below):

Table 18
Percent of Family/Social Workers Perceiving Changes in Center Nutrition and Wellness Practices
(N = 30)

	Strongly		Agree		Disagree		Unsure		No Entry		Total	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
The HEHS Cook Off created a team spirit of healthy eating, was informative, and fun.	18	60%	11	37%	0	0%	0	0%	1	3%	30	100%
Our Wellness Leadership Committee has taken a leadership role in modeling and teaching healthy	16	53%	14	47%	0	0%	0	0%	0	0%	30	100%
My directors have been clear in explaining the work and importance of the Wellness Leadership	13	43%	13	43%	1	3%	0	0%	3	10%	30	100%
Kitchen staff have been preparing healthier meals	15	50%	12	40%	1	3%	0	0%	2	7%	30	100%
Staff have been encouraged to use healthy eating and exercise activities in their work.	13	43%	15	50%	2	7%	0	0%	0	0%	30	100%
Classroom staff are routinely teaching lessons to children about nutrition and wellness	12	40%	14	47%	1	3%	0	0%	3	10%	30	100%
Family and Social Work staff are offering more workshops to families on healthy eating and	9	30%	16	53%	2	7%	0	0%	3	10%	30	100%
Parents have shown positive interest in the new menus and foods their children are served.	9	30%	15	50%	0	0%	0	0%	6	20%	30	100%
We have changed birthday and social gathering policies to cut down on unhealthy foods	14	47%	10	33%	4	13%	0	0%	2	7%	30	100%
There has been increased time for children to have physical activities	10	33%	15	50%	1	3%	0	0%	4	13%	30	100%
Healthy eating pictures and messages have been posted throughout our Center	9	30%	15	50%	4	13%	0	0%	2	7%	30	100%
Healthy eating and exercise have become daily topics of conversation among Center staff	10	33%	15	50%	2	7%	0	0%	3	10%	30	100%

Percent of Family/social workers Perceiving Changes in Center Nutrition and Wellness Practices:

- 100% either strongly agreed or agreed to that Our Wellness Leadership Committee has taken a leadership role in modeling and teaching healthy eating and wellness practices (53% strongly agree; 47% agree)
- 97% either strongly agreed or agreed that the HEHS Cook-Off created a team spirit of healthy eating, was informative, and fun (60% strongly agree; 37% agree)
- 93% either strongly agreed or agreed staff have been encouraged to use healthy eating and exercise activities in their work (43% strongly agree; 50% agree)
- 90% either strongly agreed or agreed Kitchen staff in our center are making healthier meals and snacks (50% strongly agree; 40% agree; 1% disagree)
- 87% either strongly agreed or agreed Classroom staff are routinely teaching lessons to children about

nutrition and wellness (40% strongly agree; 47% agree, 3% disagree; 10% (3) no responses)

- 84% of staff have been encouraged to use healthy eating and exercise activities in their work (42% strongly agree; 50% agree; 2% disagree)
- The largest disagreement with 13% was with the practices:
 - We have changed birthday and social gathering policies to cut down on unhealthy foods (47% strongly agree; 33% agree, 13% disagree)
 - Healthy eating pictures and messages have been posted throughout our Center (30% strongly agree; 50% agree; 13% disagree)

➤ In line with family/social workers reporting improvements in their Centers’ nutrition and wellness practices, their attitudes and beliefs continue to reflect an understanding of the environment, their influence, as well as others, in engaging children in activities that promote healthy eating and wellness. Some statements also inferred perceived extent of progress being made in those areas by other staff and by parents.

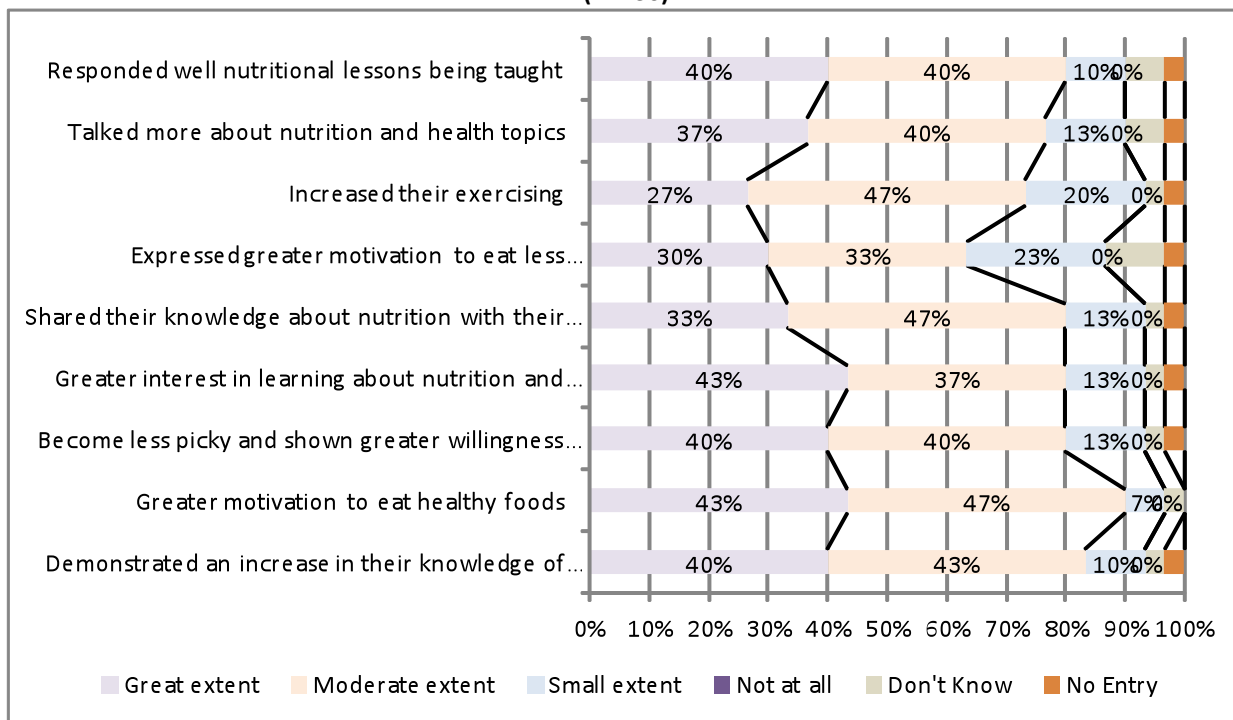
Table 19
Family/social workers Beliefs and Attitudes Related to Nutrition/Wellness and HEHS
(N= 30)

	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	No Entry
The way we introduce new foods can influence our students’ or families willingness to try new foods	70%	30%	0%	0%	0%	0%
Our students’ nutrition behaviors and knowledge continue to improve since HEHS	37%	53%	0%	0%	7%	3%
Parents seem more knowledgeable about the relationship between healthy eating and children doing well academically	33%	50%	0%	0%	13%	3%
HEHS adequately addressed cultural beliefs that can interfere with healthy eating	37%	50%	0%	0%	10%	3%
Teaching children about nutrition and healthy living should be required in all Pre-K classrooms.	73%	27%	0%	0%	0%	0%
Programs like HEHS help prepare early childhood staff to teach about nutrition and health to children and families.	70%	30%	0%	0%	0%	0%
What children eat as youngsters can impact their long term health.	80%	20%	0%	0%	0%	0%
Children need daily physical or gross motor activity in addition to movement and dance.	70%	27%	0%	0%	0%	3%
HEHS has been valuable in helping to improve the nutrition of foods served in our Center and in improving our knowledge of nutrition	63%	30%	0%	0%	0%	7%

⊕ As shown in Table 19 above, in Year 2, a substantial percentage of family/social workers expressed agreement with a wide range of statements reflective of environments, changes, curriculum, and interactions that support wellness and promote healthy eating in children.

- The way I introduce new foods can influence my students' willingness to try new foods;
 - (100%: 70% strongly agreeing; 30% agreeing)
- What children eat as youngsters can impact their long term health;
 - (100%: 80% strongly agreeing; 20% agreeing)
- Teaching children about nutrition and healthy living should be required in all Pre-K classrooms;
 - (100%: 73% strongly agreeing; 27% agreeing)
- Programs like HEHS help prepare early childhood staff to teach about nutrition and health;
 - (100%: 70% strongly agreeing; 30% agreeing)
- Children need daily physical or gross motor activity in addition to movement and dance;
 - (97%: 70% Strongly agreeing; 27% Agreeing)
- HEHS has been valuable in helping to improve the nutrition of foods served in our Center and in improving our knowledge of nutrition;
 - (93%: 63% Strongly agreeing; 30% Agreeing)
- Our students' nutrition behaviors and knowledge have improved since HEHS;
 - (90%: 37% Strongly agreeing; 53% Agreeing)
- HEHS adequately addressed cultural beliefs that can interfere with healthy eating;
 - (87%: 37% Strongly agreeing; 50% Agreeing)
- Parents seem more knowledgeable about the relationship between healthy eating and children doing well academically;
 - (83%: 33% Strongly agreeing; 50% Agreeing)

Figure 4
Family/social workers perception of benefits of HEHS on children in their classroom
(N = 30)



⊕ According to 80- over 90% of family/social workers survey respondents, as they think back over the last two years of HEHS, they report that 3, 4, and 5 year old children have and continue to benefit from HEHS by demonstrating improved knowledge, attitudes, and behaviors concerning healthy eating and exercise (See Figure 4).

⊕ More specifically these benefits included:

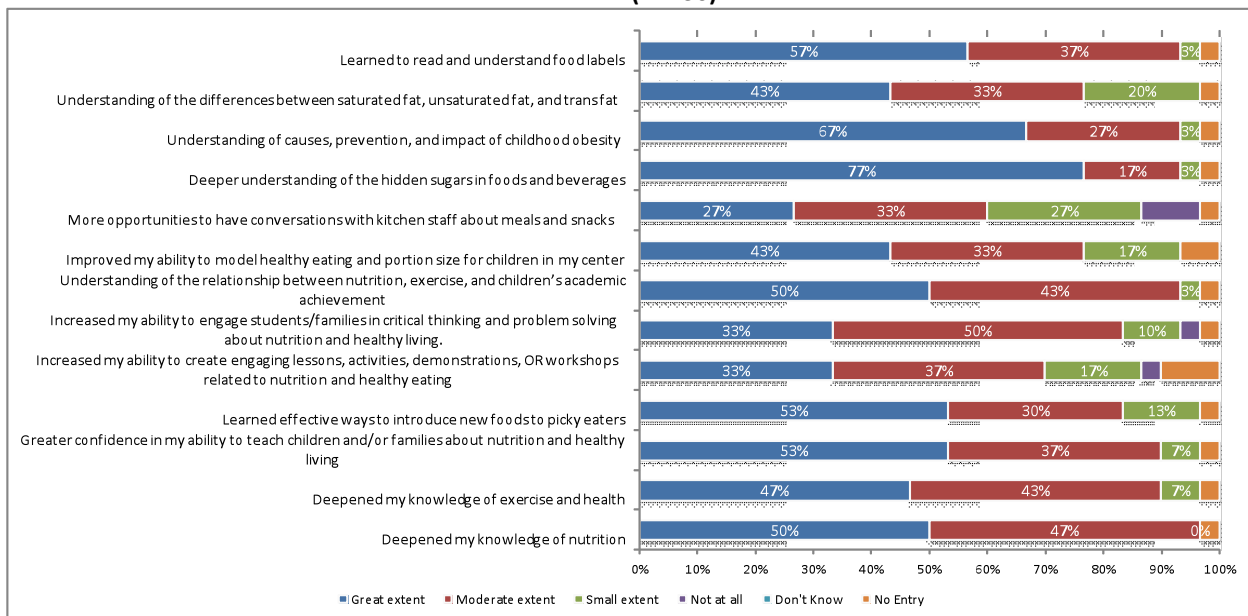
Children's improved knowledge and interest in nutrition as demonstrated by:

- Greater motivation to eat healthy food
 - (97%: 43% great extent, 47% moderate extent, 7% small extent)
- Demonstrated an increase in their knowledge of nutrition and healthy eating
 - (93%: 40% great extent, 54% moderate extent, 10% small extent)
- Become less picky and shown greater willingness to try new foods
 - (93%: 40% great extent, 40% moderate extent, 13% small extent)
- Greater interest in learning about nutrition and healthy eating
 - (93%: 43% great extent, 37% moderate extent, 13% small extent)
- Shared their knowledge about nutrition with their family
 - (93%: 33% great extent, 47% moderate extent, 13% small extent)
- Responded well to nutritional lessons being taught
 - (90%: 40% great extent, 40% moderate extent, 10% small extent)
- Talked more about nutrition and health topics

- (90%: 37% great extent, 40% moderate extent, 10% small extent)
- Expressed greater motivation to eat less unhealthy and fast foods
 - (87%: 39% great extent, 33% moderate extent, 23% small extent)
- ⊕ And
 - Increased their exercising
 - (94%: 27% great extent, 47% moderate extent, 20% small extent)

Reported Changes in personal practices by Family/social workers

Table 20
Percent of Family/social workers reporting benefits in greater understanding and practices related to nutrition/health since participating in HEHS (N = 30)



As shown in Table 20 above, the vast majority of family/social workers in Year 2 report a number of benefits in their nutrition and health related understanding and practices since participating HEHS began:

- ⊕ Ninety percent (90%) or more of family/social workers reported the following benefits to a great or moderate extent²⁶:
 - Deepened my knowledge of nutrition (97%)
 - Understanding of the relationship between nutrition, exercise, and children's academic achievement (93%)
 - Deeper understanding of the hidden sugar in foods and beverages (93%)
 - Deepened my knowledge of exercise and health (90%)
 - Greater confidence in my ability to teach children and/or families about nutrition and healthy living (90%)
- ⊕ Only sixty percent (60%) of family/social workers reported the benefits:
 - That more opportunities to have conversations with kitchen staff about meals and snacks (27% great extent, 23% moderate extent)

²⁶ Adding results for benefiting a *small extent* would bring all benefits to over 90% for classroom respondents.

