



# National Kidney Foundation of Michigan

## PEACH Evaluation Report

---

### Year 4 United Way Social Innovation Fund Grant

**NKFM Evaluation Team:** Sarah Wesolek-Greenson, Nicole Waller, Ken Resnicow, Art Franke, Crystal D'Agostino, Robert Schwarzhaupt, Adrienne Cocci, and Nanhua Zhang

01/31/2017



## Table of Contents

• <b><u>Executive Summary</u></b>	<b><u>1</u></b>
• <b><u>Section I: Introduction</u></b>	<b><u>3</u></b>
○ Problem Definition	
○ Prior Research	
○ Program Background	
○ Program Development	
○ Contribution of the Study	
▪ Overview of the Study	
▪ Previous and Target Level of Evidence	
▪ Level of Evidence Achieved	
▪ Strengths and Limitations to the Study	
○ Research Questions	
▪ Impact Questions	
▪ Implementation Questions	
▪ Findings to Date	
• Year 1	
• Year 2	
• Year 3	
▪ Program Changes	
▪ Use of Previous Findings to Evolve Evaluation	
• <b><u>Section II: Study Approach and Methods</u></b>	<b><u>18</u></b>
○ Implementation Evaluation Design	
○ Impact Evaluation Design	
○ Sampling	
▪ Selection	
▪ Baseline Equivalence Analysis	
○ Measures and Instruments	
▪ Regie’s Rainbow Adventure Parent Surveys	
▪ Regie’s Rainbow Adventure Teacher Surveys	
▪ The NAP SACC	
▪ Healthy Families Start with You Chats	
▪ Media Toolkit Analytics	
▪ Data Collection	
• Regie’s Rainbow Adventure	
• NAP SACC and HFSY	
▪ RRA Data Collection Timing	
▪ HFSY and NAP SACC Data Collection Timing	
▪ Secondary Data Sources	
▪ Data Protocol	
• RRA Data	
• NAP SACC and HFSY Data	
○ Sample Retention and Attrition	
▪ Addressing Attrition and Treatment of Missing Data	
• <b><u>Section III: Statistical Analysis of Impacts</u></b>	<b><u>35</u></b>
○ Analysis Approach	

- Unit of Assignment and Analysis
- Formation of Matched Groups
- Analysis Model
  - Coding of Variables
  - Assumptions
  - Power Analyses
- **Section IV: Findings, Lessons Learned, and Next Steps** **40**
  - Fidelity
  - Satisfaction with Program Delivery
  - Media Toolkit
    - Monthly Trends
    - General Page Analysis
  - RRA Effect Sizes
  - Previous Program Analysis Approaches
    - Year 1
    - Year 2
    - Year 3
  - Program Implications
  - Lessons Learned and Next Steps
- **Section V: Study Logistics and Updates** **51**
  - SEP Amendments
  - IRB
  - Evaluation Staff
  - Funding
  - Current Study Timeline
  - Year 3 Study Budget
- **Appendix A: Tables and figures**
- **Appendix B: Year 3 Survey Instruments**
- **Appendix C: References**

## Executive Summary

The National Kidney Foundation of Michigan's (NKFM) Project for EARly Childhood Health (PEACH) programs are a group of initiatives focused on families with young children in low-income, vulnerable communities in Michigan. These initiatives include: Regie's Rainbow Adventure® (RRA), which provides nutrition and physical activity education to children ages 3-5, Healthy Families Start with You (HFSY), in which family members of young children are coached on making healthy lifestyle changes, Nutrition And Physical activity Self-Assessment for Child Care (NAP SACC), which promotes nutrition and physical activity environmental change within child early childhood education centers, and the Media Toolkit (MTK) which supplements RRA curriculum and promotes healthy living on a budget for early childhood families. For Year 4, programming was conducted in 8 of the United Way for Southeastern Michigan Social Innovation Fund (SIF) target regions: Northwest Detroit, River Rouge, Inkster, Southwest Detroit, Hamtramck, Pontiac, Northeast Detroit and South Oakland. During the program year 2015-2016, the following number of early childhood education centers were reached: 30 centers through RRA, 7 through HFSY, and 21 through NAP SACC, for a total of 46 different centers. Across all centers, 3,974 preschool aged children were reached with PEACH programming (2603 with RRA, 1,286 with NAP SACC, and 85 with HFSY) and 1,327 children were included in evaluation activities for RRA, specifically.

Overall, the final evaluation study aim is to investigate the relationships between PEACH programs, health behaviors, and kindergarten readiness. The Year 4 evaluation will contribute to this process by assessing both impact and implementation results of the RRA program. This report will focus on the following research questions:

### **Impact:**

- Children who have participated in RRA will have significantly higher fruit and vegetable consumption.
- Children who have participated in RRA will engage in significantly more physical activity and significantly less screen time.

### **Implementation:**

- Were the interventions implemented with fidelity?
- What types of RRA content are most liked by participants?
- How many people are reached through the various outlets of the MTK and what types of MTK content are most "liked", "shared", and "commented" on by Facebook participants?

To maximize the ability to make causal inferences about PEACH and observed outcomes, the evaluation design incorporates pre-post testing, matched comparison groups, and the triangulation of data sources. The impact evaluation draws from a quasi-experimental pre-test/post-test evaluation design where both quantitative and qualitative data were collected from parents and teachers using a Parent/Guardian Survey and Teacher/Parent Child Behavior Checklists. In order to isolate the program effect on the participants, the evaluators assigned (and when possible, randomized) centers to the comparison and implementation groups to analyze the counterfactual. To ensure that the comparison group and implementation groups were similar,

centers were matched based on sociodemographic proxies known to influence nutrition, physical activity, and kindergarten readiness, including race/ethnicity and family income. The intervention group (which we generally call the implementation group) conducts RRA between the pre and post periods while the comparison group receives a delayed intervention. The implementation evaluation design was conducted to answer questions pertaining to program fidelity, program satisfaction, and aspects of the Media Toolkit through Key Information Interviews and survey measures of fidelity and dosage of the program.

Previously, there has been no rigorous evaluation of the PEACH program. Though the PEACH programs have shown preliminary evidence with regard to impact on kindergarten readiness, this study aims to achieve a moderate level of evidence in regard to RRA. NAP SACC is an evidence-based program; however the NAP SACC and HFSY programs are seeking preliminary levels of evidence in this evaluation study, given that they have no comparison groups. The Media Toolkit is a newer program first implemented in Year 3 and has received only a year of evaluation to date, so a pre-preliminary level of evidence is sought by the evaluation.

PEACH is on target for achieving a moderate level of evidence in RRA for fruit and vegetable intake and screen time outcomes. The PEACH team calculated effect size statistics to determine if the RRA program showed a generally positive effect on the study population and that the study is in alignment with the power analysis. Low range effect sizes were seen when comparing the comparison group to the implementation group. These results illustrate that the PEACH project is making a positive effect on the study population.

The implementation analysis aimed to answer if the interventions were implemented with fidelity and pinpoint the level of satisfaction with program delivery. An average of 93% of the RRA program was completed during the intervention. Overall, the data revealed that teachers are satisfied with the program and that their students love the many different components of the program. Teachers reported that their students were able to identify and were more willing to try fruits and vegetables. Many teachers talked about Regie helping with their students' creativity, shape and color recognition, as well as communication skills. These qualitative data show how our Lay Health Educators receive the program. The implementation evaluation provides teachers with opportunities to share ideas and feedback, and NKFM evaluation staff with the ability to triangulate quantitative findings.

In year 4 we continued to employ the strategies we implemented in year 3 to better observe behavior changes. As detailed in the Year 3 Report, we maintained the usage of the redesigned teacher trainings, continued to utilize and update the Media Toolkit, and again used the passive consent forms. We also continued with a few other strategies to increase response, which included increasing incentives and NKFM staff hosting events at the centers to distribute and collect surveys.

United Way for Southeastern Michigan (UWSEM) was approved for SIF continuation funds for Year 5 and so Year 4 will not be the end of the study, as previously thought.

There was a transition in the NKFM internal evaluator position near the end of Year 4. Previous program coordinator at NKFM, Sarah Wesolek-Greenson, became the new NKFM internal

evaluator in June 2016. In Year 4, PEACH also enlisted the help of 2 key part-time staff to assist in SIF evaluation: one graduate student at the University Of Michigan School Of Public Health and a recent graduate of the University of Michigan with a Bachelor's in Social Theory and Practice.

## Section I: Introduction

The following annual report summarizes impact and implementation evaluation results of the fourth year of the Social Innovation Fund grant. This Year 4 Evaluation Report is intended to inform stakeholders of interim results.

Through the SIF initiative, PEACH strives to ensure that children are more ready to learn, parents and caregivers are more equipped to nurture children's development, and that early childhood education centers have tools to promote preschoolers' well-being. This project touches three domains of school readiness: literacy, health, and social emotional skills. These outcomes will be achieved based on three common indicators as proposed by the intermediary, United Way for Southeastern Michigan:

1. Children are ready for kindergarten;
2. Families promote literacy; and
3. Caregivers promote healthy development through one or more of the following policies: healthy meals and snacks, physical activity, and reduced screen time

### A. Problem Definition

It is clear that overweight and obesity are among the most challenging health issues of our time. Overweight and obesity are associated with adverse health consequences, such as type 2 diabetes, hypertension, hyperlipidemia, sleep apnea, and psychosocial issues even in childhood and overweight children are more likely to become obese adults (CDC, 2014). A recent MetroNet Study in Detroit reported that 48% of children were overweight or obese (BMI the 85th percentile) as were 56% of mothers and 77% of fathers (BMI 25 kg/m<sup>2</sup>) (Young, Schwartz, Monsur, West, & Neale, 2008). Unfortunately, many people are not taking the necessary steps to be healthy. A study used accelerometers to measure the physical activity levels of 247 children and found that 54.7% of children aged 3-5 years old do not engage in the recommended amount of physical activity (Pate et. al., 2004). An alarming 25% of children 2-19 years old do not regularly eat fruit, according to data from a 2009-2010 The National Health and Nutrition Examination Survey (NHANES) report (Nielsen, Rossen, Harris, Ogden, 2014). A "Vital Signs" report trends analysis on 2003-2010 NHANES data discovered that children's vegetable intake has not increased at all over the study time period (CDC 1, 2014). However, the implications of this are more than just physical.

Overweight children are more than five times as likely as their healthy counterparts to have a lower health-related quality of life (Schwimmer, Burwinkle, & Varni, 2003). Several studies found that children as young as 3 years old associate overweight children with the characteristics of being mean, selfish, stupid, ugly, dishonest, unhappy, lazy, and having few friends (Cramer & Steinwert, 1998; Brylinsky & Moore, 1994; Wardle, Volz, & Golding, 1995). As a result,

overweight children tend to withdraw from others and exhibit lower self-esteem, increased levels of fear, sadness, nervousness, and loneliness.