REPORTED CHANGES IN PERSONAL NUTRITION/HEALTH PRACTICES BY FAMILY/SOCIAL WORKERS

Table 21
Percent of Family/social workers Reporting Changes in Personal Nutrition/Health Practices Since Participating in HEHS (N=30)

	Much more frequently	More frequently	Slightly more frequently	No change, remained the same	Less often	No Entry
	%	%	%	%	%	%
Learning and reading more about nutrition and healthy living	40%	40%	13%	0%	0%	7%
Trying a variety of healthy foods	47%	33%	17%	0%	0%	3%
Cooking at home more often	40%	23%	20%	10%	0%	7%
Exercising more	27%	30%	27%	13%	0%	3%
Talking or thinking about the nutritional value of foods I eat and serve my family	50%	40%	7%	0%	0%	3%
Checking food labels on cans and packages	43%	37%	17%	0%	0%	3%
Shopping at green grocery or farmer's markets	43%	27%	13%	10%	0%	7%
Using correct portion size when I eat	23%	43%	27%	3%	0%	3%
Making meals with my family	27%	27%	20%	17%	0%	10%
Drinking more water and less soda/sugary drinks	37%	40%	13%	7%	0%	3%
Avoiding fast food restaurants	30%	27%	27%	0%	7%	10%

In Year 2, as shown in the Table 21 above, family/social workers have reportedly continued to improve the frequency (much more, more, and/or slightly more) of a variety of healthy eating and wellness practices in their personal lives, compared to before they participated in HEHS.

- ⊕ For over or close to 90% of family/social workers the health and nutrition practices reported to have increased include:
 - Ninety seven percent (97%) reported
 - Trying a variety of healthy foods (47% much more frequently; 33% more frequently; 6% slightly more frequently)
 - Talking or thinking about the nutritional value of foods I eat and serve my family (50% much more; 40% more; 7% slightly more)
 - Checking food labels on cans and packages (43% much more; 37% more; 17% slightly more)
 - Ninety three percent (93%) reported
 - Learning and reading more about nutrition and healthy living (40% much more; 40% more; 13% slightly more)
 - Using correct portion size when I eat (23% much more; 43% more; 27% slightly more)
 - The practice that changed the least was 'making meals with my family' (73%: 27% much more; 26% more; 20% slightly more)

REPORTED BENEFITS TO FAMILIES AS PERCEIVED BY FAMILY/SOCIAL WORKERS

Table 22

Family/social workers Reported Benefits to Families in Nutrition/Health Practices Since Participating in HEHS (N=30)

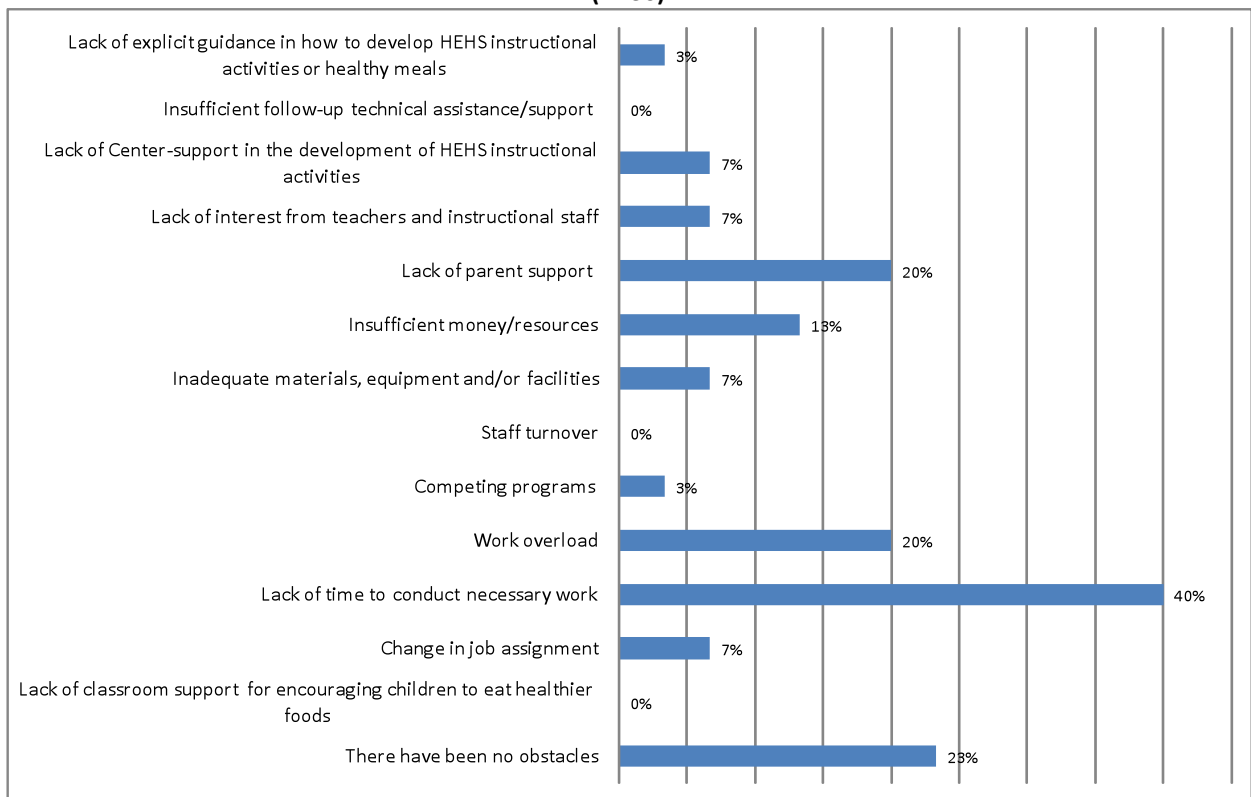
	Great extent	Moderate extent	Small extent	Not at all	Don't Know	No Entry
	%	%	%	%	%	%
Demonstrated an increase in their knowledge of nutrition and healthy eating	20%	63%	13%	0%	0%	3%
Greater motivation to eat healthy foods	27%	60%	10%	0%	0%	3%
Reported or shown greater willingness to try new foods	17%	70%	10%	0%	0%	3%
Greater interest in learning about nutrition and healthy eating.	20%	70%	7%	0%	0%	3%
Reported an increase in cooking at home, or making meals together as a family	20%	53%	17%	0%	7%	3%
Expressed greater motivation to eat less unhealthy and fast foods	20%	53%	17%	0%	7%	3%
Reported or shown an increase in their exercising	20%	50%	20%	0%	7%	3%
Talked more about nutrition and health topics	17%	50%	30%	0%	0%	3%
Responded well to the nutritional workshops family/social workers have provided	30%	47%	13%	0%	3%	7%

- Family/social workers reported a range of perceived nutrition and wellness benefits to families over the last two years of HEHS:
 - ⊕ Ninety seven percent (97%) of family/social workers perceive parents in their center have shown improvement to a great/moderate/small extent in: (See Table 22 above)
 - Greater motivation to eat healthy foods
 - Demonstrated an increase in their knowledge of nutrition and healthy eating
 - Reported or shown greater willingness to try new foods
 - Greater interest in learning about nutrition and healthy eating.
 - Talked more about nutrition and health topics
 - ⊕ Ninety percent (90%) of family/social workers perceive parents in their center have shown improvement to a great/moderate/small extent in:
 - Reported an increase in cooking at home, or making meals together as a family
 - Expressed greater motivation to eat less unhealthy and fast foods
 - Reported or shown an increase in their exercising
 - Responded well to the nutritional workshops family/social workers have provided

SUPPORT, OBSTACLES, AND CHALLENGES PERCEIVED BY FAMILY/SOCIAL WORKERS

- Family/social workers noted similar obstacles and challenges to those noted by administrators in implementing HEHS. Similar to administrators, family/social workers indicated that more activities and effort needs to be put into gaining parent involvement and interest in relation to the goals and objectives of HEHS.
- Classroom staff survey results in response to the question, What obstacles, if any, have you experienced in implementing HEHS in your classroom suggest that lack of parent support is again the prime obstacle to implementation and sustainability (See Table 23) even while reporting perceived improvements parents have shown or reported in a variety of wellness practices (See Table 24 below).

Table 23
Obstacles reported by Family/social workers in implementing HEHS in the classroom (by percentage)
(N=30)



- ⊕ In Year 2, the greatest percentage (40%) reported lack of time to conduct necessary work; followed by;
 - There have been no obstacles (23%)
 - Lack of parent support; work overload (both 20%)
 - Insufficient money/resources (13%)
- ⊕ Ten percent or less reported:
 - Lack of interest from teachers and instructional staff; change in job assignment; lack of site support in development of HEHS instructional activities (all 7%)
 - Lack of explicit guidance in how to develop HEHS instructional activities; competing programs (both 3%)

D. KITCHEN STAFF

EMERGING OUTCOMES AND IMPACTS OF HEHS REPORTED BY KITCHEN STAFF

CHANGES TO CENTER

- The majority of responding kitchen staff perceived a variety of positive wellness- related changes, practices, and impacts to their Center over the two years since HEHS began, though in lower percentages compared to other staff. (See Table 24 below):

Table 24
Percent of Administrative Staff Perceiving Changes in Center Nutrition and Wellness Practices
(N=10)

	Strongly		Agree		Disagree		Unsure		No Entry		Total	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
The HEHS Cook Off created a team spirit of healthy eating, was informative, and fun.	4	40%	3	30%	0	0%	0	0%	3	30%	10	100%
Our Wellness Leadership Committee has taken a leadership role in modeling and teaching healthy	6	60%	2	20%	0	0%	0	0%	2	20%	10	100%
Staff have been encouraged to use healthy eating and exercise activities in their work.	5	50%	3	30%	1	10%	0	0%	1	10%	10	100%
Kitchen staff have been preparing healthier meals	8	80%	1	10%	0	0%	0	0%	1	10%	10	100%
My directors have been clear in explaining the work and importance of the Wellness Leadership	5	50%	3	30%	0	0%	0	0%	2	20%	10	100%
Classroom staff are routinely teaching lessons to children about nutrition and wellness	3	30%	4	40%	0	0%	0	0%	3	30%	10	100%
Family and Social Work staff are offering more workshops to families on healthy eating and	4	40%	2	20%	0	0%	0	0%	4	40%	10	100%
There has been increased time for children to have physical activities	3	30%	2	20%	0	0%	0	0%	5	50%	10	100%
Healthy eating and exercise have become daily topics of conversation among Center staff	6	60%	1	10%	1	10%	0	0%	2	20%	10	100%
Parents have shown positive interest in the new menus and foods their children are served.	2	20%	3	30%	0	0%	0	0%	5	50%	10	100%
We have changed birthday and social gathering policies to cut down on unhealthy foods	3	30%	3	30%	0	0%	0	0%	4	40%	10	100%
Healthy eating pictures and messages have been posted throughout our Center	3	30%	3	30%	0	0%	0	0%	4	40%	10	100%

⊕ Eighty to ninety percent of kitchen staff reported:

- Kitchen staff in our center are making healthier meals and snacks since HEHS began
 - (90%: 80% strongly agree; 10% agree)
- Staff have been encouraged to use healthy eating and exercise activities in their work
 - (80%: 50% strongly agree; 30% agree)

⊕ Sixty- to seventy percent indicated:

- Classroom staff are routinely teaching lessons to children about nutrition and wellness
 - (70%: 30% strongly agree; 40% agree)
- We have changed birthday and social gathering policies to cut down on unhealthy foods
 - (70%: 60% strongly agree; 10% agree)
- Healthy eating pictures and messages have been posted throughout our Center
 - (60%: 30% strongly agree; 30% agree)

- Family and Social Work staff are offering more workshops to families on healthy eating and wellness
 - (60%: 40% strongly agree; 20% agree)
- Healthy eating and exercise have become daily topics of conversation among Center staff
 - (60%: 30% strongly agree; 30% agree)
- ⊕ Half reported that:
 - Parents have shown positive interest in the new menus and foods their children are served
 - (50%: 30% strongly agree; 20% agree)
 - There has been increased time for children to have physical activities
 - (50%: 20% strongly agree; 30% agree)

➤ Kitchen staff responses regarding their attitude and reflect an understanding of their own and their staff's influence and the kind of environment that might support children and families engagement in activities that promote healthy eating and wellness. Some statements also inferred perceived extent of progress being made in those areas by staff members.

Table 25
Kitchen Staff Beliefs and Attitudes Related to Nutrition /Wellness and HEHS
(N= 10)

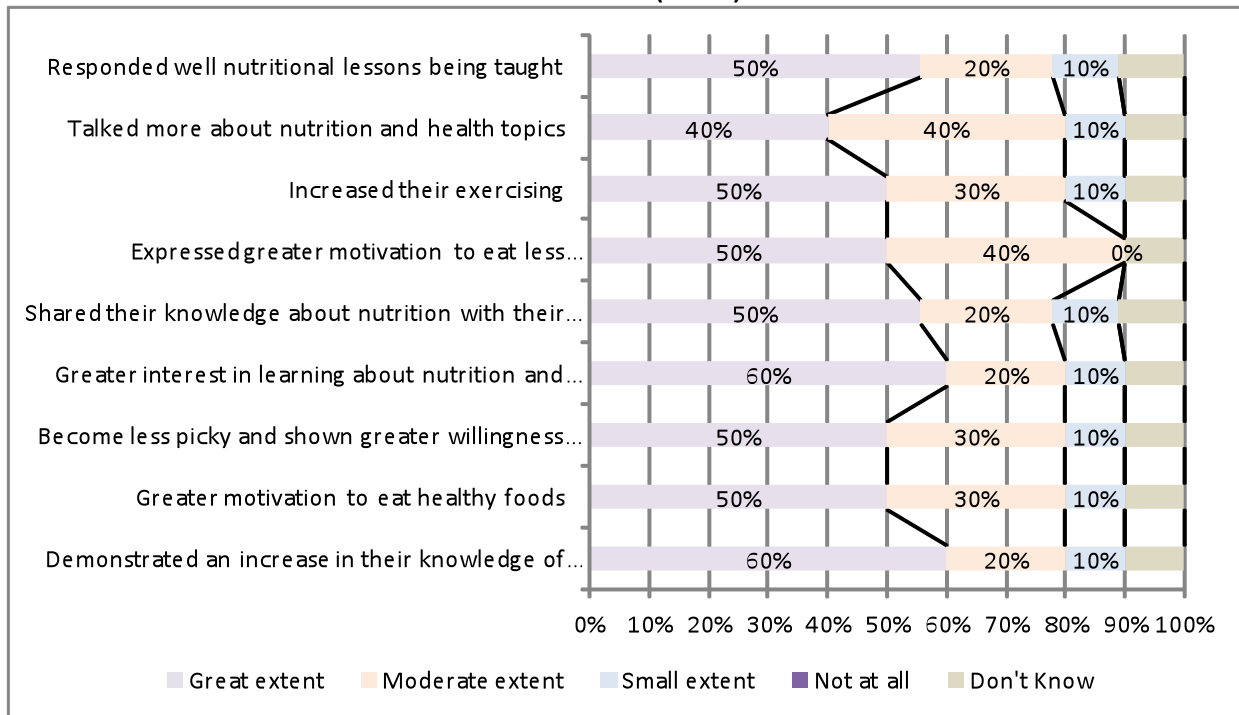
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	No Entry
The way we introduce new foods can influence our students' or families willingness to try new foods	70%	30%	0%	0%	0%	0%
Our students' nutrition behaviors and knowledge continue to improve since HEHS	30%	70%	0%	0%	0%	0%
Parents seem more knowledgeable about the relationship between healthy eating and children doing well academically	40%	50%	0%	0%	10%	0%
HEHS adequately addressed cultural beliefs that can interfere with healthy eating	40%	40%	10%	0%	10%	0%
Teaching children about nutrition and healthy living should be required in all Pre-K classrooms.	50%	40%	0%	0%	0%	10%
Programs like HEHS help prepare early childhood staff to teach about nutrition and health to children and families.	40%	50%	0%	0%	0%	10%
What children eat as youngsters can impact their long term health.	60%	30%	0%	0%	0%	10%
Children need daily physical or gross motor activity in addition to movement and dance.	50%	40%	0%	0%	0%	10%
HEHS has been valuable in helping to improve the nutrition of foods served in our Center and in improving our knowledge of nutrition	50%	40%	0%	0%	0%	10%

- ⊕ As shown in Table 25 above, similar to other staff attitudes. a substantial percentage of kitchen staff expressed agreement with a wide range of statements reflective of environments, changes, curriculum, and interactions that support wellness and promote healthy eating in children:
 - The way we introduce new foods can influence our students' or families' willingness to try new foods
 - (100%: 70% Strongly agree; 30% Agree)
 - Our students' nutrition behaviors and knowledge have improved since HEHS
 - (100%: 30% Strongly agree; 70% Agree)
 - What children eat as youngsters can impact their long term health
 - (90%: 60% Strongly agree; 30% Agree)

- Children need daily physical or gross motor activity in addition to movement and dance
 - (90%: 50% Strongly agree; 40% Agree)
- Teaching children about nutrition and healthy living should be required in all Pre-K classrooms
 - (90%: 50% Strongly agree; 40% Agree)
- HEHS has been valuable in helping to improve the nutrition of foods served in our Center and in improving our knowledge of nutrition
 - (90%: 50% Strongly Agree; 40% Agree)
- Programs like HEHS help prepare early childhood staff to teach about nutrition and health
 - (90%: 40% Strongly agree; 50% Agree)
- Parents seem more knowledgeable about the relationship between healthy eating and children doing well academically
 - (90%: 40% Strongly agree; 50% Agree)
- Interestingly, compared to other staff, kitchen staff voiced the strongest positive view that HEHS trainings adequately addressed cultural beliefs that can interfere with healthy eating
 - (80%: 40% Strongly Agree; 40% Agree)

Reported benefits of HEHS for Children by Kitchen Staff

Figure 5
Kitchen Staff perception of benefits of HEHS on children in their classroom
(N = 10)

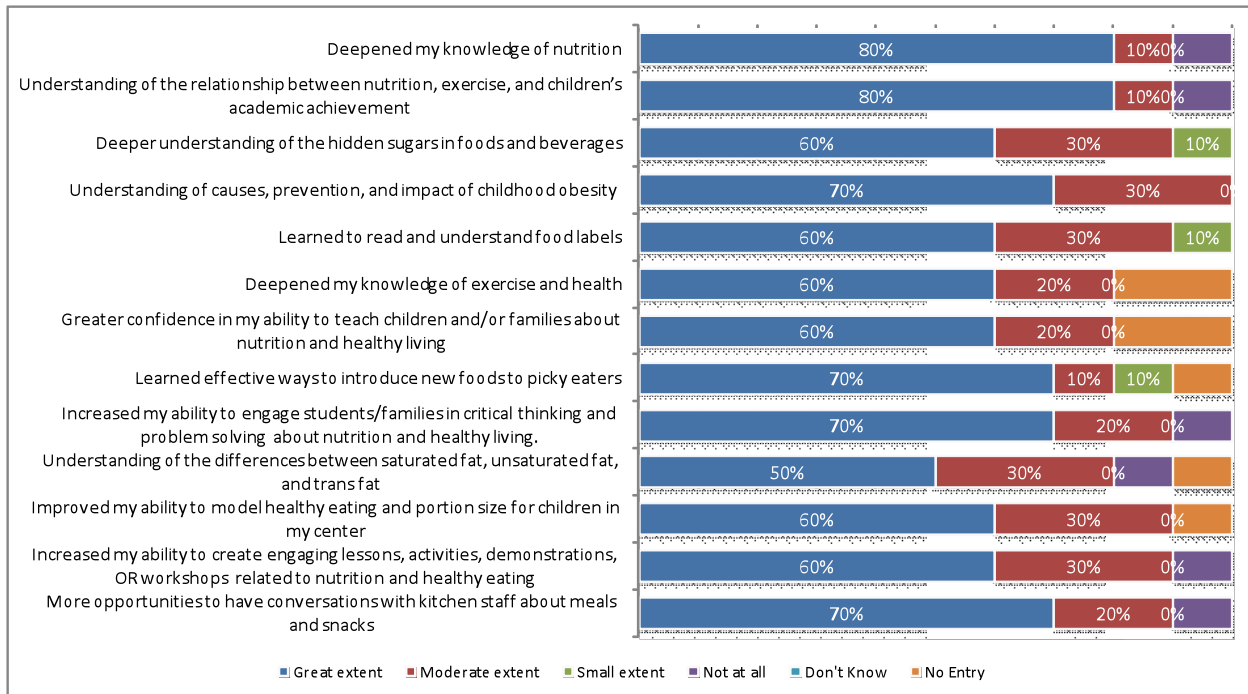


- According to kitchen staff respondents, 90%-100% report that children in their Centers have benefited from HEHS by demonstrating improved knowledge, attitudes, and behaviors concerning healthy eating and exercise (See Figure 5). More specifically children have demonstrated:
 - ⊕ Greater interest in nutritional information:
 - an increase in their knowledge of nutrition and healthy eating
 - (100%: 60% great extent; 20% moderate extent; 10% small extent)
 - responded well to nutritional lessons being taught
 - (80%: 50% great extent; 20% moderate extent; 10% small extent)
 - greater interest in learning about nutrition and healthy eating
 - (90%: 60% great extent; 20% moderate extent; 10% small extent)
 - ⊕ Improved healthy eating and wellness practices:
 - greater motivation to eat healthy foods
 - (90%: 50% great extent; 30% moderate extent; 10% small extent)
 - become less picky and shown greater willingness to try new foods
 - (90%: 50% great extent; 30% moderate extent; 10% small extent)
 - increased their exercising
 - (90%: 50% great extent; 50% moderate extent; 10% small extent)
 - talked more about nutrition and health topics
 - (90%: 40% great extent; 40% moderate extent; 10% small extent)
 - shared their knowledge about nutrition with their family
 - (80%: 50% great extent; 20% moderate extent; 10% small extent)

Reported Changes in Personal Practices by Kitchen Staff

Table 26

Percent of kitchen staff reporting benefits in greater understanding and practices related to nutrition/health since participating in HEHS (N = 10)



➤ As shown in Table 26 above, a very high percentage of Kitchen staff reported a number of benefits in their nutrition and health related understanding and practices since participating HEHS began:

- ⊕ Ninety percent of kitchen staff reported benefitting a great or moderate extent from participation in HEHS over the last two years by having :²⁷
 - Learned effective ways to introduce new foods to picky eaters (100%)
 - Deepened my knowledge of nutrition (90%)
 - More opportunities to have conversations with kitchen staff about meals and snacks (90%)
 - Learned to read and understand food labels (90%)
 - Understanding of the differences between saturated fat, unsaturated fat, and trans fat (90%)
 - Deepened my knowledge of exercise and health (90%)
 - Understanding of causes, prevention, and impact of childhood obesity (90%)
 - Greater confidence in my ability to teach children about nutrition and healthy living (90%)
 - Increased my ability to create engaging lessons, activities, or demonstrations related to nutrition and healthy eating (90%)
- ⊕ Eighty percent (80%) of kitchen staff reported the following benefits to a great or moderate extent:
 - Improved my ability to model healthy eating and portion size in the classroom (80%)
 - Greater understanding of the relationship between nutrition, exercise, and children's academic achievement (80%)
 - Increase in their ability to engage students and families in critical thinking and problem solving about nutrition and healthy living (80%)
 - Deeper understanding of the hidden sugar in foods and beverages (80%)

Table 27

²⁷ Adding results for benefitting a *small extent* would bring all benefits to over 90% for classroom respondents.