A child who is experiencing poor physical or mental health may not be able to concentrate or attend to tasks in preschool. If kept home to recover, he or she may miss out on key educational and social milestones. In the first study to examine health status and its effect on academic achievement among Head Start children, using data from the National Public School-Head Start Transition Demonstration Study, researchers found poor child health status to be an independent risk factor for lower academic achievement among former Head Start children as they began formal school (Spernak et al., 2006). In other words, sick, overweight, and/or sedentary children are not as ready for kindergarten as they could be.

And if children are not consuming enough fruits and vegetables, they lack the nutrients necessary for timely and adequate cognitive development. Nutrients provide the brain with building blocks that contribute to cell proliferation, neurotransmitter metabolism, the creation of enzyme systems, and a whole host of other vital functions that are essential for cognitive development and cognition (Nyaradi et al., 2013). In simpler terms, nutrition is the critical point at the intersection of the biological and nurturing factors that mediate brain growth and development (Rosales, Reznick, Zeisel, 2009). Cognitive development in preschoolers is predictive of later school achievement (Rosales, Reznick, Zeisel, 2009). Not surprisingly, two notable research studies observed children's dietary behaviors and discovered that children who ate higher amounts of fruits and vegetables were more likely to score higher on academic performance measures (Florence, Asbrige, Veugelers, 2008; Neumark-Sztainer et al., 1996).

The PEACH programs aim to increase healthy behaviors that have been shown to improve academic outcomes. These behaviors will be evaluated alongside externalizing behaviors in the classroom and at home, which the PEACH evaluation team defines as factors that play an essential role in a child's kindergarten readiness. In addition, family members' health behaviors and early childhood education providers' practices and policies will be evaluated as the home and school are both dimensions of a larger system of a child's behavioral choices.

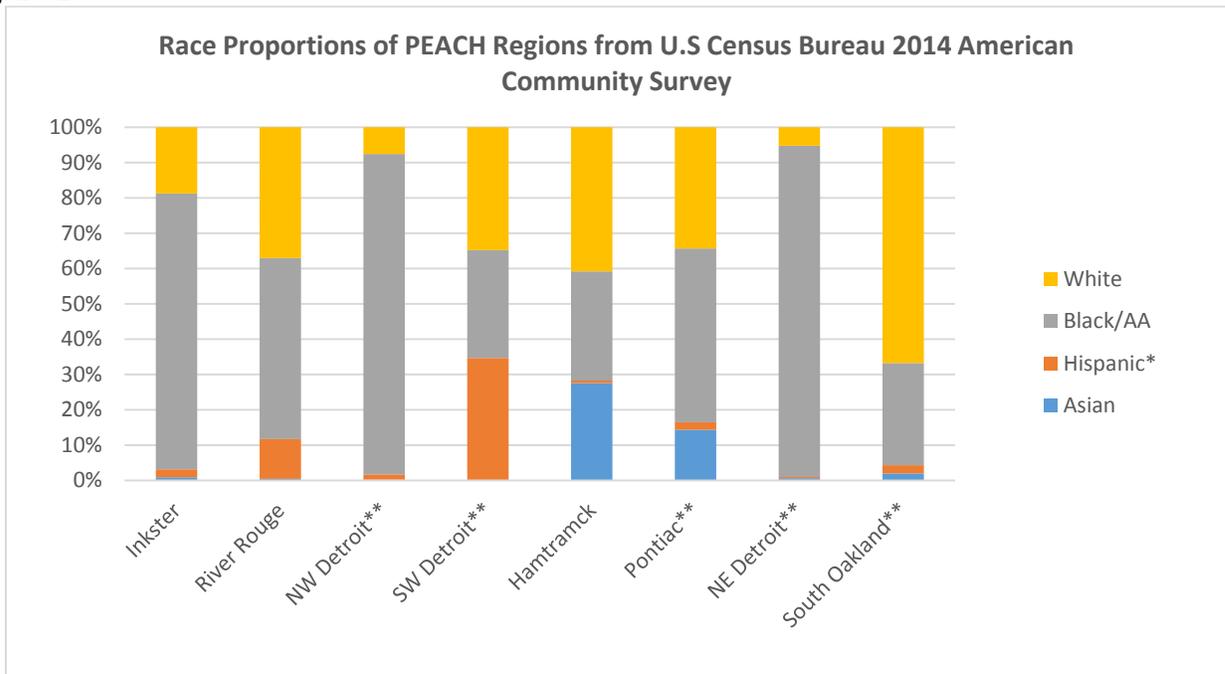
## B. Prior Research

Considerable research corroborates the importance of proper nutrition, adequate physical activity, and access to basic primary care for healthy physical, cognitive, and emotional development among children (Ginsburg et al., 2007; O'Conner et al., 2013; Chaddock et al., 2011). Further, studies have demonstrated that overweight children have significantly lower math and reading test scores compared with non-overweight children in kindergarten (Chaddock et al., 2011). Therefore, interventions to improve levels of physical activity and proper nutrition among young children (ages 0 to 5) have great potential to create positive long-lasting impacts on children's health and academic potential (Ginsburg et al., 2007; Burdette & Whitaker, 2005). In addition, early childhood education centers have been recognized as critical, but under-utilized, settings for implementing obesity prevention programs for pre-school aged children in the U.S. (Ginsburg et al, 2007).

### C. Program Background

The following Project for EARly Childhood Health (PEACH) programs were implemented in early childhood education sites during the program year 2015-2016: Regie’s Rainbow Adventure® (RRA), Nutrition And Physical Activity Self-Assessment for Child care Centers (NAP SACC), and Healthy Families Start with You (HFSY). The following number early childhood education centers were reached this year, by program: 30 centers through RRA, 7 through HFSY, and 21 through NAP SACC. Across all centers, 3,974 preschool aged children were reached with PEACH programming (2,603 with RRA, 1,286 with NAP SACC, and 85 with HFSY) and 1,327 children were included in evaluation activities for RRA, specifically. The number of children included in evaluation activities is significantly smaller than the number of children who receive the program. This is because a random sample of children is selected for evaluation, where children who have received programming in previous years are excluded from these evaluation activities. NKFM implemented the interventions in early childhood education centers in zip codes with high African American and Hispanic/Latino and low-income families. Regions that were touched by the PEACH interventions in Year 4 were Inkster, River Rouge, Northwest Detroit, Southwest Detroit, Pontiac, Hamtramck, Northeast Detroit and South Oakland. Proportions of each region’s reported racial composition are illustrated in Figure 1 and reported median household incomes are shown in Figure 2.

**Figure 1.**

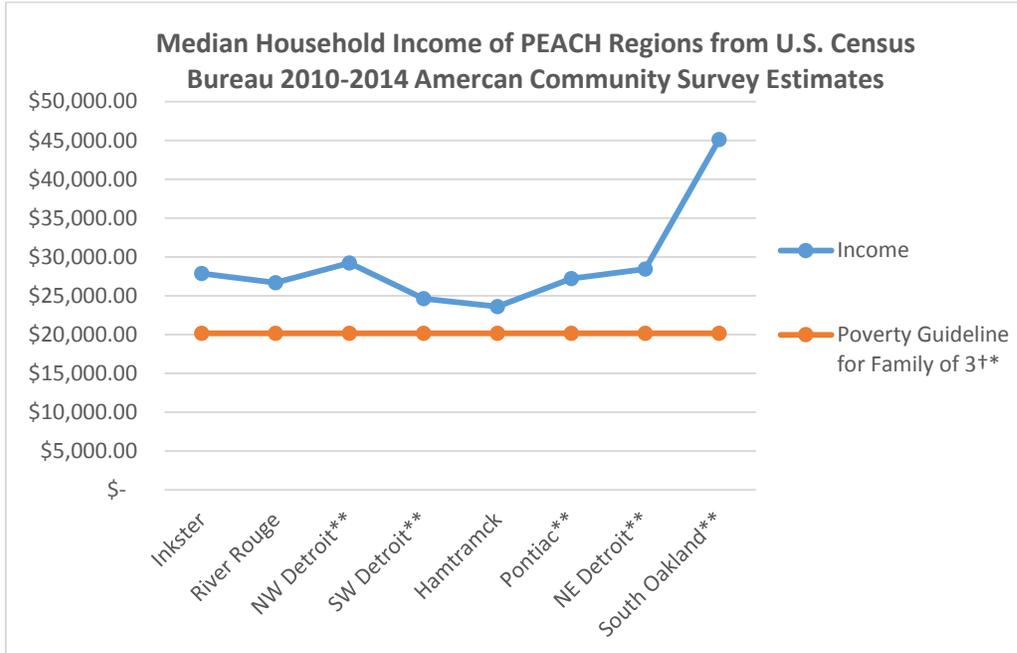


All categories show race alone or in combination with other races

\*Hispanic or Latino (of any race)

\*\*Averages from multiple Zip Codes within that Region

**Figure 2.**



† 2016 Department of Health and Human Services Poverty Guideline for Family of 3 is \$20,160.00

\* Average household size in Detroit is 2.69 people

\*\* Averages from multiple Zip Codes with that Region

### 1. Program Descriptions

Each of the three programs addresses different components of early childhood education and wellbeing while complementing each other’s target outcomes. The programs are briefly summarized below. Please refer to Figure A in Appendix A for the logic model.

#### *Regie’s Rainbow Adventure® (RRA)*

Regie’s Rainbow Adventure® is a seven week nutrition and physical activity education program geared toward 3-5 year old children in Head Start Programs or other early childhood education settings. The program follows a superhero broccoli character named Regie as he travels to islands that match the colors of the rainbow, tries fruits and vegetables of those colors and earns ‘power stripes’ from the healthy foods he eats. The books include opportunities to learn colors and new vocabulary words, practice counting, and engage in physical activity. A riddle and a song at the end of each book provide fun, age-appropriate language development skills. Each lesson is about 20 minutes long and the core program consists of reading a book, tasting a fruit or vegetable sample and sending home a parent education handout. This program is offered once a week for seven weeks. Optional activities encouraging physical activity and nutrition are included in a teacher’s implementation manual.

National Kidney Foundation of Michigan (NKFM) staff provide materials and train teachers who implement the program in their classrooms. Program materials include a set of 7 books, a Regie puppet, classroom posters, fruit and vegetable cards in English and Spanish, a teacher manual, and weekly parent handouts. The classroom posters allow students to track Regie’s travels from

week to week, color in his power stripes earned during his adventures, and also place a sticker by their own name for each week to show that they, too, joined in on Regie's Rainbow Adventure®. Nutrition education is provided to the parents as well through take-home handouts. These handouts include a recipe and a list of fruits and vegetables for each week's specific color. They also include a copy of the story that the children read with their teacher in class that day to encourage a shared reading experience with parent and child at home.

Central to the program is a food tasting of each week's themed color. Students are able to sample a fruit or vegetable in the classroom. Twice during the program, whole produce items are provided to take home with a recipe for children to share with their families. Using the recipe included on the take-home handout, families can experience together a fruit or vegetable they may not have tried or may not be likely to buy themselves. The last week of programming focuses on physical activity and screen time reduction; there is no food tasting that week.