**Percent of Kitchen Staff Reporting Changes in Personal Nutrition/Health Practices Since Participating in HEHS
(N=10)**

	Much more frequently	More frequently	Slightly more frequently	No change, remained the same	Less often	No Entry
	%	%	%	%	%	%
Learning and reading more about nutrition	70%	20%	0%	10%	0%	0%
Trying a variety of healthy foods	60%	30%	0%	10%	0%	0%
Cooking at home more often	50%	30%	0%	0%	10%	10%
Exercising more	70%	10%	0%	10%	10%	0%
Talking or thinking about the nutritional value of foods I eat and serve my family	70%	10%	0%	10%	0%	10%
Checking food labels on cans and packages	70%	20%	0%	10%	0%	0%
Shopping at green grocery or farmer's markets	50%	30%	0%	10%	10%	0%
Using correct portion size when I eat	40%	40%	0%	20%	0%	0%
Making meals with my family	50%	40%	0%	10%	0%	0%
Drinking more water and less soda/sugary drinks	70%	20%	0%	10%	0%	0%
Avoiding fast food restaurants	30%	60%	0%	10%	0%	0%

➤ Even more than they had reported during focus groups in Year 1, kitchen staff reported more improvements in Year 2 in the frequency (much more, more, and/or slightly more) of a variety of healthy eating and wellness practices in their personal lives, compared to before they participated in HEHS.

⊕ Ninety percent or more of kitchen staff reported increases in the following health and nutrition practices:

- Learning and reading more about nutrition and healthy living
 - (90%: 70% much more; 20% more)
- Trying a variety of healthy foods
 - (90%: 60% much more; 30% more)
- Drinking more water and less soda/sugary drinks
 - (90%: 70% much more; 20% more)
- Checking food labels on cans and packages
 - (90%: 70% much more; 20% more)
- Making meals with my family
 - (90%: 50% much more; 40% more)
- Avoiding fast food restaurants
 - (90%: 30% much more; 60% more)

⊕ Eighty percent reported increases in the following health and nutrition practices:

- Talking or thinking more about the nutritional value of foods I eat and serve my family
 - (80%: 70% much more; 10% more)
- Cooking at home more often
 - (80%: 50% much more; 30% more)
- Shopping at green grocery or farmer's markets
 - (80%: 50% much more; 30% more)
- Exercising more
 - (80%: 70% much more; 10% more)

- Using correct portion size when I eat
 - (80% : 40% much more; 40% more)

REPORTED BENEFITS OF HEHS TO FAMILIES AS PERCEIVED BY KITCHEN STAFF

Table 28
Percent of Kitchen Staff Reporting Changes in Benefits of HEHS to Families Since Participating in HEHS (N=10)

	Great extent	Moderate extent	Small extent	Not at all	Don't Know	No Entry
	%	%	%	%	%	%
Demonstrated an increase in their knowledge of nutrition and healthy eating	50%	20%	0%	0%	20%	10%
Greater motivation to eat healthy foods	50%	20%	0%	0%	20%	10%
Reported or shown greater willingness to try new foods	60%	10%	0%	0%	20%	10%
Greater interest in learning about nutrition and healthy eating.	50%	20%	0%	0%	20%	10%
Reported an increase in cooking at home, or making meals together as a family	50%	20%	0%	0%	20%	10%
Expressed greater motivation to eat less unhealthy and fast foods	60%	10%	0%	0%	20%	10%
Reported or shown an increase in their exercising	50%	20%	0%	0%	20%	10%
Talked more about nutrition and health topics	50%	20%	0%	0%	20%	10%
Responded well to the nutritional workshops family/social workers have provided	50%	20%	0%	0%	20%	10%

- Seventy percent (70%) of responding kitchen staff reported a range of perceived nutrition and wellness benefits to families over the last two years of HEHS (with the remaining 30% responding they did not know or did not respond):
 - ⊕ Seventy percent of responding kitchen staff perceive families/parents in their center have shown improvement to a great or moderate extent in a full range of behaviors: (See Table 28 above)
 - Greater motivation to eat healthy foods
 - Reported or shown greater willingness to try new foods
 - Demonstrated an increase in their knowledge of nutrition and healthy eating
 - Expressed greater motivation to eat less unhealthy and fast foods
 - Responded well to the nutritional workshops family/social workers have provided
 - Talked more about nutrition and health topics
 - Greater interest in learning about nutrition and healthy eating
 - Reported an increase in cooking at home, or making meals together as a family
 - Reported or shown an increase in their exercising

Table 29
Percent of Kitchen Staff Reporting Center Nutrition Related Activities Since HEHS Began
(N=10)

	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	No Entry
I talk more about healthy eating with other kitchen staff	67%	22%	11%	0%	0%	0%
Center staff have been showing more appreciation for the work of the food service staff	44%	44%	0%	11%	0%	0%
Parents have been asking for the healthy recipes we have been making	33%	44%	0%	0%	22%	0%
Children have been telling food service staff that they are enjoying the new recipes	33%	44%	0%	0%	11%	11%
Teachers have been requesting assistance in cooking and making recipes with children in their classroom	44%	56%	0%	0%	0%	0%
Kitchen staff have been invited to talk with parents about nutritious cooking and changes in the menu	56%	33%	11%	0%	0%	0%
Teachers are encouraging children to try new foods	44%	44%	0%	0%	11%	0%
Teachers have invited kitchen staff to talk to children about the day's meal	44%	33%	11%	0%	11%	0%
Center Staff have been more positive about trying new recipes	33%	67%	0%	0%	0%	0%
I am proud of the work the food service staff are doing in making healthier foods	56%	33%	0%	0%	0%	11%
I feel more appreciated for my work	44%	44%	0%	11%	0%	0%
I feel more confident in knowing how to prepare good tasting, homemade healthy foods	56%	44%	0%	0%	0%	0%
I am more aware of the nutrition level of foods I prepare	44%	33%	0%	11%	0%	11%

Kitchen staff were asked a series of survey questions to gauge their perceptions of changes that have occurred since HEHS began. Survey items asked about their work and treatment as professionals, and their experiences with staff, children, and parents regarding the foods they serve, their collaborative interactions with staff related to nutrition-classroom activities, and their sense of being appreciated. In Year 1, a number of kitchen staff commented on not feeling appreciated for their work and an objective of Year 2 training was to highlight the critical role of kitchen staff in increasing access to healthy foods for Head Start children, families, and staff.

➤ Survey results suggest that there has been much positive change in kitchen staff's professional knowledge, collaboration with other staff, and sense of appreciation for their work as a result of HEHS activities and events. While professional knowledge, skills and confidence have increased in cooking homemade, good tasting foods by 100% of responding kitchen staff, there remain kitchen staff who do not feel appreciated or recognized for their contribution to improved nutritious meals, and/or may not sufficiently understand the nutritional level of foods they prepare. With that said, results are overwhelming positive as shown in Table 29:

⊕ 100% of kitchen staff report that over the last two years of HEHS:

- I feel more confident in knowing how to prepare good tasting, homemade healthy foods
- Center staff have been more positive about trying new recipes
- Teachers have been requesting assistance in cooking and making recipes with children in their classroom

⊕ Just under 90% strongly agree/agree:

- I talk more about healthy eating with other kitchen staff (89%)
- I am proud of the work the food service staff are doing in making healthier foods (89%)

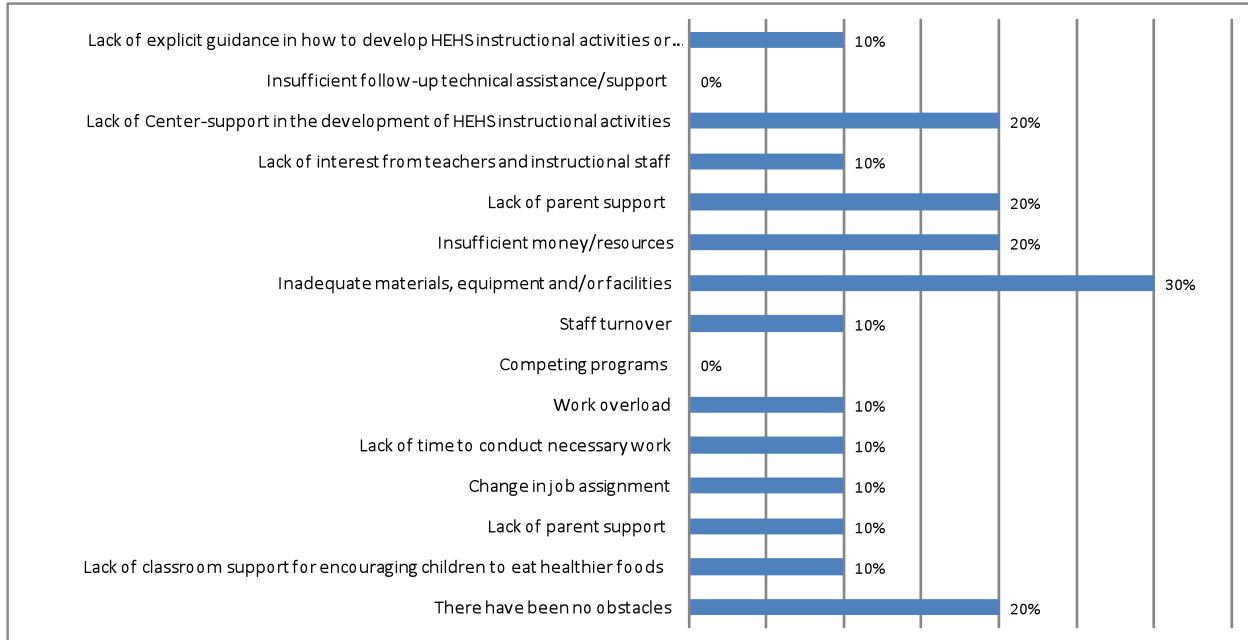
- Kitchen staff have been invited to talk with parents about nutritious cooking and changes in the menu (89%)
- Teachers are encouraging children to try new foods (88%)
- I feel more appreciated for my work (88% strongly agree/agree, however 11% strongly disagree)
- Center staff have been showing more appreciation for the work of the food service staff (88% strongly agree/agree, however 11% strongly disagree)
- ⊕ Close to 80% strongly agree/agree:
 - Children have been telling food service staff that they are enjoying the new recipes (77%)
 - Parents have been asking for the healthy recipes we have been making (77%)
 - I am more aware of the nutrition level of foods I prepare (77% strongly agree/agree, however, 11% strongly disagree, and 11% did not respond)
 - Teachers have invited kitchen staff to talk to children about the day's meal (77% strongly agree/agree, however 11% disagree and 11% don't know)

OBSTACLES, AND CHALLENGES PERCEIVED BY KITCHEN STAFF

- A very low percentage of kitchen staff identified a variety of obstacles to implementing HEHS. Of those, the highest rated obstacle was inadequate materials, equipment, and/or facilities by 30% of respondents, followed by lack of parent support, insufficient money/resources, and lack of Center support in the development of (nutrition) instructional activities, all by 20%. The only two survey items not viewed as obstacles by any kitchen staff were insufficient follow-up technical assistance/support and competing programs. (See Table 29)

Obstacles to implementing HEHS as perceived by Kitchen Staff

Table 29
Obstacles reported by kitchen staff in implementing HEHS in the classroom (by percentage)
(N = 10)



- ⊕ In Year 2, the greatest percentage (30%) reported *inadequate materials, equipment and/or facilities*; followed by;
 - There have been no obstacles (20%)
 - Lack of parent support (20%)
 - Insufficient money/resources (20%)
 - Lack of Center support in the development of HEHS instructional activities (20%)
- ⊕ Ten percent reported:
 - Work overload (10%)
 - Lack of interest from teachers and instructional staff (10%)
 - Lack of explicit guidance in how to develop HEHS instructional activities (10%)
 - Staff turnover (10%)
 - Lack of time to conduct necessary work (10%)
 - Change in job assignment (10%)
 - Lack of classroom support for encouraging children to eat healthier foods (10%)

EMERGING OUTCOMES AND IMPACTS: KITCHEN STAFF

Table 30 on the following page shows results of pre-post assessment of all 8 Center menus. Menus from Fall 2010 (pre-HEHS) and Spring 2011 (post-Year 1 HEHS) were compared using a menu rubric²⁸. The Menu Rubric was designed to assess changes in the nutritional quality of meals served at the HEHS demonstration centers (See Methodology section). The rubric included 6 criteria upon which meals were rated. Ratings were from 5-1, with 5-exemplary, 4-good, 3-basic, 2-fair, and 1-deficient.