#### *Nutrition And Physical activity Self-Assessment for Child Care (NAP SACC)*

The evidence-based NAP SACC program assesses and aims to improve the early childhood education center environment to promote healthy eating and physical activity. The program uses a tool to identify the strengths and limitations of the facility in its ability to promote nutrition and physical activity and includes components for goal setting and education. In addition, NKFM provides resources to achieve the goals set by providers. For example, if a provider set a goal to provide water to children while playing outside, NKFM may purchase a large water cooler for that site. The program consists of a pre-assessment meeting at which point a center provider completes the assessment and creates goals, a post-assessment meeting at program conclusion, and targeted assistance in goal achievement in between those assessments. NAP SACC is considered an environmental intervention.

#### *Healthy Families Start with You (HFSY)*

Healthy Families Start with You provides parents and caregivers with education sessions regarding individualized health coaching, targeted nutrition, and physical. It utilizes a lay health educator program model. After receiving a standardized training from NKFM, staff within the site conduct two health chats with participating parents/guardians. As part of these chats, parents complete a health assessment form (at two time points), set health related goals, and discuss nutrition and health messages. Group educational classes such as nutrition and physical activity demonstrations are also offered at participating sites. Through educating parents about nutrition and physical activity, HFSY aims to improve parents' behaviors so that they can ultimately serve as positive role models for their children. In this grant year, 85 parents and caregivers were reached through this program by over 20 trained lay health educators.

The evaluation design varied greatly by type of program and will be described in more detail in Section II. To evaluate the effect of RRA, early childhood education centers were selected to serve as intervention (implementation) and comparison centers. Centers serving as comparison centers received a delayed intervention so that after the evaluation activities had concluded, they then received the program. Parent, teacher, and child level information was collected. All 30 centers received programming and evaluation.

HFSY and NAP SACC were conducted at both implementation and comparison sites and the data from these programs will be analyzed at the end of Year 5 for the final report because of

their considerably smaller sample sizes. It was our original intent to use this data to compare the effects of receiving: 1) RRA, 2) RRA and NAP SACC and 3) RRA, NAP SACC and HFSY. However upon further review from CNCS, it was determined that due to the fact that there is not a comparison group for each of the treatment types, we are unable to adequately compare the effects of receiving: 1) RRA, 2) RRA and NAP SACC, and 3) RRA, NAP SACC and HFSY. HFSY was conducted at 7 centers and NAP SACC was conducted at 25 centers. Of note, NAP SACC does not require a separate comparison group because we are only evaluating the progress each site made during the course of the intervention. The comparison will be between each individual site's own pre- and post- assessments.

### *Media Toolkit (MTK)*

The Media Toolkit continues to supplement the RRA curriculum and promote healthy living and development on a budget for early childhood families. It consists of a website with free downloadable parent and teacher resources such as games, handouts, and additional curriculum components. The Media Toolkit also contains an RRA Facebook page that shares local community events, posts, and photos dedicated to nutrition, physical activity, and literacy for early childhood families. The toolkit encourages families to bring RRA out of the classroom and into the home. Data to evaluate this component include the number visits to the full website and measuring user engagement of the Facebook page throughout the year.

## 2. Program Development

The PEACH programs were developed using the Social Ecological Model and the Social Cognitive Theory as a theoretical framework. The Social Ecological Model issued by the Dietary Guidelines for Americans provides a framework for nutrition and physical activity programs. It recognizes that an individual's physical activity and food choices are impacted by individual factors, environmental settings, sectors of influence and social and cultural norms and values (USDA, 2010). The programs use this multi-level approach to communicate nutrition education messages of increased fruit and vegetable consumption and physical activity every day. Our programs reach the individual, their families, and the early childhood education environment.

Behavior change approaches used within the programs are based on Social Cognitive Theory, developed by Albert Bandura. Research in the fields of social learning/cognitive theory and social influence support the repeated use of consistent messages via multiple avenues as a way to create dialogue in the community (i.e., within the early childhood settings) and to encourage changes in behavior (Bandura, 1998). These theories emphasize the importance of providing multi-level programming and activities such as health knowledge to individuals, families, schools, and communities, in addition to developing incentive systems, self-management capabilities, and strong family support.

Since the approval of the original SEP, the project has undergone several changes which will be noted in this report.

## D. Contribution of the Study

### 1. Overview of Study

The following report summarizes the impact and implementation results of the fourth year of the Social Innovation Fund grant. See Table A in Appendix A for the full list of early childhood centers implementing PEACH programs in this grant year. The impact evaluation draws from a quasi-experimental pretest/posttest evaluation design and quantitative and qualitative data collection from parents and teachers. As seen in the logic model (Figure A in Appendix A), short term outcomes for RRA include increased exposure to fruits and vegetables and increased collaboration and partnership with early childhood education centers while long term outcomes include increased healthy food choices, increased time spent being physically active, and decreased problem behaviors in addition to several others. The implementation evaluation consists of Key Information Interviews with teachers in addition to survey measures of fidelity and dosage of the program.

Overall, the final evaluation study aim is to investigate the relationships between PEACH programs and kindergarten readiness and health behaviors. The Year 4 evaluation will contribute to this process through assessing effect sizes of confirmatory program outcomes of Regie's Rainbow Adventure<sup>®</sup>, which are fruit and vegetable consumption and physical activity. These preliminary outcome results will illuminate aspects of the study population's school readiness. Once the final sample size has been achieved at the end of Year 5, the study team anticipates achieving the target level of evidence.

### 2. Previous and Current Target Level of Evidence

Regie's Rainbow Adventure<sup>®</sup>, NAP SACC, and Healthy Families Start with You have been studied for their effects on nutrition and physical activity. The primary focus of the overall evaluation study is on PEACH's effects on kindergarten readiness. The RRA program has shown preliminary levels of evidence with regard to impact on kindergarten readiness; this study aims to achieve a moderate level of evidence for RRA in this arena. Additionally, this study aims to show a moderate level of evidence for RRA with regard to changes in nutrition and physical activity.

Given the fact that HFSY and NAP SACC do *not* have comparison groups and also lack adequate statistical power for analyses, the following questions regarding these programs are now categorized as exploratory and will fall under the preliminary evidence level: "Parents who participate in the program will display significantly higher levels of positive healthy behaviors" and "Centers that complete making improvements in nutritional and physical activity offerings will offer healthier food options and more physical activity opportunities." This re-categorization was decided upon near the end of Year 4 and its final submission actually took place in the beginning of Year 5. The MTK was introduced in Year 3 and due to its lack of formal evaluation, a pre-preliminary level of evidence is sought by the evaluation.

The study will advance the evidence base via the careful steps taken in preserving internal validity through demonstrating a strong conceptual basis; preceding observed outcomes; ruling out other explanations for outcomes; capturing statistically significant associations; and utilizing reliable and valid measures. It is important to note however that this document will only report

on program outcomes of RRA, specifically the confirmatory research questions which have previously shown preliminary levels of evidence.

### 3. Level of Evidence Achieved

Most hypothesized target variables are moving in the right direction to achieve a moderate level of evidence. The effect sizes calculated show the overall magnitude and direction that was desired based on power analyses. Efforts to maintain internal validity will continue to strengthen and support the PEACH study's level of evidence achieved. NKFM projects that this study will be able to fulfill the most recent Notice of Funds Available (NOFA) criteria for achieving a moderate level of evidence provided in the SIF Reporting Guidance: "at least one well-designed and well-implemented experimental or quasi-experimental study supporting the effectiveness of the practice, strategy, or program, with small sample sizes or other conditions of implementation or analysis that limit generalizability."

### 4. Strengths and Limitations to the Study

The current quasi-experimental design aims to assess impacts and implementation of the PEACH programs and shows strength in its steps taken to address common threats to internal validity, the accumulation of three years of pre and post cohort data, differentiation between effects of program dosage on study outcomes, and the statistical analysis of program effect sizes on the study population. Maintaining internal validity facilitates the ability to make causal references to program outcomes. Having a large dataset of pre and post time points allows the evaluation to determine baseline characteristics which also affords the ability to assess differences between study groups. Assessing effect sizes strengthens the study's ability to determine not only the statistically significant changes that appear, but also the magnitude of PEACH programs on affecting change. A limitation to the study is its low generalizability, as our population is specific to socioeconomic status, location, age, and enrollment in Head Start or Great Start Readiness Program (GSRP). It is imperative to illuminate the conditions under which PEACH functioned in evaluation dissemination.

## E. Research Questions

This project has both impact and implementation research questions for all three programs as well as the Media Toolkit. This interim evaluation report seeks to preliminarily address some of these questions, while the final report will address all research questions. Impact evaluation questions address outcome measures related to school readiness, nutrition, and physical activity. Implementation measures center around program dosage, fidelity and the evaluation of the MTK. Program satisfaction will also be measured via Key Information Interviews and web-based analytics for the MTK. Please refer to the tables below for specific question details.

## 5. Impact Questions

Impact evaluation questions center around outcomes of fruit and vegetable consumption, physical activity and screen time, and externalizing behaviors at home and in the classroom.

<b>Research Question Type</b>	<b>Method of Analysis</b>	<b>Research Question</b>
Confirmatory	<ul style="list-style-type: none"> <li>• Time component: post test analysis adjusting for baseline values</li> <li>• Comparison Groups: Intervention vs. Comparison</li> <li>• Instrument: RRA Parent Survey</li> <li>• Reporting: Analyzed for Annual and Final Reports</li> </ul>	Will children who participate in RRA have significantly higher fruit and vegetable consumption?
Confirmatory	<ul style="list-style-type: none"> <li>• Time component: post test adjusting for baseline values</li> <li>• Comparison Groups: Intervention vs. Comparison</li> <li>• Instrument: RRA Parent Survey</li> <li>• Reporting: Analyzed for Annual and Final Reports</li> </ul>	Will children who participate in RRA engage in significantly more physical activity and less screen time?
Exploratory	<ul style="list-style-type: none"> <li>• Time component: post test analysis adjusting for baseline values</li> <li>• Comparison Groups: Intervention vs. Comparison</li> <li>• Instrument: Child Behavior Checklist 1.5-5 and the Caregiver-Teacher Report Form 1.5-5</li> <li>• Reporting: Analyzed for Final Report*</li> </ul>	Will children who receive RRA programming have significantly lower externalizing behaviors (and sub scale scores within externalizing behaviors)?
Exploratory	<ul style="list-style-type: none"> <li>• Time component: post test analysis adjusting for baseline problem behaviors</li> <li>• Comparison Groups: Intervention vs. Comparison</li> <li>• Instrument: Classroom Level Problem Behavior Survey</li> <li>• Reporting: Analyzed for Final Report*</li> </ul>	Will children who receive RRA programming have significantly decreased classroom level problem behaviors?

\*Analyzed for Final Report only due to exploratory nature

<b>Research Question Type</b>	<b>Method of Analysis</b>	<b>Research Question</b>
Exploratory	<ul style="list-style-type: none"> <li>• Time component: Comparison of Pre and Post</li> <li>• Comparison Groups: None</li> <li>• Instrument: Pre and post chat instrument</li> <li>• Reporting: Analyzed for Final Report*</li> </ul>	Will parents who participate in the program display significantly higher levels of positive health behaviors?