A variety of analysis was conducted on menu scores to identify and compare possible changes in nutritional quality of menus. While additional comparisons are available, presented below are comparative results of pre or baseline menus (Fall 2010) to post menus (Spring 2012).

- ⊕ While there were differences in the extent and nature of improvement for each center, on average, overall improvements from Fall 2010 to Spring 2012 were found for:
 - Criteria 1: Variety, type and frequency of protein source:
 - In 5 out of 7 Centers, on average, positive nutritional changes were found overall in variety, type, and frequency of protein sources, with two Centers showing no change overall, and two showing a slight decrease. Although improvement was shown, the majority of Centers scored within the deficient level in the frequency of use of plant based protein sources, and uneven across Centers generally in type, variety and frequency of protein source.
 - Criteria 2: Frequency and Variety of Whole Grains
 - On average, results show impressive gains and improvement from Fall 2010 to Spring 2012 in the frequency and variety of whole grains in menus. The average overall went from the deficient - fair level (1.8) to good- basic level (3.4). All Centers rated at the fair -deficient moved to basic level and above, in several cases, jumping two levels. (Note: gains may have been greater but menu items not noted as whole grain were not scored)
 - Criteria 3: Frequency and Quality of Pre-prepared Foods
 - On average, results show improvement in from Fall 2010 to Spring 2012 in the increased frequency of making homemade foods rather than using pre-prepared foods, as well as an increase in the quality of pre-prepared foods when they are used. On average, across all sites, scores went from the basic (3.0) level to good level (3.7), with one Center increasing one full level from basic to good.
 - Criteria 4: Frequency, Type, and Preparation of Fruits and Vegetables
 - On average, results show slight improvement in the frequency, preparation and variety of fruits and vegetables served, however two Centers showed a slight decrease of 0.3 and 0.4

²⁸ During 2011-2012 the Menu Rubric was analyzed for content by nutrition experts. Based on their comments the Menu Rubric was modified, with modification in descriptors and removal of criteria about water use, as well as one sub-criteria that was changed from a bonus to a regular item. Interrater reliability was also conducted in 2011-2012 with the finding that there is a lack of consistency in the way menus are completed; some Centers consistently identify if a menu item is made from whole grain or low fat or fresh vegetables, or pre-prepared or home-made, while others do not specify, and others sometimes do and sometimes don't specify. Standard error of error for the Rubric is $\pm .5$ and in cases where the ingredients or cooking procedures were not clear (e.g., unclear if ingredient was whole grain or if the item was homemade or pre-prepared) scores were not assigned. Newly revised sub-criteria not assessed in Fall 2010- Fall 2011 Menus due to revision after Fall 2011 are not included. As shown in Table 7 above, menus from all 8 Centers showed gains on a wide variety of criteria associated with improved nutrition since HEHS was implemented. While progress has been made, there remains room for further improvement in all Centers.

(yet both remained in the good level) from Fall 2010 to Spring 2012. Though showing a slight increase, the sub-criteria with the lowest average scores (3.0 for Fall 2010 to 3.3 for Spring 2012) was 4d, the frequency of use of vegetables integrated with grain and/or protein for breakfast, lunch, and/or snacks. Overall average scores of all sub-criteria were generally in the high basic to high good range in Fall 2010 and but nonetheless showed gains after implementing HEHS. (Results need to be interpreted with care in light of a number of scores that could not be determined due to incomplete descriptions of ingredients. See Footnote)

- Criteria 5: Beverages served (frequency of juice and water served)
 - Results for the frequency of juice served generally show that one Center moved from deficient (score 1) to basic (score 3, and one Center remained at a fair level (2) in the frequency of juice served. (Some WLC members did mention that they plan or recently – after menus were collected - decreased juice and increased water, though they did not cut down on milk). Overall, there was little change from Fall 2010 to Spring 2012. (An earlier sub criteria regarding water availability was eliminated.)
- Criteria 6: Frying and Fried Foods
 - Centers had exemplary pre and post scores, showing a lack of fried foods served or the use of frying as a preparation method.

Menu Rubric Scoring	Average	Site 1	Site 3/4	Site 7	Site 8	Site 2	Site 6	Site 5
Legend: Scale of 1-5, with 1 Poor/Deficient, 2 Fair, 3 Basic, 4 Good, and 5 Exemplary								
Protein: Variety, Type, and Frequency of Protein Use								
2010 Fall 1a - Type of Protein Source for Lunch	2.6	1.5	4.0	4.0	2.0	1.0	2.0	4.0
2012 Spring 1a - Type of Protein Source for Lunch	3.0	2.0	4.0	1.0	4.0	4.0	2.0	4.0
2010 Fall 1b - Frequency of Plant Based Protein Use for Lunch	1.1	1.0	2.0	1.0	1.0	1.0	1.0	1.0
2012 Spring 1b - Frequency of Plant Based Protein Use for Lunch	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
2010 Fall 1c - Variety of Protein for Lunch	4.3	4.3	4.8	4.3	3.8	4.8	4.5	3.8
2012 Spring 1c - Variety of Protein for Lunch	4.2	3.9	4.0	4.0	4.0	5.0	4.3	4.0
2010 Fall 1d - Frequency of Meat/Poultry Based Protein for Lunch	2.3	2.0	3.0	3.0	1.0	3.0	3.0	1.0
2012 Spring 1d - Frequency of Meat/Poultry Based Protein for Lunch	2.9	2.0	3.0	3.0	2.0	5.0	3.0	2.0
2010 Fall 1e - Frequency and Type of Dairy as Protein	4.7	5.0	5.0	5.0	5.0	4.0	5.0	4.0
2012 Spring 1e - Frequency and Type of Dairy as Protein	4.6	5.0	4.0	5.0	4.0	4.0	5.0	5.0
2010 Fall 1e - Frequency and Type of Dairy as Protein								
2012 Spring 1e - Frequency and Type of Dairy as Protein (Revised)	2.1	1.0	3.0	3.0	1.0	1.0	3.0	3.0
2010 Fall Average Score	3.0	2.8	3.8	3.5	2.6	2.8	3.1	2.8
2012 Spring Average Score	3.1	2.8	3.2	2.8	3.0	3.8	3.1	3.2
Improvement/Decline	↑ 0.1	↑ 0.0	↓ -0.6	↓ -0.7	↑ 0.5	↑ 1.1	↓ 0.0	↑ 0.5
Whole Grains: Frequency and Variety Breakfast, Lunch, and Snacks								
2010 Fall 2a - Frequency of Whole Grains: Overall for Breakfast, Lunch, and Snacks	2.0	2.0	2.0	4.0	1.0	1.0	3.0	1.0
2012 Spring 2a - Frequency of Whole Grains: Overall for Breakfast, Lunch, and Snacks	3.4	3.0	4.0	4.0	4.0	3.0	3.0	3.0
2010 Fall 2b - Variety of Whole Grains for Breakfast, Lunch, and Snacks	1.6	2.7	1.8	1.0	0.8	1.8	2.3	1.0
2012 Spring 2b - Variety of Whole Grains for Breakfast, Lunch, and Snacks	3.3	3.0	3.5	3.8	3.0	3.0	4.0	2.8
2010 Fall Average Score	1.8	2.4	1.9	2.5	0.9	1.4	2.6	1.0
2012 Spring Average Score	3.4	3.0	3.8	3.9	3.5	3.0	3.5	2.9
Improvement/Decline	↑ 1.6	↑ 0.7	↑ 1.9	↑ 1.4	↑ 2.6	↑ 1.6	↑ 0.9	↑ 1.9
Homemade and Processed Foods								
2010 Fall 3a - Frequency of Homemade Foods for Lunch	4.7	5.0	5.0	5.0	4.0	4.0	5.0	5.0
2012 Spring 3a - Frequency of Homemade Foods for Lunch	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
2010 Fall 3b - Frequency of Homemade Foods for Breakfast	2.9	4.0	3.0	2.0	4.0	2.0	4.0	1.0
2012 Spring 3b - Frequency of Homemade Foods for Breakfast	3.0	4.0	3.0	3.0	4.0	2.0	3.0	2.0
2010 Fall 3c - Quality of Pre-Prepared Foods for Breakfast	1.6	2.0	1.0	3.0	1.0	1.0	2.0	1.0
2012 Spring 3c - Quality of Pre-Prepared Foods for Breakfast	3.0	3.0	3.0	3.0	3.0	2.0	4.0	3.0
2010 Fall Average Score	3.0	3.7	3.0	3.3	3.0	2.3	3.7	2.3
2012 Spring Average Score	3.7	4.0	3.7	3.7	4.0	3.0	4.0	3.3
Improvement/Decline	↑ 0.6	↑ 0.3	↑ 0.7	↑ 0.3	↑ 1.0	↑ 0.7	↑ 0.3	↑ 1.0
Fruits and Vegetables - Frequency and Types of Fruits and Vegetables								
2010 Fall 4a - Variety of Fruits for Breakfast, Lunch, and/or Snacks	4.7	5.0	5.0	5.0	5.0	4.0	5.0	3.8
2012 Spring 4a - Variety of Fruits for Breakfast, Lunch, and/or Snacks	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
2010 Fall 4b - Variety of Vegetables for Breakfast, Lunch, and/or Snacks	3.9	4.0	4.5	3.0	3.0	4.5	4.0	4.0
2012 Spring 4b - Variety of Vegetables for Breakfast, Lunch, and/or Snacks	3.9	3.0	3.0	4.0	5.0	5.0	3.0	4.0
2010 Fall 4c - Variety of Techniques Used to Prepare Vegetables and Fruits for Breakfast, Lunch, and/or Snacks	4.0	5.0	5.0	4.0	4.0	4.0	2.0	4.0
2012 Spring 4c - Variety of Techniques Used to Prepare Vegetables and Fruits for Breakfast, Lunch, and/or Snacks	4.7	5.0	5.0	5.0	4.0	5.0	4.0	5.0
2010 Fall 4d - Vegetables Integrated With Grain and/or Protein for Breakfast, Lunch, and/or Snacks	3.0	3.0	4.0	4.0	3.0	2.0	2.0	3.0
2012 Spring 4d - Vegetables Integrated With Grain and/or Protein for Breakfast, Lunch, and/or Snacks	3.3	2.0	4.0	4.0	4.0	3.0	3.0	3.0
2010 Fall 4e - Fresh vs. Canned Fruit for Breakfast, Lunch, and/or Snacks	4.3	5.0	5.0	3.0	5.0	4.0	4.0	4.0
2012 Spring 4e - Fresh vs. Canned Fruit for Breakfast, Lunch, and/or Snacks	4.4	5.0	4.0	4.0	5.0	5.0	5.0	3.0
2010 Fall 4f - Use of Canned Fruit for Breakfast, Lunch, and/or Snacks				4.0				
2012 Spring 4f - Use of Canned Fruit for Breakfast, Lunch, and/or Snacks	4.1	5.0	2.0	4.0	5.0	4.0	5.0	4.0
2010 Fall 4g - Types of Vegetables: Canned, Fresh and Frozen Vegetables for Breakfast, Lunch, and/or Snacks	4.4	5.0	5.0	5.0	3.0	4.0	4.0	5.0
2012 Spring 4g - Types of Vegetables: Canned, Fresh and Frozen Vegetables for Breakfast, Lunch, and/or Snacks	4.9	5.0	5.0	5.0	5.0	4.0	5.0	5.0
2010 Fall Average Score	4.0	4.5	4.8	4.0	3.8	3.8	3.5	4.0
2012 Spring Average Score	4.4	4.2	4.3	4.5	4.7	4.5	4.2	4.2
Improvement/Decline	↑ 0.3	↓ -0.3	↓ -0.4	↑ 0.5	↑ 0.8	↑ 0.8	↑ 0.7	↑ 0.2
Beverages								
2010 Fall 5a - Frequency of Juice Served	3.6	4.0	4.0	2.0	5.0	1.0	5.0	4.0
2012 Spring 5a - Frequency of Juice Served	3.9	4.0	4.0	2.0	5.0	3.0	5.0	4.0
2010 Fall 5b - Frequency and Availability of Water	5.0		5.0	5.0				
2012 Spring 5b - Frequency and Availability of Water								
2010 Fall 5b Type of Juice Served - Revised Pre								
2012 Spring 5b Type of Juice Served - Revised Pre	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
2010 Fall 5c - Milk	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
2012 Spring 5c - Milk	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
2010 Fall Average Score	4.3	4.5	4.5	3.5	5.0	3.0	5.0	4.5
2012 Spring Average Score	4.4	4.5	4.5	3.5	5.0	4.0	5.0	4.5
Improvement/Decline	↑ 0.1	→ 0.0	→ 0.0	→ 0.0	→ 0.0	↑ 1.0	→ 0.0	→ 0.0

- ⊕ As shown in Table 30 above, menus from all 8 Centers showed gains on a wide variety of criteria associated with improved nutrition since HEHS was implemented. While progress has been made, there remains room for further improvement in all Centers.

- ⊕ While there were differences in the extent and nature of improvement for each center, on average, overall improvements were found for:
 - Criteria 1: Variety, type and frequency of protein source:
 - In 6 out of 7 Centers, positive nutritional changes were found overall in variety, type, and frequency of protein sources, with one Center (representing two sites) showing no change overall. Although improvement was shown, the majority of Centers scored within the fair level in the frequency of use of plant based protein sources.
 - Criteria 2: Frequency and Variety of Whole Grains
 - On average, results show an increase in the frequency and variety of whole grains in menus, with one Center jumping from deficient to basic (a jump of two levels). Again, there remains much room for expanded growth in all Centers.
 - Criteria 3: Frequency and Quality of Pre-prepared Foods
 - On average, results show improvement in the decreased use of pre-prepared foods, as well as an increase in the quality of pre-prepared foods when they are used.
 - Criteria 4: Frequency, Type, and Preparation of Fruits and Vegetables
 - On average, results show improvement in the frequency, preparation and variety of fruits and vegetables served. Scores were generally strong initially, but nonetheless showed gains after implementing HEHS. (Results need to be interpreted with care in light of a number of scores that could not be determined due to incomplete descriptions of ingredients. See Footnote)
 - Criteria 5: Beverages served (frequency of juice and water served)
 - Results for the frequency of juice and water served are inconclusive due to limited information listed on the menus regarding juice and water provision.
 - Criteria 6: Frying and Fried Foods
 - Centers had exemplary pre and post scores, showing a lack of fried foods served or the use of frying as a preparation method.

E. PARENTS/GUARDIANS/FAMILIES

- Ninety percent or more of responding parents indicated they have benefitted from their Center having participated in HEHS in gaining knowledge and understanding of nutrition and wellness (See Table 31).

Table 31
Percent of Parents indicating they have benefited from HEHS participation
(N=70)

	Great extent	Moderate extent	Small extent	Not at all	Don't Know
	%	%	%	%	%
Improved my knowledge of nutrition	43%	41%	11%	0%	4%
Improved my knowledge of exercise and health	44%	44%	9%	0%	3%
Greater confidence in my ability to teach my children and family about nutrition and healthy living	47%	40%	11%	0%	1%
Learned effective ways to introduce new foods to my family	51%	34%	13%	0%	1%
Attended workshops on healthy eating and wellness in my Center	47%	37%	14%	0%	1%
Increased understanding of the relationship between nutrition, exercise, and children's academic achievement	44%	39%	13%	0%	4%
Improved my ability to model healthy eating and portion size for my children and family	47%	41%	10%	0%	1%
More opportunities to have conversations with my family about healthy eating	51%	37%	10%	0%	1%
Deeper understanding of the hidden sugars in foods and beverages	53%	33%	13%	0%	1%
Understanding of causes, prevention, and impact of	46%	43%	10%	0%	1%
Understanding of the differences between saturated fat, unsaturated fat, and trans fat	47%	39%	13%	0%	1%
Learned to read and understand food labels	46%	34%	10%	0%	10%

- ⊕ Ninety-five percent or more reported benefitting to a great, moderate, or small extent from HEHS over the last two years by having :²⁹

- More opportunities to have conversations with my family about healthy eating
 - (99%: 51% great extent; 37% moderate extent; 10% small extent)
- Deeper understanding of the hidden sugar in foods and beverages
 - (99%: 53% great extent; 33% moderate extent; 13% small extent)
- improved ability to model healthy eating and portion size for my children and family
 - (99%: 47% great extent; 41% moderate extent; 10% small extent)
- understanding of the differences between saturated fat, unsaturated fat, and trans fat
 - (99%: 47% great extent; 39% moderate extent; 13% small extent)

²⁹ Adding results for benefiting a *small extent* would bring all benefits to over 90% for classroom respondents.

- understanding of causes, prevention, and impact of childhood obesity
 - (99%: 46% great extent; 43% moderate extent; 10% small extent)
- learned effective ways to introduce new foods to my family
 - (98%: 51% great extent; 43% moderate extent; 13% small extent)
- greater confidence in my ability to teach my children and family about nutrition and healthy living
 - (98%: 47% great extent; 40% moderate extent; 11% small extent)
- attended workshops on healthy eating and wellness in my Center
 - (98%: 47% great extent; 37% moderate extent; 14% small extent)
- improved my knowledge of exercise and health
 - (97%: 44% great extent; 44% moderate extent; 9% small extent)
- increased understanding of the relationship between nutrition, exercise, and children's academic achievement
 - (96%: 44% great extent; 39% moderate extent; 13% small extent)
- improved my knowledge of nutrition
 - (95%: 43% great extent; 41% moderate extent; 11% small extent)
- ⊕ Ninety percent reported they have learned to read and understand food labels (90%: 46% great extent; 34% moderate extent; 10% small extent)

➤ Close to 100% of responding parents reported that their child(ren) have benefitted from HEHS in improved nutrition and wellness practices and knowledge, including (See Table 32):

Table 32
Percent of Parents indicating their children have benefited from HEHS participation
(N=70)

	Great extent	Moderate extent	Small extent	Not at all	Don't Know
	%	%	%	%	%
Increased knowledge of nutrition and healthy eating	50%	36%	11%	0%	3%
Greater motivation to eat healthy foods	43%	40%	11%	0%	6%
Become less picky and shown greater willingness to try new foods	30%	47%	20%	0%	3%
Greater interest in learning about nutrition and healthy eating.	36%	46%	14%	0%	4%
Shared knowledge about nutrition with our family	40%	43%	14%	0%	3%
Expressed greater willingness to eat less unhealthy and fast foods	31%	44%	20%	1%	3%
Increased time spent exercising	37%	40%	19%	1%	3%
Talked more about nutrition and health topics	41%	39%	17%	0%	3%

- Increased knowledge of nutrition and healthy eating
 - (97%: 50% great extent; 36% moderate extent; 11% small extent)
- Shared knowledge about nutrition with our family
 - (97%: 40% great extent; 43% moderate extent; 14% small extent)

- Talked more about nutrition and health topics
 - (97%: 41% great extent; 39% moderate extent; 17% small extent)
- Greater motivation to eat healthy foods
 - (94%: 43% great extent; 40% moderate extent; 11% small extent)
- Greater interest in learning about nutrition and healthy eating
 - (96%: 36% great extent; 46% moderate extent; 14% small extent)
- Increased time spent exercising
 - (96%: 37% great extent; 40% moderate extent; 19% small extent)
- Become less picky and shown greater willingness to try new foods
 - (97%: 30% great extent; 47% moderate extent; 20% small extent)
- Expressed greater willingness to eat less unhealthy and fast foods
 - (96%: 31% great extent; 44% moderate extent; 20% small extent)

EMERGING OUTCOMES AND IMPACTS

Reported Changes in Parents/Families Practices

Table 33
Changes in Personal Nutrition/Wellness Practices Reported by Parents since HEHS Began (N= 70)

	Great extent	Moderate extent	Small extent	Not at all	Don't Know
	%	%	%	%	%
Learning and reading more about nutrition and healthy living	30%	40%	24%	3%	3%
Trying a variety of healthy foods	27%	44%	23%	3%	3%
Cooking at home more often	37%	40%	19%	3%	1%
Exercising more	34%	31%	27%	4%	3%
Talking or thinking about the nutritional value of foods I eat and serve my family	31%	39%	27%	1%	1%
Checking food labels on cans and packages	30%	46%	23%	0%	1%
Shopping at green grocery or farmer's markets	23%	41%	29%	4%	3%
Using correct portion size when I eat	27%	41%	27%	3%	1%
Making meals with my family	33%	41%	23%	0%	3%
Drinking more water and less soda/sugary drinks	41%	39%	16%	1%	3%
Avoiding fast food restaurants	31%	37%	26%	3%	3%

Parent/Family/Guardians were surveyed in Year 2 regarding perceived changes to their Center as a result of HEHS activities.

- Ninety percent or more of parent/family/guardians reported a variety of positive wellness-related changes and impacts to their Center over the two years since HEHS began (See Table 33 above):
- Over ninety percent of responding parents reported improvements in a variety of their personal nutrition and wellness practices since HEHS began two years ago; Year 2 improvements are even stronger than those reported by parents in Year 1 (See Appendix x).

- ⊕ In Year 1, 6 of the 11 behaviors assessed were reported to be done more by 90% or more parents; in Year 2, all 11 behaviors assessed were reported to be done more by over 90% of responding parents:
 - Checking food labels on cans and packages
 - (99%: 30% great extent; 46% moderate extent; 23% small extent)
 - Drinking more water and less soda/sugary drinks
 - (96%: 41% great extent; 39% moderate extent; 16% small extent)
 - Making meals with my family
 - (97%: 33% great extent; 41% moderate extent; 23% small extent)
 - Talking about healthy eating and exercise
 - (97%: 31% great extent; 39% moderate extent; 27% small extent)
 - Cooking at home
 - (96%: 37% great extent; 40% moderate extent; 19% small extent)
 - Learning and reading about nutrition and healthy living
 - (94%: 30% great extent; 40% moderate extent; 24% small extent)
 - Trying a variety of healthy foods
 - (94%: 27% great extent; 44% moderate extent; 23% small extent)
 - Using correct portion size when I eat
 - (96%: 27% great extent; 41% moderate extent; 27% small extent)
 - Avoiding fast food restaurants
 - (94%: 31% great extent; 37% moderate extent; 26% small extent)
 - Exercising more
 - (93%: 34% great extent; 31% moderate extent; 27% small extent)
 - Shopping at green grocery or farmer's markets
 - (93%: 23% great extent; 41% moderate extent; 29% small extent)