\*Analyzed for Final Report only due to smaller sample size at time of Year 4 Report

## 2. Implementation Questions

Process measures center around program dosage, fidelity and the evaluation of the recently developed intervention, the MTK. Program satisfaction will also be measured via Key Information Interviews, web-based analytics for the MTK, as well as if and how many centers that implement The NAP SACC go on to make healthy changes in their environments.

**Table 3: Implementation Questions**

Research Question Type	Method of Analysis	Research Question
Implementation	<p>Numbers of parents and caregivers who access the web-based programming will be measured and reported based on web-based analytics</p> <ul style="list-style-type: none"> <li>• Time component: Cumulative analysis from the beginning of Year 4 to end of Year 4 (September 01-August 31).</li> <li>• Instrument: Google Analytics</li> <li>• Reporting: Annual and Final Report. Final report will show cumulative data.</li> </ul>	How many people are reached through the Media Toolkit: NKFM.org Early Childhood page?
Implementation	<p>Numbers of parents and caregivers who access the web-based programming will be measured and reported based on web-based analytics that capture page views, likes, and post engagement.</p> <ul style="list-style-type: none"> <li>• Time component: Analyzed by month, showing growth throughout Year 4 (September 01-August 31)</li> <li>• Instrument: Facebook Insights</li> <li>• Reporting: Annual and Final. Final report will show cumulative data.</li> </ul>	How many people are reached through the Media Toolkit: Regie’s Rainbow Adventure® Facebook page?
Implementation	<p>Parents and caregivers interact via comments, likes and visits with certain themes of web-based programming therefore indicating satisfaction with this type of content.</p> <ul style="list-style-type: none"> <li>• Time component: Analyzed within Year 4.</li> <li>• Instrument: Facebook Insights</li> <li>• Reporting: Annual and Final. Final report will show cumulative data.</li> </ul>	What types of MTK content are most “liked”, “shared”, and “commented” on by Facebook participants?
Implementation	<p>Teachers provide feedback in Key Information Interviews about components of the programs that are most liked and beneficial to children’s learning.</p> <ul style="list-style-type: none"> <li>• Time component: Analyzed within Year 4.</li> <li>• Instrument: Key Informant Interviews</li> <li>• Reporting: Annual and Final. Final report will show cumulative data.</li> </ul>	What types of RRA content are most liked by participants?
Implementation	<p>Teachers and center staff implemented RRA with fidelity as reported in Key Information Interviews and the Implementation Checklist.</p> <ul style="list-style-type: none"> <li>• Time component: Analyzed within Year 4.</li> <li>• Instrument: Implementation Checklist and Key Informant Interviews</li> <li>• Reporting: Annual and Final. Final report will show cumulative data.</li> </ul>	Were the interventions implemented with fidelity?
Implementation	<p>Center staff complete pre and post assessments as part of The NAP SACC and make changes to their facilities and practices based on the results of these assessments.</p> <ul style="list-style-type: none"> <li>• Time component: Comparison of Pre and Post</li> <li>• Comparison Groups: None</li> <li>• Instrument: Pre and Post Center Nutrition and Physical Activity Practices survey</li> <li>• Reporting: Analyzed for Final Report only in order to increase the sample size</li> </ul>	Will centers that complete making improvements in nutritional and physical activity offer healthier food options and more physical activity opportunities?

### 3. Findings to Date

#### *a) Year 1, Feasibility Assessment*

During the first program year (2012-2014) of Social Innovation Fund implementation and evaluation, three Project for EARly Childhood Health (PEACH) programs were implemented: RRA, HFSY and NAP-SACC. In the first year of programming, 2,239 were reached in Northwest Detroit and River Rouge, two of the ten identified service regions. In addition, 999 participants received SIF programming at Hartford Head Start which served as a pilot, who did not receive all evaluation tools, only retrospective post parent and teacher surveys and Implementation Checklist. There were 903 children participating in the program in the implementation sites (New St. Paul Head Start, Rising Advocates for Young Children, and The Guidance Center River Rouge Head Start) and 274 children in the comparison sites (The Guidance Center Ecorse Head Start, and The Children's Center Head Start Academy).

Due to logistic constraints and the desire to foster relationships with community partners, it was not feasible to randomly assign comparison groups. Therefore, propensity score matching was used based on household income, average MEAP scores, racial/ethnic comparison, center type, availability of transportation, access to local food stores, neighborhood safety, and access to parks. Several data measures were used in order to collect data for all of the outcomes measured. Data was collected from parents, teachers, and in some cases administrators. Parents completed a Fruit & Vegetable Questionnaire, Physical Activity Questionnaire, and a retrospective post parent survey. Teachers completed an Implementation Checklist, retrospective post teacher survey, as well as participated in Key Informant Interviews. Both outcome and process/implementation related data was collected and analyzed.

After the first year, promising preliminary data about the effects of Regie's Rainbow Adventure<sup>®</sup> on children and parents' health and kindergarten readiness. After the program, 94% of teachers who completed the survey agreed or strongly agreed that their students understood the benefits of eating fruits and vegetables. Improvements in parental behavior were also seen: 85% of parents agreed or strongly agreed that they ate more fruits while 79% said that they eat more vegetables. Finally, 63% of teachers agreed or strongly agreed that after implementing the RRA curriculum, their students were better prepared for the next grade level.

This first year of SIF programming was used as more of a feasibility assessment to explore which domains of kindergarten readiness to focus on and which measures were effectively capturing fruit and vegetable consumption.

#### *b) Year 2*

In the second year of programming, 4,278 children were reached in four of the identified ten regions: Northwest Detroit, River Rouge, Inkster and Southwest Detroit. The two additional regions of Inkster and Southwest Detroit were added for Year 2. A total of 43 Head Start centers were involved, 24 as implementation centers and 19 as comparison centers.

Implementation findings from Year 2 show that across all classrooms that implemented the program, 91% of the components were completed with a minimum of 74% of components and a maximum of 100% of components.

Instruments that were used to collect data on RRA comprised of a Parent/Guardian survey, height and weight measurements, Implementation Checklist, Key Informant Interviews, Teacher Classroom Level Problem Behaviors, Caregiver-Teacher Report Form (Teacher CBCL), Child Behavior Check List 1.5/5 (CBCL), and the Weekly Attendance sheet.

An optimistic outcome finding from Year 2 showed several statistically significant differences in the parents’ perceived report of child fruit and vegetable consumption in the implementation vs. the comparison group when adjusting for baseline level of the variable and clustering of children in the same classroom. Parents were asked the grade they gave their child regarding several health behaviors (Table 4). Parents could select any grade from A-F for behaviors such as physical activity/exercise, eating fruits, and drinking sweetened beverages. A grade of ‘A’, like an academic grade, was a positive score and corresponded with a healthy behavior while a grade of ‘F,’ corresponded with an unhealthy behavior.

**Table 4. Year 2 Parental Perceived Intake of Fruit and Vegetables**

<b>Comparison</b>	<b>Odds of Reporting A or Not A for Fruit Consumption Odds Ratio (95% C.I.)</b>	<b>Odds of Reporting A or Not A for Vegetable Consumption Odds Ratio (95% C.I.)</b>
Implementation vs. control	<b>1.64</b> (1.06, 2.53)*	<b>1.53</b> (1.07, 2.19)*
Implementation low dose vs. control	1.08 (0.58, 2.01)	1.14 (0.68, 1.91)
Implementation high dose vs. control	<b>1.96</b> (1.20, 3.19)*	<b>1.77</b> (1.19, 2.63)*
Implementation high dose vs. low dose	1.81 (0.96, 3.43)	1.55 (0.90, 2.69)
*p < .05		
<sup>a</sup> Odds ratio calculated based on generalized linear mixed effect model adjusting for baseline level and clustering of students in the same classroom.		
<sup>b</sup> The variable was collapsed so that grade ‘A’ was given a value of 1 and grades B-F were given a value of 0		

A significant dose effect with internalizing behaviors was found among children who received the program in Year 2. Higher attendance was significantly associated with parents reporting that their child was less likely to be unhappy at post test when controlling for race, parent education and baseline level of this variable (p value = 0.0595). A decrease in externalizing behaviors is an exploratory outcome for the SIF Project and the final report at the end of Year 5 will focus on all confirmatory and exploratory outcomes to maximize sample size and level of evidence.

*c) Year 3*

In Year 3 of programming, 2,181 children were reached in six of the identified ten regions: Northwest Detroit, River Rouge, Inkster and Southwest Detroit, Hamtramck and Pontiac. The two additional regions of Hamtramck and Pontiac were added for Year 3. A total of 38 Head Start centers were involved in PEACH as a whole. Fifteen served as implementation centers for RRA and 12 as comparison centers.

Implementation findings from Year 3 show that across all classrooms that implemented the program, 91% of the components were completed with a minimum of 50% of components and a maximum of 100% of components.

Instruments that were used to collect data on RRA comprised of the same instruments utilized in Year 2: The Parent/Guardian survey, height and weight measurements, Implementation Checklist, Key Informant Interviews, Teacher Classroom Level Problem Behaviors Survey, Caregiver-Teacher Report Form (Teacher CBCL), Child Behavior Check List 1.5/5 (CBCL), and the Weekly Attendance sheet.

**Table 5. Baseline Adjusted Posttest Effect Sizes for Year 3**

Variable Name	Variable Description	Comparison			Implementation			Pooled SD	Cohen's d
		Mean	SD	n	Mean	SD	n		
Amt_Fru	Servings Fruit	0.01	1.22	167	0.18	1.12	189	1.16	0.14*
Amt_Veg	Servings Vegetable	0.01	1.08	167	0.21	1.08	189	1.08	0.18*
FVComposite	Total fruit and vegetable, plus up to one serving juice	0.02	2.04	167	0.40	1.96	189	2.00	0.19*
Totaltvhrs	Total hours watching TV	0.18	8.04	149	-0.76	6.55	164	7.29	0.13*
Totalgame	Total hours video games	1.87	9.48	138	-1.25	7.20	156	8.35	0.37**
Totalscreentime	Total screen time hours	2.07	15.21	137	-2.29	10.62	151	13.00	0.34**
PA_week	Total hours of physical activity	-0.31	9.61	146	0.90	8.44	153	9.03	0.13*

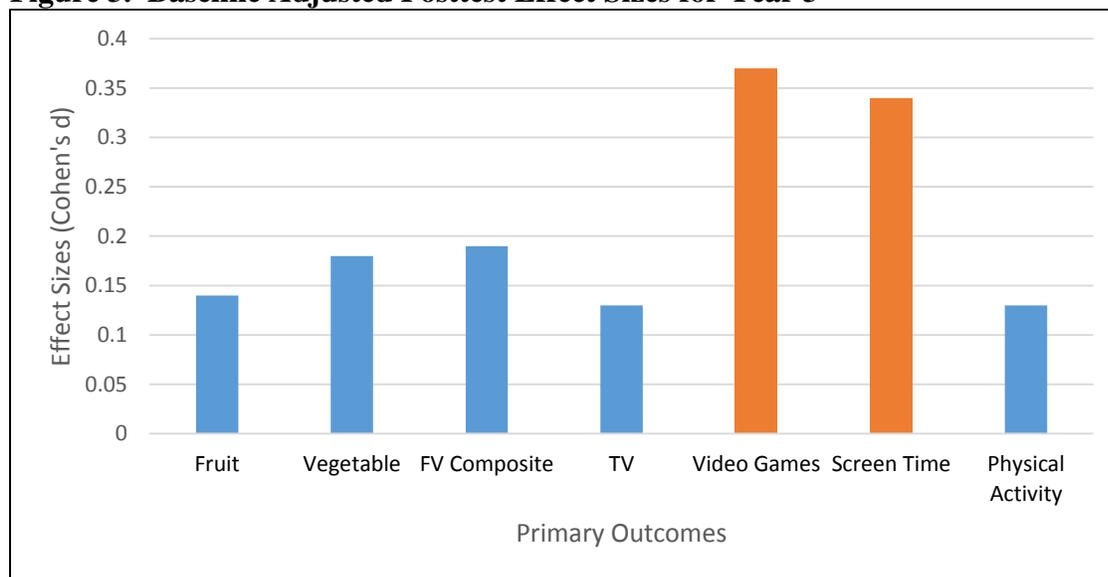
\*Low-range program effects

\*\*Mid-range program effects

As shown in Table 5 above and Figure 3 below, low- and mid-range posttest effect sizes were seen when comparing the comparison group to the implementation group. The greatest effects were seen in reducing total hours spent playing video games and total screen time hours. Vegetable intake effects increased more than fruit intake. There was a slight increase in effects of total fruit and vegetable consumption over those in the individual fruit and vegetable consumption outcomes.

These results illustrate that the PEACH project is having a positive effect on the study population. It was ethically important to the evaluation team to determine there were no negative effects. All effects were demonstrated in the appropriate direction (such as decreased screen time and increased fruit intake). Given these positive results, the evaluation team is confident that once the final sample has been reached, PEACH will be able to report significant p-values of program effects on these confirmatory outcomes.

**Figure 3. Baseline Adjusted Posttest Effect Sizes for Year 3**



#### 4. Program Changes

The Media Toolkit program component experienced a major change from Years 1 and 2 to Year 3. Years 2 and 3 were spent planning and developing the MTK. In NKFM launched the MTK in Year 3 by posting resources for teachers and parents on the NKFM website at [www.nkfm.org/regierainbow](http://www.nkfm.org/regierainbow) and developing the Regie Rainbow Facebook ([www.facebook.com/regie.rainbow](http://www.facebook.com/regie.rainbow)). This component was then added to RRA teacher trainings at implementation sites. THE MTK was continued throughout Year 4.

One component of the RRA program is fruit or vegetable tastings within the classroom. In previous years, children received tasting bags of the item tasted to take home to share with their family six of the seven weeks of the program. Parents receive a handout with storage and preparation tips for the produce, and an easy family friendly healthy recipe. In an effort to increase the sustainability of the program and program replication, NKFM decreased the number of tasting bags that are sent home with the child from six to two in Year 3, which take place on survey completion event days. Typical weekly sampling within the classroom continued. This practice has continued throughout Year 4.

Several programmatic strategies were employed in Year 3 to increase the likelihood of observing behavior change. First, changes were implemented to the actual RRA program, including a redesign of teacher trainings, increased efforts of data dissemination to teachers, and updated RRA story books and parent handouts. Evidence of these changes were submitted in the Year 3 Report. These updates and changes were maintained in Year 4.

Changes specific to Year 4 include changing the type of incentive provided for parents filling out the follow-up surveys. Previously we only gave gift cards for Pre Paloozas and would give parents at implementation sites a MyPlate puzzle at Post Paloozas and comparison site parents a flashlight pen at Post Paloozas. In Year 4 we began giving parents a gift card at Post Palooza

events at both comparison and implementation sites. We were also able to provide all RRA parent surveys and parent handouts in Arabic in Year 4. Southeast Michigan has a large population of Middle Eastern and Arab-American families, many of whom speak English as a second language or do not speak, read, or write in English at all. We are able to better serve this special population now that we have Arabic materials.

Lastly, instead of holding just one, large raffle event for all parents after each evaluation time point (one raffle event after pre-program surveys are turned in, one raffle event after post-program surveys are turned in), we divided up the amount of money dedicated to the raffle event and created smaller raffle events for each partner site, allowing for parents to have a greater chance of winning.

#### 5. Use of Previous Findings to Evolve Evaluation

For Year 3, changes to evaluation efforts were made in order to increase the response rate and validity of the data. These changes continued in Year 4, due to their effectiveness in improving response rates. NKFM staff hosted events at the early childhood education center during child pick up and drop off where they asked parents to complete surveys, offer incentives, distribute health information and provide a food sample. The teachers were still responsible for distributing surveys to parents not reached at these events but it removed a large portion of the work they did in Year 2. In Year 1 and Year 2, teachers were responsible for asking all parents of children in their classroom to complete surveys. In Year 3, a smaller random sample of 50 children per center was selected for survey distribution with a target of 30 completed surveys by both parents and teachers. We continued with this smaller random sample of 50 children per center in Year 4 as well. This was a change from Year 2 where we did not have a sample of children, except for a subsample of 20 children for the Child Behavior Checklist instrument. The addition of a random sample and elimination of a small subsample for the instrument were implemented to increase response rates.

More substantial teacher and parent incentives in the form of gift cards were distributed in Year 3 and again in Year 4. There was hope that the ability to tell parents that they will receive an incentive when returning a survey would increase the likelihood that parents return completed surveys. Two of the survey instruments were also slightly modified. The Implementation Checklist was changed in order to collect more accurate data. Language was added to this survey to decrease social desirability effects and to encourage teachers to report the actual percentage of the program they were able to implement.

In addition, in response to parent feedback, positive behaviors were added to the CBCL 1.5/5 to increase the likelihood that parents will complete the survey. The original version of this survey only includes negative behaviors. Teachers reported in Key Informant Interviews in Year 2 that these negative items frustrated parents. By adding items such as ‘plays well with others’ and ‘does something you are proud of’, parents were given an opportunity to also describe positive characteristics about their child. These changes were maintained in Year 4 programming.

The total average response rate for child level data did indeed increase following the evaluation changes to Year 3, as illustrated below:

Program Year	Pre Survey Response Rate	Post Survey Response Rate
Year 2	40%	33%
Year 3	61%	43%
<b>Difference</b>	<b>21% increase</b>	<b>10% increase</b>

Due to staffing changes in the main evaluator role as well as in the supporting data entry and evaluation roles, general survey response rates were not tabulated during Year 4. However, given that Year 4 produced the largest number of participants to date (N=855, compared to N = 718 in Year 3), we can cautiously assume that pre and post survey responses remained at a similar rate to those in Year 3.

Key Informant Interview methodology also changed in Year 3. In Year 2, these interviews were conducted with all intervention sites (implementation centers). However, information collected from groups showed content saturation and so in Years 3 and 4, only new implementation centers were included in these efforts.

In an effort to maintain a true quasi-experimental design with implementation and comparison groups, the MTK was only promoted within implementation sites and during regular RRA programming within comparison sites only after evaluation was completed.

A final change to the evaluation process in Year 3 was the use of passive consent forms instead of active consent forms. This requires parents to sign the passive consent form only if they do not consent to their child’s data being used in the SIF study. When the consent form is not signed and given back to NKFM, consent is assumed. If parents did not consent their child for the study, NKFM did not use any of the data from the individual level survey instruments including those completed by teachers about individual children. However, NKFM still collected the height and weight data of all children as this practice is a part of regular programming at the center. This practice was adopted in Year 3 to reduce the amount of paperwork required for parents to send in to participate in the study. For more detailed information on this, please refer to an amendment to the SEP that was sent in June 2015. The practice of passive consent forms was again utilized in Year 4.

In contrast to prior years, height and weight data was not collected in Year 4. BMI is no longer a component of PEACH’s SIF evaluation focus. An SEP amendment with research questions was submitted in September 2015.

## Section II: Study Approach and Methods

The Year 4 SIF evaluation focuses on both impact results and implementation results. Both are included in the evaluation to illuminate how the study population received the programs as well as how the programs left an impact on participants in regard to kindergarten readiness. PEACH has taken careful steps in order to retain internal validity by addressing these common threats (Grembowski, 2001):

- *History*: The use of comparison groups represents a key strategy for minimizing threats to history. By observing a comparison group, which will be exposed to the same external events as the treatment group over the course of the program, evaluators can better attribute observed outcomes in the treatment group to PEACH programming. Additionally, children who have received the programs in the past are screened out of the evaluation.
- *Maturation*: The use of matched comparison groups will control for maturation threats by limiting the extent to which PEACH effects can be attributed to the natural maturation of children over time.
- *Testing*: Treatment and comparison groups will receive the same tests and data collection assessments at pretest. Administration of the same tests to both groups will increase the likelihood that, if testing effects exist (e.g. participants' outcomes are exaggerated or understated), they will apply to both groups, maintaining their comparability.
- *Instrumentation*: The proposed evaluation will further preserve internal validity by employing common tools across programs as well as at pre- and posttest. The use of consistent assessments at pre and post and with comparison groups will support evaluators' ability to draw conclusions about the programs themselves, rather than the instruments, as well as make viable comparisons across PEACH programs. The set of pre-post assessment tools currently include: 1) parental/caregiver survey to measure children's physical activity and diet, 2) measures of kindergarten readiness (Child behavior checklist and Caregiver-Teacher Report form), 3) chat forms to measure parent/caregiver health behaviors in Healthy Families Start with You and 4) early childhood education center practices with respect to diet and nutrition in NAP SACC.
- *Statistical regression effects*: Regression threats to PEACH evaluation findings will be reduced because participants have not been selected for PEACH participation based on specific pretest scores. Further, if regression effects do occur, they will likely occur in both treatment and comparison groups. The use of reliable and validated instruments, where possible, will further control for regression threats. This will be especially true when measuring kindergarten readiness utilizing the Child Behavior Checklist and Caregiver-Teacher Report Form.
- *Attrition*: The evaluation will utilize early childhood education centers, which are already intact groups. While attrition cannot be controlled for exactly, comparing "natural" groups will minimize the likelihood of unequal attrition between groups and related threats to internal validity. Missing data analysis will be conducted on intervention and comparison groups to assess the likelihood that data is missing at random and that the patterns of missingness are equivalent across groups.
- *Differential selection*: The evaluation will minimize threats to selection, or the possibility that differences in intervention and comparison treatment groups account for observed outcomes, and its potential interaction with maturation, history and instrumentation by matching treatment and comparison groups on several characteristics and by employing a pre-/posttest design.

Given these strengths, the study still has certain limitations:

- *Selection bias*: With a nonequivalent comparison group design, there exists the possibility that comparison and treatment groups will still vary on some unmeasured characteristics (Rossi et al., 2004).