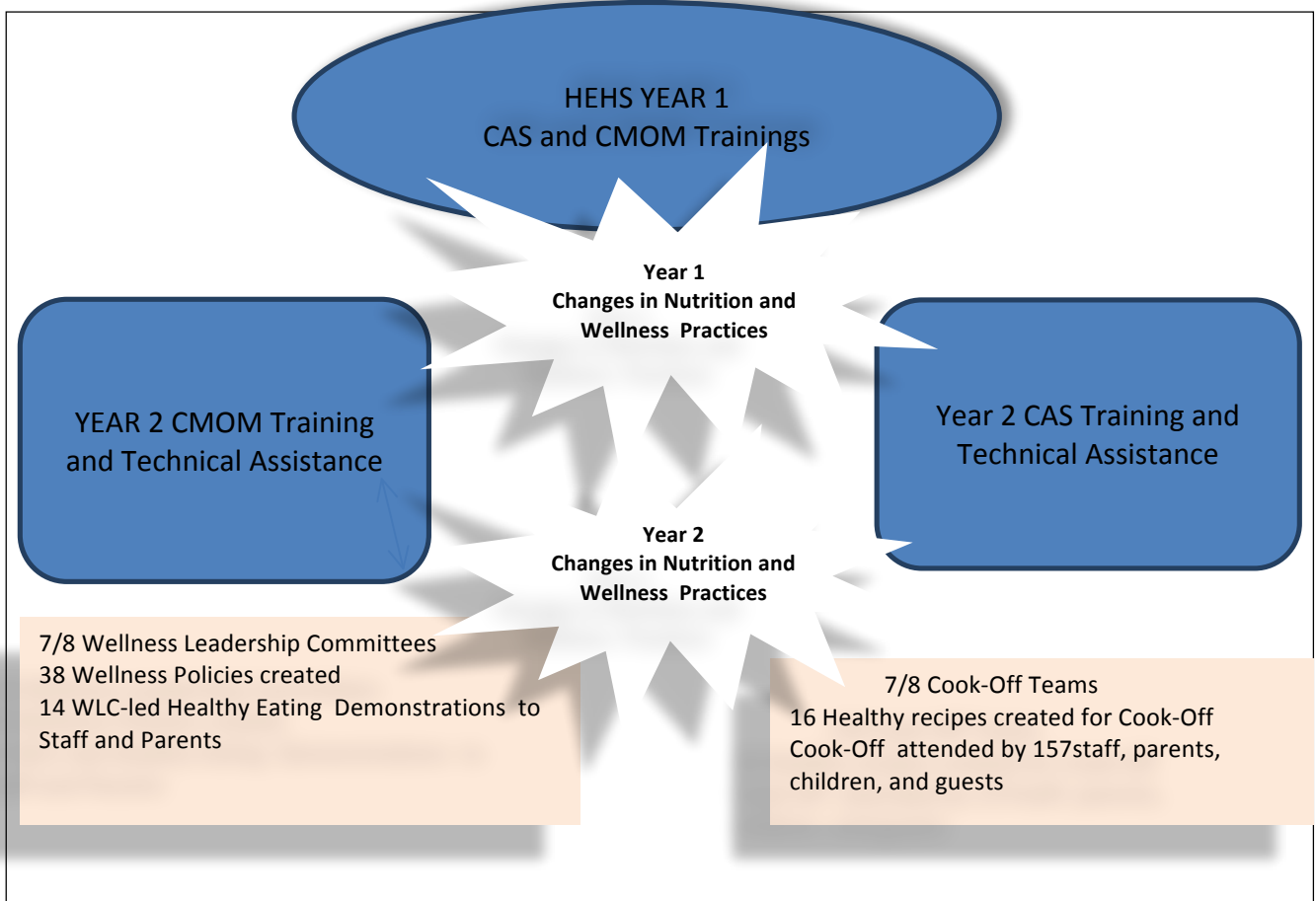
Conclusions and Recommendations

Conclusions

In its second year, UWNYP/ACS Healthy Eating for a Healthy Start Demonstration Project has continued to make impressive progress, in some ways transformational, in achieving its objectives of enhancing nutritional literacy and promoting healthy eating and wellness practices for Head Start staff, children, and families. Following its successful first year, in its second year (Year 2), UWNYP/ACS HEHS activities focused on transitioning HEHS to be a sustainable initiative that, through policy and informed practice, would enable, promote, and embed continuing access to healthy, nutritious food in Head Start and Early Education centers and ongoing engagement by children, families and staff in activities that lead to and sustain healthy eating and physical activity. Spearheading the path to sustainability and widening acceptability of healthy practices was the creation of Center-wide Wellness Leadership Committees (WLC), a cohort of leaders within each Center trained by CMOM to develop policies to promote and sustain the goals of HEHS. In addition, to sustain and extend the goal of increasing access to healthy foods, cooking workshops were provided on-site by CAS to inform the cooking practices of all staff, support the work of the WLCs, and culminate in a competitive, final Cook-Off event. Adding to the sizeable cohort of Head Start staff and families trained in Year 1 through HEHS was the substantial group that received nutrition, cooking, and leadership training in Year 2.

Figure 6 on the following page roughly illustrates the interconnection of outcomes generated through the multi-pronged inputs of CMOM and CAS trainings and technical assistance in which staff and parents had opportunities to participate in hands-on trainings. As discussed in the body of this report, Year 1 contributed motivation for participation and a foundation of changes in knowledge and practices from which to extend beyond Year 1 to accomplish outcomes of Year 2. Year 2 CAS and CMOM trainings were reported to have iteratively influenced the capacity of WLCs to accomplish a variety of tasks; specifically creating and presenting wellness policies, and taking ownership in becoming leaders in informing and promoting wellness practices in their Centers, as evidenced for example through demonstrations to staff and parents, and through the creation of healthy recipes showcased at the Cook-Off. Additional outcomes of Year 1 and 2 of HEHS are reported changes in nutrition and wellness-related practices by all stakeholder groups (as reported in Section IV), and in a sampling of actions taken by WLCs, found in Appendix B.

Figure 6
Relationship of Process and Outcomes of Trainings and Technical Assistance



A major lesson learned from Year 1, the importance of training all stakeholder groups within the 8 demonstration Centers, rather than one group or individuals, again reaped benefits in Year 2. More specifically, by having all staff exposed to HEHS trainings in Year 1 the leadership teams (WLC) that formed were comprised of a wide cohort of staff, derived from a nucleus of stakeholders within each Center. Kitchen and classroom staff, family/social workers, administrators, and parents worked in teams to create policies designed to enhance, strengthen, and ultimately sustain nutrition and wellness practices. Staff who had not necessarily worked together before learned to set committee ground rules, expect commitments, take on committee roles, and negotiate and optimize limited time to meet to work together to expand Center support for positive health messages and to formulate, develop, and communicate sustainable healthy eating and wellness policies for their site.

Through a guided and scaffolded process of professional development and technical assistance (gradual release of responsibility) the aim of creating and building the capacity of Wellness Committee members to become ambassador/leaders who knowledgeably identified Center strengths and needs, and developed wellness policies (commitments) designed to inform and promote the sustainability of HEHS objectives into practices was achieved. By the end of Year 2, WLCs at all sites had worked as a team to create an average of 5 and range of 4-8 polices per site. Based on observations and document review, all had effectively presented those polices along with their rationale to staff and parents, having learned and practiced strategies for introducing policies in ways that promoted their acceptance.

Based on focus group responses and observations, WLC members' skills and resolve in developing and creating wellness policies were facilitated through a systematic process that included 1) the utilization of wellness policy tools provided by CMOM that scaffolded their work, 2) a top-down/bottom-up approach that was grounded from the top in Head Start standards, yet bottom-up in that the policies that emerged were created at the ground or Center level based on needs that emerged from members' own assessment of those standards at their Center, 3) hands-on, task-oriented training, well facilitated by informed, trusted trainers (including CAS on-site cooking trainings). This top-down/bottom up, scaffolded process helped to 4) create ownership, investment, and identification with policies. Rather than being told policies by an external entity, the process reportedly enabled WLCs to *see for ourselves where we are at, think through their wellness goals as a team*, and then devise policies that were *logical, meaningful, and practical; ones we understand and believe in*. Such a systematic, conceptually based but flexible model reportedly enabled a logic and belief in the policies because *the policies were created by people who have to practice the policies and [we] saw the logic and value of the policies*.

WLC training benefitted from another lesson learned from Year 1 when kitchen staff from all sites received training together. Those Year 1 cross-site trainings created a hands-on, supportive peer learning community for cook staff. The same benefit appears to have held true for cross-site WLC training; after holding the first in a series of WLC meetings individually at each site to develop team vision and cohesion, the next two trainings were held at CMOM and included four WLCs each time. WLC members were unanimous in the positive influence of meeting jointly with their peers and came to recognize the work and lessons of these committees might contribute beyond just their Center. Members reported that it is vital to continue meetings with other WLCs to share ideas, provide support and energy, and help keep the momentum moving forward.

In conjunction with developing policy, training strategies were related to the goal of facilitating WLC members' capacity to model, demonstrate, and inspire parents and staff to expand their receptivity and support of positive health messages and lay the groundwork for acceptance, implementation, and sustainability of wellness policies and practices. Towards that end, CMOM's WLC trainings modeled and explicitly taught best practices of workshop presentation (e.g., eye contact, engaging all participants), while simultaneously teaching the nutrition content of the workshops WLCs would be expected to deliver. To further develop their nutrition/wellness leadership skills, WLCs practiced leading large group activities that utilized art to teach nutrition and wellness. WLC members, the majority of whom had never conducted workshops or led large group nutrition activities for parents or staff, presented hands-on nutrition demonstrations that engagingly taught over 200 attending staff and parents about the hidden sugar in beverages, and led large group activities that enhanced or refreshed participants' nutrition knowledge.

Over the two years, through HEHS trainings and events (including in Year 2, the activities of the WLC), staff members increasingly recognized the significance of their role in influencing children's health and wellbeing. The growing shift in Centers' norms - from normalcy and acceptance of bringing in fast foods and drinking sugary beverages, to resistance to trying new foods based on faulty assumptions that healthy food tastes bad - have continued to shift to *healthier* norms. Indeed, a comparison of observations conducted in Year1 and Year2 revealed a paradigm shift in the reaction to foods served at trainings and the noticeable absence of bags from fast food restaurants that were so prominent during Year 1. During Year 1, participants were hesitant and even often unwillingly to try the new, unfamiliar grains or bean dips (e.g., hummus) served at trainings. By Year 2, whether preparing the recipes at cooking trainings or being served healthy foods at WLC trainings, participants were excited to try the new recipes and foods, displaying no hesitancy, and leaving empty platters and containers of vegetable pita pizzas, salads, every variety of hummus, and homemade chips, among other foods. The *delicious and healthy recipes* created with children and showcased at the Cook-Off and the energy produced at the Cook-Off for sharing more healthy recipes reflects the changing norms; as noted at the Cook-Off, *who would have ever thought children would clamor for kale, or people would line up for quinoa*. As one member commented, the biggest surprise to her whole Center was that healthy food tastes good.

Clearly impressive progress has been made in developing a large cohort demonstrating positive shifts in their nutritional beliefs, attitudes, knowledge, and practices as a result of two years of HEHS. The transfer of knowledge into human capital has reportedly already begun to spread and be disseminated beyond the eight Centers; to Centers currently or newly associated with the demonstration sites but not part of the demonstration project, to families, friends, and church. Along with human capital, the social capital created through HEHS, so critical to a community's health and wellbeing, and referred to as an outcome in Year 1's report, has continued to diversify and grow through trusting relationships and increased access to resources and information from inside the Centers and WLCs, and outside the Centers from trusted trainers and other WLCs. The inclusive approach of training all staff in Year 1, in part enabled the inclusive leadership committees of Year 2 to again help bridge often weakly tied staff members through their work and training. The cross site trainings have also yielded bridging forms of social capital, allowing WLCs to benefit from the input, experiences, and knowledge of their cross-site peers, reportedly moving them all closer towards their goals.

Year 2's team model approach again provided a conceptual and structural model as well as a motivational structure to reinforce a culture of mutual support among colleagues' efforts towards healthy eating and exercise. Center staff and parent survey results suggest that Year 2 (and Year 1) trainings promoted active nutrition-learning and the demonstration of that learning in widespread improved and sustained personal wellness practices, the continued increase/sustaining of the use of healthy ingredients in meals served at the eight demonstration Centers, further implementation of healthy eating and cooking classroom lessons, and signs of improvement in parent interest and understanding of the rationale and value of wellness policies. The list of sample actions taken and planned by the WLCs (found in the Appendix) reflects a level of seriousness, resolve, and sense of urgency to *stop the epidemic* of diet related diseases and increase the health and wellness of children and adults. The Cook-Off and on-site cooking workshops were effective at building a sense of team spirit and fun in improving wellness and access to healthy foods.

Based on focus groups, observations, and surveys, in Year 2 again, there was widespread approval of the CMOM and CAS trainings and widespread agreement on the effectiveness of trainings, technical assistance and the Cook-Off in improving knowledge, and promoting attitudes, beliefs, and practices that positively influence children's and their own health and wellbeing. Participants responded well to the energetic, hands-on, task-oriented, supportive, and informed trainers and trainers from whom they felt respect, trust, and partnership. WLC members were enthusiastic in their endorsement of HEHS, and more specifically in the legitimacy of the committee work they performed and hands-on, task-oriented, engaging training methods through which HEHS was implemented.

With its impressive accomplishments, implementation of HEHS, however, was not without its obstacles and challenges, described in both Year 1 and Year 2 reports. Survey and focus group results indicate that even with its accomplishments there is more work to do in creating and sustaining healthy environments in all Centers and communities. An identified objective of Year 2 training was to recognize the critical role of kitchen staff in achieving the goals of HEHS. While small in number, survey and focus group results suggest there remain cook staff who do not feel appreciated for their work in preparing healthier meals, and concern has been voiced that cuts in staff due to Early Learning may decrease the amount of homemade foods and increase the use of pre-prepared foods. WLC members expressed the view that in at least three kitchens there is room for improvement. In at least one case, those having final say in creating menus have not had the benefit of HEHS training and menus are not as healthy as HEHS trained cook staff would like. Menu Rubric results show improvements as well as room for growth and a need for consistency in filling our menus. In addition, while a sizeable percentage of staff and responding parents report having a role and responsibility to ensure implementation of wellness policies, not all respondents felt that way. Parent involvement is still viewed as an obstacle to implementation as is a lack of access and affordability to healthy foods and healthy ways to prepare culturally - traditional classic recipes. Respondents also commented on the challenge of developing partnerships, an area they did not feel was sufficiently covered in trainings. Now also viewed as a prominent challenge to

sustainability is the poor nutritional quality of meals in the public schools HEHS children will eventually attend, the lack of advocacy and proposal writing skills to obtain Center funding to sustain and expand the initiative, and the need to learn new hands-on demonstrations beyond hidden sugar.