- *External validity*: Because our target populations for the SIF are made of predominantly low income and high African American and Latino communities, study findings cannot be generalized unless the data are weighted.
- *Repeated programming sites*: Even though the evaluation study follows a Comparison/Implementation group model, PEACH is unable to control for sites with returning teachers that may carry over nutrition education practices that they learned during previous Regie’s Rainbow Adventure<sup>®</sup> programming, either during SIF or before SIF began. Because PEACH strives to benefit the at-risk population it serves as much as possible, sites are not withheld the program but instead offered a delayed intervention.

#### A. Implementation Evaluation Design

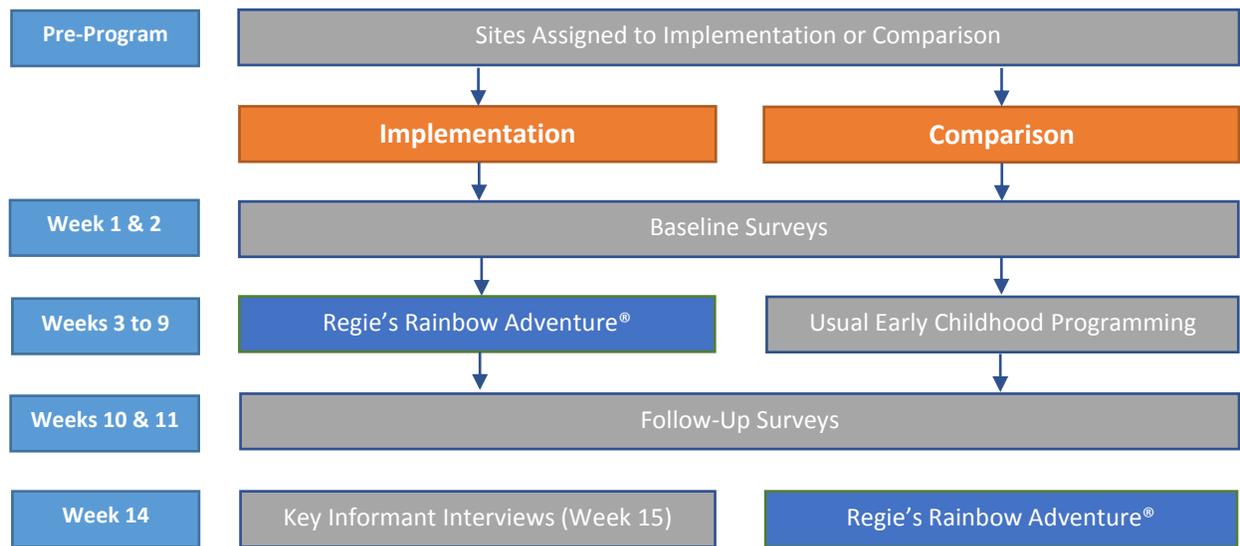
The implementation evaluation in Year 4 of the SIF PEACH project was conducted to answer questions pertaining to program fidelity, program satisfaction, and aspects of the Media Toolkit (MTK) implementation through both qualitative and quantitative approaches. Quantitative approaches for the Media Toolkit included tallying the number of visitors to the RRA Facebook page and the Early Childhood website, as well as tallying the number of ‘likes’ and ‘shares’ of RRA Facebook posts, so as to discover which content was most popular with users. Due to its lack of a research hypothesis, supporting research, and formal evaluation, a pre-preliminary level of evidence is sought. The MTK was introduced as a supplement to the SIF project and is not a crucial aspect of the evaluation study, nor does it undergo rigorous evaluation. As such, we can only assume that the increase in traffic and interaction on the RRA Facebook page as well as on the Early Childhood website means that the MTK is well received and on the path towards a pre-preliminary evidence level.

Program satisfaction is measured in a qualitative fashion through Key Informant Interviews with teachers after they implemented the program. Program fidelity was quantitatively derived using the average percentages of the program that teachers reported implementing on the Implementation Checklist. Maintaining program fidelity throughout the course of this evaluation study is a small but still important step in achieving a moderate evidence level, as it assesses the alignment between program theory and day-to-day practice in order to provide services to the target population and accomplish program objectives.

#### B. Impact Evaluation Design

The evaluators draw from a quasi-experimental design to analyze program effects. In order to isolate the program effect on the participants, the evaluators assigned centers to the comparison and implementation groups to analyze the counterfactual. As seen in Figure 4 below, the implementation group conducts Regie’s Rainbow Adventure<sup>®</sup> between the pre and post periods and the comparison group conducted a delayed intervention after all data collection is finished.

**Figure 4. Impact Evaluation Design and Timeline – Regie’s Rainbow Adventure®**



After one year of being in the comparison group and receiving the delayed intervention, children are no longer eligible to be in the comparison group. In addition, there is not adequate power for children across both the implementation and comparison groups to analyze whether or not there is an increase in positive outcomes when children receive more than one year of the program. Therefore, children are excluded from the evaluation component entirely after receiving one year of RRA.

Due to logistical constraints and the desire to foster relationships with community partners for future work, it was not feasible to randomly assign sites to serve as comparison groups for the program. Therefore, to increase the internal validity of the evaluation (the selection threat) and to ensure that the comparison and implementation groups were similar, centers were matched based on demographics known to affect the variables of interest. The program is delivered at the center level. An entire center implements the core program while only certain classrooms participate in evaluation activities through a random selection process. As such, we were unable to match individuals in this evaluation because we treat each school as its own center and carry out the program at the center level. To obtain as much matching equivalency as possible, we use sociodemographic proxies known to influence nutrition, physical activity and kindergarten readiness such as racial/ethnic composition, size of the population, and median family income for matching. Baseline equivalence analyses assess which, if any matching variables are significantly different between the comparison and implementation groups. Such variables are then adjusted for in all future analyses.

In some cases, centers within the same region were able to serve as comparison which further increased the internal validity of the data. For example, Matrix Human Services Vista Nuevas Head Start was able to serve as their own comparison center by randomly delegating some of their sites to be implementation sites and comparison sites. Peer-reviewed public health literature corroborates the use of this model of matching groups based on demographic characteristics

when evaluating the effectiveness of health and nutrition based interventions (Veugelers & Fitzgerald, 2005; Swinburn et al., 2014; Hoelscher et al., 2015; Cloutier et al., 2015).

To maximize the ability to make causal inferences about PEACH and observed outcomes, the evaluation design incorporates pre-post testing, matched comparison groups, and triangulation of data sources. Through these mechanisms, the evaluation will strive to satisfy five requirements of internal validity: that PEACH demonstrates a strong conceptual basis (see logic model and discussion), PEACH precedes observed outcomes, other explanations for observed outcomes have been ruled out, a statistically significant association exists between PEACH and observed outcomes, and outcome measures are reliable and valid. These five requirements are described in detail in the report's Introduction.

## C. Sampling

### 1. Selection

RRA program participants at each center were selected through a randomization process, using the same process for both implementation and comparison groups. There were 30 centers selected for evaluation in Year 4, with 30-50 children selected at random for evaluation which added up to a total of 2,603 children. The number of children selected was determined by how many children were enrolled when the selection process began and how many children had previously participated in the intervention. Those who had previously received the program (not just those who were previously participated in the evaluation component) were not eligible for selection. At the end of data collection, there were 855 children in the final sample: 430 of these participants were in the comparison group and 425 were in the implementation group. Data may not have been collected for the entire sample due to absence, non-consent, or incomplete data. Key Informant Interview participants were selected based on new intervention center status.

As seen in Table 6 below, demographic data were collected on 855 children. The average age of children receiving the program was 4 years. The sample was predominantly Black or African American (66%), with almost 14% of participants reporting they were Hispanic/Latino, 3% reporting they were white and almost 2% described themselves as Arab/Arab American. Other parents reported their children to be part of an 'other' category which predominantly consisted of Bengali and Asian families. Almost three quarters of the parents completing the survey reported an annual household income of less than \$20,000 (72%), 20% reported an annual household income between \$20,000 and \$35,000, and 7% reported an annual household income above \$35,000.

**Table 6: Description of Study Participants (N = 855)**

<b>Age (mean, sd)</b>	4.13 (0.56)
<b>Gender (%)</b>	
Female	47.36
Male	52.64
<b>Race/Ethnicity (%)</b>	
Black	66.43
White	3.39
Hispanic/Latino	13.80
Arab	1.52
Other	14.85
<b>Parental Education (%)</b>	
Less than HS	15.97
HS to some college	75.17
College or above	8.86
<b>Annual Household Income (%)</b>	
Less than 20K	72.14
20K to 35K	20.61
35K and above	7.24

## 2. Baseline Equivalence Analysis

Baseline equivalence at the center level is set by design because center level matching is done via selection (i.e., sites were specifically selected because they were matched on those characteristics. These characteristics include the center size as well as center-level demographics. Thus, sites were specifically selected because they were matched on those characteristics.

Our baseline equivalence t-test analyses use center level demographics that parents report to us as part of our evaluation activities. These include age, race/ethnicity, parental education and annual household income. These demographic reports come from parents of selected children only, so as to assess baseline equivalence of selected children via the random selection of classrooms for evaluation. Center size is not included in this. Either a center is large enough for selection, or it is not. Centers are not specifically matched based on their enrollment size, but are considered for inclusion if they are large enough to participate in the evaluation component, where at least 30 children who have never received the program before are eligible for evaluation. The goal is to select 50 children who have never received the program before for evaluation, with the maximum number being 60 and the minimum number being 30. These numbers were generated using a power analysis.

We perform t-tests to determine any statistically significant differences between groups in terms of baseline equivalence. If significant differences do exist, we adjust for them by using a dummy coded variable to then control for these differences at baseline in all further analyses.

Our final report will include a table of all matched centers and how they compare on all characteristics included in baseline equivalence analyses. In response to the current concern regarding center size equivalence, our final report will also include a table of p-values of our confirmatory research outcomes at baseline, stratified by center size. Centers will be empirically split into either the “small” or “large” category by using the median as the cut off for size. The enrollment size of every center that participated in RRA during the 5 years will be used to

calculate the median number. Any center with an enrollment smaller than the median will be categorized as a small center and any center with an enrollment equal to or larger than the median will be categorized as a large center. T-tests will produce p-values for the confirmatory outcomes of F/V consumption, amount of PA, and amount of screen time. These p-values will show what, if any, significant differences in outcomes exist between small and large centers. Any significant differences that do exist between center sizes will be adjusted for in all pertinent future analyses.

Please refer to Table 7 for a comparison of demographics of study participants in the implementation and comparison groups for Year 4. There was a statistically significant difference in race/ethnicity between the implementation and comparison groups. In order to account for this difference, race/ethnicity was included in all analyses and will continue to be adjusted for in all future analyses of the data from Year 4.

**Table 7. Baseline Equivalence Analysis (Between Study Groups) (N = 855)**

	<b>Comparison</b> (n=430)	<b>Implementation</b> (n=425)	<b>p-value</b>
<b>Age (mean, sd)</b>	4.15 (0.55)	4.10 (0.57)	0.2167
<b>Gender (%)</b>			0.9770
Female	47.31	47.41	
Male	52.69	52.59	
<b>Race/Ethnicity (%)</b>			0.0019*
Black	72.79	60.00	
White	2.33	4.47	
Hispanic/Latino	11.40	16.24	
Arab/Arab American	1.63	1.41	
Other	11.86	17.88	
<b>Parental Education (%)</b>			0.0754
Less than HS	13.83	18.16	
HS to some college	78.72	71.54	
College or above	7.45	10.30	
<b>Annual Household Income (%)</b>			0.8253
Less than 20K	71.11	73.18	
20K to 35K	21.39	19.83	
35K and above	7.50	6.98	
*p < .05			

#### D. Measures and Instruments

The evaluation of the PEACH programs includes the collection of qualitative and quantitative data, outcome and implementation data, as well as data from the parent, teacher and child. See Table B in Appendix A for details about each survey instruments and measures by program. Please refer to Appendix B for all Year 4 survey instruments.

##### 1. Regie’s Rainbow Adventure® Parent Surveys

One of the main sources of outcome data for the evaluation, and particularly nutrition and physical activity related outcomes, is the parent/guardian survey. This survey is completed by

parents and caregivers about their child's eating habits at baseline and follow-up. This survey also asks basic demographic information and measures of internalizing behaviors such as sleep quality and mood. Internalizing behaviors form another domain of kindergarten readiness and have been found in nationally representative samples to be related to children's health and success in school (Datar & Sturn, 2004; Romano et al., 2010).

Parents also complete the CBCL 1.5/5, a survey about the frequency of their child's externalizing behaviors at baseline and follow-up (Achenbach, 2014). The externalizing behaviors scale is made up of two subscales: the child's ability to pay attention at school, and the child's level of aggression at school. This survey replaced the data that would have been collected through the Early Development Instrument (EDI). An SEP amendment documenting this change was submitted in August of 2013.

The addition of positive items to this scale poses a threat to validity. To reiterate, CBCL scores will be used in exploratory analyses only, and the negative and positive items will not be analyzed together. It is important to note that only the parent forms have positive items on them and not the teacher forms as well. As such, we will run reliabilities to look at how each item correlates with the total score for each form (in SPSS, Scale Reliabilities-Cronbach's Alpha). Then we will correlate the parent score with the corresponding teacher score. Many studies have looked at the differences between parent and teacher reports on CBCL forms. If, using significance tests, our correlations are approximately the same magnitude as what other studies have reported in the literature, then we can assume that our changing of one scale by adding positive items is not impacting the tool's validity.

Fruit and vegetable intake are PEACH's primary outcomes for Regie's Rainbow Adventure<sup>®</sup>. Numerous articles have been published in scholarly manuscripts that have either utilized a parent report of child food consumption or have validated the parent report of child food consumption (Bjelland et al., 2013; Taveras et al, 2011; Resnicow et al, 2011; Blum et al., 1993; Rifas-Shirman et al., 2001; Parris et al., 2003; Byers et al., 1993). These studies support the reliability, validity and precedence of use requested for the NKFM's choice of measures for fruit and vegetable and sugar sweetened beverage consumption.

## 2. Regie's Rainbow Adventure<sup>®</sup> Teacher Surveys

Teachers complete several classroom level surveys including the Classroom Level Problem Behaviors Survey and Implementation Checklist. The Classroom Level Problem Behaviors Survey is completed at baseline and follow-up and asks teachers about the percentage of children in the class who exhibit behaviors such as being unable to sit still, or obey class rules. This survey is used as another measure of kindergarten readiness in order to increase the reliability of data collected for this construct and maximize the ability to make causal inferences about the programs and observed outcomes. The Implementation Checklist is a program fidelity measure that describes the extent to which the program is being implemented as intended. Each week, teachers track the number of components in the program that they actually implemented in their classroom. At the end of the program they estimate how much of the program in total they implemented in their classroom.

The teachers also complete two individual level measures: the Weekly Attendance Sheet and the C-TRF. The C-TRF is identical to the CBCL 1.5/5, except that it includes questions about behaviors that would occur in the classroom and does not include questions about behaviors that would occur at home. The Weekly Attendance Sheet is completed by the teacher during the course of the program. Each week the teacher marks child attendance on the sheet so that program dosage can be calculated. The Weekly Attendance Sheet and Implementation Checklist are for implementation centers only and are only completed one time during the course of the evaluation.

Finally, implementation data were collected from 10-12 teachers at new implementation centers in Key Informant Interviews. These took place after the end of program implementation and evaluation activities. In these interviews, teachers were asked about a) program satisfaction, b) program implementation, and c) if there was any parental confusion regarding survey questions or surveys.

### 3. The NAP SACC

The evaluation measures for the NAP SACC program consist of a pre and post self-assessment completed by the center administrator or lead teacher. The assessment measures 21 areas of nutrition and physical activity policy, practices and environments to identify the strengths and limitations of the early childhood education facility. Regarding nutrition, providers ask questions about practices such as the number of fruits, vegetables, lean meats and whole grains served to the children each day. Providers are also asked about their center's physical activity practices such as the amount of time children of each age range spend engaging in supervised and unsupervised play. They are also asked if they have specific policies in place to encourage an increase in physical activity and nutritious food, and a decrease in screen time. The self-assessment answers also help early childhood educators set goals for change and develop plans to improve practice. These data were collected in Year 4, however will not be reported on until the final report in order to maximize the sample size so that more rigorous analyses can be performed.

### 4. Healthy Families Start with You Chats

The evaluation for HFSY consists of the two Health Chat forms used to facilitate the program. The first health survey form, completed at the first chat, helps focus and tailor the session to the participant while collecting baseline and demographic data. The form also collects baseline data about key health and nutrition behaviors such as high fat and salt foods, whole grains, fruits and vegetables, and physical activity. In this session, the participant also sets health-related goals that will be discussed in the second chat session. The second chat session and the corresponding chat form are designed to measure improvement towards the participants' goals and improved health behaviors. To this end, the participant is asked some of the same questions about the types of food that they eat and how often they engage in physical activity in order to measure behavior change between the two chat sessions. These data were collected in Year 4, however will not be reported on until the final report in order to maximize the sample size so that more rigorous analyses can be performed.

## 5. Media Toolkit Analytics

The NKFM website and Facebook page offer a wide variety of data to analyze the reach and satisfaction of the Media Toolkit. Specifically, NKFM will measure the number of people reached through the website and Facebook page in addition to types of posts that created the most engagement with program participants. NKFM will analyze the themes of the most liked Facebook posts and use this data to tailor the content to program participants. These metrics are available through Google Analytics and Facebook Insights.

## 6. Data Collection

NKFM staff were trained in all data collection processes at the beginning of Year 4 and were provided with technical support throughout the year by the evaluation team. Teachers and site administrators were also given information about activities and processes pertaining to consent, data collection, and programming. Feedback from staff, teachers, and administrators was collected throughout the year via informal and formal communication regarding these processes. Any challenges were addressed and positive feedback was shared with the team to maintain morale and ensure successes could be repeated.

### a) *Regie's Rainbow Adventure*<sup>®</sup>

Data for RRA were collected through a series of events and activities. Initially demographic data provided by the centers themselves is used to determine matching eligibility of centers, as that portrays the most up to date data and is truly representative of each center's enrolled populations (who may or may not physically reside within the center's zip code). When that is not available, we use 9 digit zip code data from the US Census as a proxy measure. Next, survey data were collected through the process of hosting "Regie Paloozas" (for implementation sites) and "Parent Paloozas" (for comparison sites) at each center. These events were specifically developed to aid in the parent and teacher survey collection process and continued to take place in Year 4. NKFM staff arrive at the school before children are dropped off and set up a table with resources, a snack, survey materials, and coloring materials for children. Parents are given a gift card and a raffle ticket for completing the surveys then and there. NKFM staff are available to help with survey comprehension, questions, and communication about the PEACH programs with parents. Items offered vary based on the type of event. These events are held at both pre and post time points (weeks 1-2, and 10-11, respectively). Whereas these events are focused on increasing parent involvement in the evaluation, they also allow staff to distribute surveys to teachers, which are left with the teachers at the end of the event and picked up at a later date. Additionally, teachers from implementation sites are given the Implementation Checklist and Attendance Sheet that they fill out during RRA implementation. These forms are then collected at the end of the centers' evaluation timeline. Please refer to Table 8 below for an illustration of survey events held in Year 4.

As in years past, passive consent forms were collected in Year 4 of the SIF PEACH evaluation study. NKFM staff distributed the passive consent forms to teachers at SIF centers and collected any that were sent back by parents. If any came back, those participants were noted and left out of data entry and evaluation. At palooza events, parents were reminded that the surveys were optional and they were under no obligation to answer any question that they did not want to.

**Table 8. Survey Collection Events in Year 4**

Event Type	Resources Offered	Tasting/Snack	Parent Incentive
<b>Pre Regie Palooza</b>	<ul style="list-style-type: none"> <li>• Nutrition education</li> <li>• Green pepper take home</li> <li>• Recipe to make sample dish</li> </ul>	“Confetti Bean Salsa”	<ul style="list-style-type: none"> <li>• \$5 Gift Card</li> <li>• Raffle ticket for \$500 prize</li> </ul>
<b>Post Regie Palooza</b>	<ul style="list-style-type: none"> <li>• Nutrition education</li> <li>• Carrot take home</li> <li>• Recipe to make sample dish</li> </ul>	“Carrot Cake Oatmeal Cookie”	<ul style="list-style-type: none"> <li>• \$ 5 Gift Card</li> <li>• Raffle ticket for \$1,000 or \$750 prize</li> </ul>
<b>Pre Parent Palooza</b>	<ul style="list-style-type: none"> <li>• Health (non-nutrition) education, such as child vaccine information.</li> </ul>	Pretzels	<ul style="list-style-type: none"> <li>• \$5 Gift Card</li> <li>• Raffle ticket for \$500 prize</li> </ul>
<b>Post Parent Palooza</b>	<ul style="list-style-type: none"> <li>• Safety education, such as car seat and accident information</li> </ul>	Pretzels	<ul style="list-style-type: none"> <li>• \$ 5 Gift Card</li> <li>• Raffle ticket for \$1,000 or \$750 prize</li> </ul>

*b) NAP SACC and Healthy Families Start with You*

Data for NAP SACC were collected via the MIHealthTool resource that is managed by the Michigan Department of Health and Human Services (<http://mihealthtools.org/childcare/>) that captures pre and post assessments and actions towards the selected goals. Participants of the program were invited to create an account or log into an existing account to complete this tool, with NKFM technical support available to guide them along the process. Participants who do not have access to this technology were offered a paper survey that could be mailed back or picked up by a NKFM staff member. When data are exported for the final report, SIF specific center IDs will be attached to each participant’s data.

Healthy Families Start with You participants filled out the two Health Chat surveys with guidance from the Lay Health Educator conducting the chats. Health Chats were collected at the end of the program once participants completed the second health chat. NKFM staff received these chats either by mail or picking them up at the centers. This program’s data will be analyzed at the center level, therefore the data will be extracted from the database at the end of the grant period.