Recommendations

WLC and survey comments, anecdotal evidence, conversations with Cook-Off attendees, and observations of exchanges at WLC demonstrations suggest there are stakeholders who are invested and willing to ensure obstacles are addressed, that the work continues, and improvements to healthy practices are sustained within and beyond the Centers.

Having invested time and effort, and with a developing skill set, WLC comments suggest they, in particular, are anxious to continue their work, their training, and their newly acquired support systems of other WLCs to help them better serve their Center and community. Many of the recommendations that follow point to ways to utilize and build upon WLC members' newly developed skills, deepened nutritional knowledge, and sense of investment to become wellness ambassadors to other Centers, communities and colleagues. They also highlight the desire and value of continuing the relationships, input, and infusion of energy of working with other WLCs.

As was the case in Year 1, HEHS partners should carefully review and consider WLC- informed recommendations for utilizing the human capital and resources HEHS enabled. WLCs are again uncertain what's next for HEHS but clearly want projects to sustain professional relationships and a sense of being part of a community of learners. They suggest the provision of advocacy and proposal writing skills to help ensure adequate materials and resources to implement their planned activities, along with strategies to improve upon physical activity. They would like to learn new nutritional/wellness demonstrations and/or learn research skills so they themselves can develop additional hands-on demonstrations beyond hidden sugar. In many ways, WLC members want to be included in figuring out next steps. Such an approach reflects the successful trajectory of HEHS in which Year 2 built but expanded upon the outcomes and resources of Year 1, and indicates a belief in the burgeoning abilities of people trained through HEHS. While not discussed as a recommendation by WLC members, kitchen staff, aside from being members of WLCs, should participate in field testing the Menu Rubric not only to improve its usability and reflect their pivotal role in increasing access to healthy foods, but to expand and scaffold their training of what constitutes exemplary healthy meals. Along those same lines, recommendations also suggest that the contributions, skills, and efforts of kitchen staff be recognized professionally through a career ladder or certification.

■ Recommendations to Improve HEHS (as it was implemented)

- ⊕ Earlier awareness of HEHS rollout for Years 1 and 2 : “It would have been helpful to know the (HEHS) program goals at the beginning of last year in terms of developing a leadership committee. Some participants from the center may have used the workshops in a different way if they have this information”.
- ⊕ The trainings should introduce a discussion about the committee’s role in creating an inventory of available/affordable healthy foods in our area.
- ⊕ More information on understanding the relationship between “exercise and food”
- ⊕ Provide more structured lessons that encourage talking with the children about healthy meals at the center. (i.e.: circle time/group lessons about the day’s menu)
- ⊕ Partnerships - The committee feels that the partnership aspect of the training needed more time.
 - “.WLCs would like to receive more specific training as to the strategies and steps to creating local partnerships (“similar to the demo training”)”. In addition, the training needs to be targeted and differentiated for the specific center.

■ Recommendations to Expand and Sustain HEHS

- ⊕ WLCs meet/visit on a regular basis next year to help existing committees maintain focus and energy, learn and share ideas/problems
- ⊕ Continue to be connected with CMOM and CAS as resources for future trainings/information and to learn new demonstrations
- ⊕ Utilize existing WLC in becoming “ambassadors” or trainers for HEHS to other centers in the city. (with some additional training and time made available) and/or “Representatives from other centers could also visit our program”
- ⊕ Continue having at least one similar event (Cook-Off) each year with other committees.
- ⊕ Develop strategies to continue the committee as parents and staffing change over time
- ⊕ Create a healthy living event coordinated by the WLC where other centers, not currently involved in the program, are invited to participate. (demonstrations, cooking classes, healthy activities).
- ⊕ If HEHS is repeated, provide more detailed information at the general nutrition trainings at CMOM similar to the detailed trainings received by CAS to the staff members so they would be able to use the menu more effectively as a teaching tool in the classrooms.

■ Recommendations for Additional Training to Sustain HEHS (Continuing Goals of the WLCs)

- ⊕ Learning how to purchase healthy foods within a school or family budget
- ⊕ Advocacy and Partnerships :
 - Becoming advocates: We need to “demand more” from the center and the community. The community should have more choices of healthy food availability in the area. The committee sees themselves as an advocate to promote health-conscious food options in the local markets and restaurants. The WLC stated that they would like to receive training on how to partner with other advocacy groups to help them promote these changes in their community.
 - Learn more about how to develop partnerships in the community .
 - learn strategies on how to contact community and citywide associations that promote healthy eating. One WLC stated that they plan to contact local political officials who can support them in their effort to make the community more aware of the importance of nutrition and healthy lifestyles as well as encouraging local food outlets to carry more fresh produce and healthy food choices
 - Learn to create an inventory of available/affordable healthy foods in our area. Address the lack of available healthy and affordable food choices in the community. “...We might be doing disservice to our center and community if we introduce these new foods but do not provide them information as to where to find them in our area”. major goals is to provide more options for parents. .
- Research and Grant Writing
- ⊕ Research and writing grants to support the healthy eating and lifestyle program at the center to build sustainability.
 - Providing samples of grants and successful strategies to complete proposals.
 - Learn how to do independent research on healthy food choices and lifestyles in order to create own demonstrations.
- ⊕ Outreach Skills
 - Developing better outreach skills to involve more parents into the program.
- ⊕ Learning more in- depth how to sustain a program and deal with resistance to change. We want to learn how to create a sustained program at our head start and learn more about strategies to develop a program where we get the commitment of all staff to work together to make our center healthier.
- ⊕ Having physical activity trainings specifically for outdoor verses indoor sessions.

- Training in learning how to lose weight in a healthful way. More emphasis on physical activity/more structured physical fitness activities provided at trainings. (teachers are more physical activity based but could use more guidance/ideas to be incorporated during the day) – Additional training could also address the safety issues (properties use of equipment, correct form, understanding game rules) that are a concern during physical activity periods. Difficulty having parents participate at the open gym nights. Parents are very resistant to taking their children to the park after school.

Appendix

Appendix A

Staff Attendance and Reactions to Nutrition Information and Policies Presented at WLC Demonstrations

	WLC 1	WLC2	WLC 3/4	WLC 5	WLC 6	WLC 7	WLC 8	Total
# and Types of Staff Attending	20	15	5 Administration	25	15	14	25	119
# WLC Members Participating	5	6	5	7	5	10	3	41
Responsive to nutrition info/demo?	Yes, (Did you know segment was especially effective)	Yes, but need new demos on other foods	Yes, agreed on importance of sharing w/staff and families	Yes, demo refresher for staff; art activity showed need for more staff nutrition training	Yes (esp. to guessing questions)	Yes, refresher for most staff	Yes, very	
In agreement with Policy Changes ?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

Parent /Family/DAPC Attendance and Reactions to Nutrition Information and Policies Presented at WLC Demonstrations

	WLC 1	WLC2	WLC 3/4	WLC 5	WLC 6	WLC 7	WLC 8	Total
# and Types of Parents Attending	10 (DAPC and other parents)	12 (DAPC)	8 (parents, families, DAPC)	20 (two sessions: 12 (parents, 8 (DAPC	9 (primarily DAPC)	19 (DAPC and other parents)	9 parents and community members	87
# WLC Members Participating	5	6	6	7	6	12	4	46
Responsive to nutrition info/demo?	Yes, very	Yes, very	Yes (surprise by amount of sugar in beverages.	Yes (e.g., some were in shock at quantity of sugar in beverages)	Yes	Yes, some aware and enhanced knowledge	Yes, followed by cooking demo	
In agreement with Policy Changes?	Yes	Yes	Yes	Yes	Yes	Yes	Yes, those that were there- Will present in classrooms to get more parent input	

Appendix B: WLC Members Biggest surprises/changes

Biggest surprises/changes

- That healthy foods can taste delicious.
- The quality of the training. The ability of the trainings to keep the members of the committee focused on “learning and growing.”
- That the success of the program and the information learned was “making the program our own”. “The key for me was making it personal because I know that I have to make changes in my eating habits for long term health. The structure of the program allowed me to do this.” “How can we ask someone to make changes if we are not committed to make the changes ourselves?”
- Healthy cooking is not as expensive as was thought before the program.
- Heightened confidence in discussing nutrition with others: While attending meetings at other centers, the WLC felt comfortable in pointing out that lack of healthy food choices offered
- That this is serious
- That staff initiated joining a local gym together.
- More conversations about healthy eating among staff.
- That this year there are more staff involved in making personal changes and the extent of personal changes members have made.
- WLC as well as other staff members are already becoming more comfortable enforcing health and nutrition policies. Example: committee member pointed out to a parent that candy/goodie bags were not appropriate for birthday parties at the center. The WLC mentioned that it would be helpful to have additional discussions/ trainings on how to work with potentially negative reactions by parents to changes in health policies.
- Parents are beginning to accept and incorporate the new health policies. The staff are beginning to hear discussions from parents with their children about eating fewer sweets at home and buying less “junk food” afterschool. Parents are taking “more pride by offering to bring in fruits and vegetables” instead of less nutritious items. Parents are beginning to see themselves as “partners with the center to help transform the classroom” because of HEHS. This issue of being consistent with the health policies at the center can be a magnifying influence for parents on how they choose to make healthy decisions for their children.
- Kitchen staff have really been “leading by example”, by the healthy changes they have done with the food preparation at the site.
- ⊕ Staff are conscious about reading labels and looking at the content of foods because of the demonstrations and ongoing discussions about nutrition at the center.
- ⊕ Sense of confidence they have developed in being more creative in applying the information that they have learned in the trainings. (e.g., piñata birthday celebrations- instead of putting candy in the piñata, one Center puts pictures of fruits in the piñata. As children hit the piñata the pictures fall out, children gather them and then exchange the picture of the real fruit; creative way to introduce water by adding a slice of fruit into a pitcher of water.)
- The benefits of having a healthy competitive spirit with the “Cook-Off” helped build community and camaraderie among the wellness team. *We don’t ordinarily get to compete against other pre-K programs , so it was fun and built a great sense of spirit.*
- Importance of nutrition beyond just nutrition: *Issues that face our children that are impacted by nutrition include attention span and learning. By providing families the tools to make better food choices these trainings have pointed out that we are impacting the entire lives of the children we serve.*

Appendix C: A Sampling of Actions and Plans Taken by the WLCs

What WLCs report they have been doing since HEHS, and especially since becoming “nutrition and wellness ambassadors,” and plan to continue:

- Teaching ourselves and others that we are responsible for our health through a variety of activities, including but not limited to:
 - ⊕ Resource to the family.
 - As a teacher, influence family by teaching students about wellness and students can share what they have learned in the classroom at home.
 - As family worker- continue “direct contact with parents/guardians and provides materials and information on nutrition and exercise.
 - As committee members, we have begun to talk to parents more directly about the healthy food choices that are taking place at the center
 - As personal family member- continue to speak to our own family about nutrition
 - ⊕ Mentor to Parents and Staff:
 - Plan to meet regularly with parents to share information on nutrition and exercise as well as support staff in their efforts to promote healthy eating.
 - Continue to lead by example by ordering healthy foods for parents at meetings and orientations”.
 - Incorporate healthy eating and nutrition with the new parents starting next year.
 - Encouraging staff and families to use less sugar
 - ⊕ Expand beyond current nutrition lessons:
 - Utilize the art teacher more in the classroom in using art activities as a nutrition teaching tool.
 - Plan to create an imaginary market at the center where teachers and students can model and practice healthy food shopping
 - ⊕ “Biggest Loser” competition - staff member weight loss contest was influenced by the HEHS initiative
 - ⊕ Expand sugar demonstrations beyond staff and parents:
 - WLC was planning to present the sugar demonstration to their Board of Directors sometime in the fall
 - Develop new workshops ideas to present to the community. One WLC member has already presented hidden sugar demonstration to her church
 - ⊕ Using the new HEHS web site as a way off sharing information with other centers
 - ⊕ Increasing Access to healthy, good tasting foods
 - Forming a food co-op to test menu ideas on the staff before we give them to the children.
 - Additional focus on increasing the variety of foods offered on the menu.
 - Expanding the types of spices used in the cooking to “enhance and diversify the tastes of new foods introduced. Encouraging children to introduce and talk about nutrition with their families
 - Continue experimenting with different types of combinations of ingredients as a way of introducing healthy menu choices at the school. (i.e., couscous, quinoa, red lentils).
 - ⊕ Reinstate the Parent Nutrition Committee (staff and parents would attend nutrition meetings)
 - ⊕ Use a version of the scorecard assessment form in the future for ongoing nutrition monitoring at the center