**7. RRA Data Collection Timing**

Data collection for RRA follows two time points. This process is illustrated in Figure 3 in the Impact Evaluation Design section. First, the baseline survey event (Pre Paloozas) took place during the school day. A series of seven weeks passed where either the RRA program was implemented for implementation centers, or no programming took place for comparison centers. Next, a follow-up survey event took place to collect follow-up data. The new implementation centers completed Key Informant Interviews. At that point, the other, pre-existing implementation centers had completed all evaluation and programming which completed their participation with PEACH for the year. Comparison centers were then free to implement RRA at any time. Please refer to Table 9 on the following page. It lists all centers that participated in Year 4 RRA evaluation and their respective evaluation timelines.

**Table 9: Timeline of RRA Evaluation and Programming by Center**

Center	Study Group	Dates of Baseline**	Dates of Follow Up
<b>New St. Paul</b>			
Bibleway I	Implementation	3/29-4/11/2016	6/2-6/13/2016
Citadel	Comparison	1/28-2/8/2016	3/24-4/4/2016
Metro	Implementation	3/30-4/11/2016	6/2-6/13/2016
Third New Hope	Comparison	1/27-2/8/2016	3/21-4/4/2016
St. Timothy's	Implementation	3/31-4/11/2016	6/1-6/13/2016
St. John	Comparison	1/28-2/8/2016	3/24-4/4/2016
<b>The Guidance Center</b>			
River Rouge	Implementation	2/29-3/4/2016	5/2-5/10/2016
<b>Starfish Family Services</b>			
Inkster – Hiveley	Implementation	9/30-10/2/2015	11/25-12/3/2015
<b>Matrix Head Start</b>			
Eternal Rock	Implementation	4/4-4/13/2016	6/1-6/13/2016
Hernandez	Comparison	1/27-2/3/2016	3/23-4/4/2016
Holy Redeemer	Comparison	1/26-2/3/2016	3/22-4/4/2016
Fiore Center	Implementation	4/5-4/13/2016	5/31-6/13/2016
St. Stephen	Implementation	4/5-4/13/2016	5/31-6/13/2016
SS Peter & Paul	Comparison	1/26-2/3/2016	3/22-4/4/2016
Lighthouse	Implementation	4/4-4/13/2016	6/1-6/13/2016
Care Village	Comparison	1/25-2/3/2016	3/21-4/4/2016
Infinity I	Comparison	1/27-2/3/2016	3/23-4/4/2016
Samaritan	Comparison	1/25-2/3/2016	3/21-4/4/2016
<b>United Children and Family</b>			
Charity	Implementation	1/11-1/21/2016	3/22-4/6/2016
Mt. Calvary	Implementation	1/12-1/21/2016	3/22-4/6/2016
Mt. Zion	Implementation	1/13-1/21/2016	3/23-4/6/2016
Kids-in-Zion	Implementation	1/14-1/21/2016	3/23-4/6/2016
<b>Wayne Metro</b>			
Hamtramck Mitchell	Implementation	2/25-3/3/2016	4/28-5/9/2016
Highland Park Cortland	Comparison	11/24-12/2/2015	2/2-2/10/2016
<b>Wayne County RESA</b>			
Ecorse GRSP	Comparison	1/5-1/19/2016	3/15-3/23/2016
Hanley International GSRP	Comparison	1/5-1/19/2016	3/8-3/16/2016
<b>OLHSA</b>			
Pontiac Head Start	Implementation	1/11-1/19/2016	3/14-3/23/2016
Oak Park Head Start	Implementation	1/12-1/19/2016	3/15-3/23/2016
<b>Southwest Solutions</b>			
Mark Twain	Comparison	12/10-12/18/2015	2/11-2/25/2016
<b>Development Center</b>			
7 Mile	Comparison	11/19-12/3/2015	1/26-2/5/2016

\*Implementation sites receive the intervention between the Baseline and Follow-up time points. Comparison sites receive the intervention after the Follow-up time point.

\*\*Baseline dates are based on centers' availability for programming as well as participating in the survey collection events.

### 8. HFSY and NAP SACC Data Collection Timing

HFSY and NAP SACC data are collected at two time points. Outcome evaluation for HFSY consists of Chat 1 and Chat 2 data, which are collected from participants whenever the lay health educator conducts each chat. After the lay health educator collects both chats from all participants, they are given to the program coordinator for that center either by mail or in person

at the center. Timing for HFSY is documented in Table 10 below as baseline and follow-up. Baseline is the time that Lay Health Educators were trained in the chat instruments, and follow-up is the time that NKFM received the centers' Chat 2s, to account for the entire centers' respective time points. Individual Chat dates are noted in the database so exact time frames can be distinguished for analyses. NAP SACC data are entered into the online database at the times of each assessment. Both NAP SACC and HFSY programs have more flexible timelines than RRA due to the nature of the programs' implementation process. For instance, an optimal suggested timeline for HFSY is 4-6 weeks in between chats, however many times lay health educators cannot conduct a Chat 2 in that timeframe given the availability of the parent.

**Table 10: Timeline of HFSY and NAP SACC Evaluation and Programming by Center**

Name of site	HFSY: Baseline	HFSY: Follow-up	NAP SACC: Baseline	NAP SACC: Follow-up
<b>Starfish Family Services Head Start</b>				
Inkster Head Start	10/21/2015	5/4/2016	10/21/2015	5/13/2016
Westwood Head Start	-	-	2/10/2016	5/2/2016
<b>Oakland Livingston Human Service Agency Head Start</b>				
Pontiac Head Start	11/30/2015	5/12/2016	1/29/2016	5/9/2016
Oak Park Head Start	-	-	2/9/2016	5/9/2016
<b>United Children and Family Head Start</b>				
Charity	10/2/2015	5/27/2016	-	-
Mt. Calvary	10/2/2015	5/27/2016	-	-
Mt. Zion	10/2/2015	5/27/2016	-	-
<b>Wayne Metro Community Action Agency Head Start</b>				
Hamtramck Mitchell	1/21/2016	5/27/2016	1/4/2016	5/13/2016
Highland Park Cortland	2/2/2016	5/27/2016	2/14/2016	5/25/2016
<b>Other Early Childhood Education centers</b>				
Helping Hand Child Care & Development Center	-	-	12/29/2015	5/30/2016
Kittie's Lovin Care	-	-	12/29/2015	4/26/2016
Gracie Fox	-	-	1/14/2016	5/20/2016
Above and Beyond	-	-	1/14/2016	5/31/2016
Second Home Child Development	-	-	10/6/2015	2/18/2016
Something Special Daycare	-	-	1/14/2016	5/20/2016
Willi's Wonderland Home Child Care	-	-	10/13/2015	4/28/2016
A Place 4 Jake	-	-	10/13/2015	4/20/2016
Young Faith Child Care	-	-	10/13/2015	4/21/2016
Seay's Home Child Care	-	-	10/13/2015	4/28/2016
Susie Q kiddie Kare	-	-	10/13/2015	5/9/2016
My Grannie's Child Day Care	-	-	10/13/2015	5/17/2016
Lona's Learning Zone	-	-	10/13/2015	4/29/2016
Open Arms Child Care	-	-	10/13/2015	5/19/2016
DHDC	-	-	10/23/2015	4/28/2016

## 9. Secondary Data Sources

The matching design utilized data from early childhood education centers as well as the national census database to determine matching eligibility between centers. Income and racial composition data were analyzed by zip code when new SIF regions were added to the evaluation study. The most recent data available online were used.

## 10. Data Protocol

### a) *RRA Data*

After RRA survey events, surveys are brought back to the NKFM's office in a secured lockbox and stored in a locked cabinet. Surveys are securely kept for seven years from collection date. If capacity in the office is not available, data are moved to a secure offsite storage location. Any other information on participants and centers is shredded and disposed of. Survey data are entered electronically by specially trained staff into internal databases using Access and ADM software in a HIPAA-complied electronic drive. Once surveys are entered, data are validated to ensure accuracy. At the end of the grant year, data are analyzed by internal staff and external contracted specialists. Staff who cleaned, analyzed, and interpreted data after it has been entered in Year 4 are as listed:

- NKFM Staff
  - Sarah Wesolek-Greenson, MPH in health Behavior and Health Education (cleaned and interpreted)
- External Consultants
  - Ken Resnicow, BA in Psychology; Ph.D. in Health Psychology (analyzed and interpreted)
  - Nanhua Zhang, Ph.D. in Biostatistics (analyzed)

Before initializing the analysis phase, steps are taken to ensure valid and clean data are available to be analyzed. First, the data were exported from ADM and Microsoft Access into Excel documents separated into each form distributed by NKFM: Parent Guardian Surveys/Attendance Sheet, Parent Child Behavior Checklist, Teacher Child Behavior Checklist, Classroom Level Problem Behavior Survey, and Implementation Checklist. These Excel documents were imported into SPSS and merged with premade templates. These templates ensure variable names, lengths, and types are consistent across not only each form, but each year as well. Lastly, the SPSS databases were merged together to create two final databases: Child Merged and Classroom Merged. As the names suggest, Child Merged consists of any data pertaining to an individual child (Parent Guardian Surveys/Attendance Sheet, Parent Child Behavior Checklist, and Teacher Child Behavior Checklist) and Classroom Merged contains data generalized to a classroom (Classroom Level Problem Behavior Survey and Implementation Checklist). Each merge done was a simple join using the primary key of Child ID or Classroom ID for Child Merged and Classroom Merged, respectively.

Once the data have been merged into the final databases, the data can be cleaned. The cleaning process consisted of calculating composite variables and creating cutoff values for variables to avoid extreme outliers. See Tables C, D, and E in Appendix A for more information on composite variables and how variables were combined and recoded.

b) *NAP SACC and HFSY Data*

When participants complete the pre and post assessments, they enter their own survey responses in the MIHealthTools resource and data are kept there until the end of Year 5 when they will be exported and analyzed. HFSY data are entered and validated by specially trained NKFM staff and kept in a HIPAA-compliant electronic drive.

E. *Sample Retention and Attrition*

Due to the nature of working with a transient population (Head Start families) and the barriers previously discussed, sample retention is a challenge in a pre/post cohort study. The PEACH team took proactive measures to attempt to retain as many participants as possible in Year 4, akin to those in Year 3. Survey collection events were designed to help with sample retention, as they allowed NKFM to have a physical presence in the schools. At follow-up events, all parents of children chosen for evaluation were invited to fill out surveys, not just the parents who filled out baseline surveys. Raffle tickets for a cash prize of a higher value was available at the follow-up event for parents who filled out follow-up surveys to encourage completion of the evaluation. NKFM staff who were present at the events were available to answer questions that parents had to ensure participants did not drop out of the study due to lack of understanding of questions or literacy difficulties. An added barrier to retention was that surveys that were not filled out at survey events were left with teachers to be sent home and were then sent back to school by parents, to be given to NKFM staff by the teachers. The many steps needed for these surveys to be used in PEACH evaluation made it difficult to retain participants who were absent on days of survey events or did not have time to fill them out. To help mitigate this, NKFM program coordinators made many phone calls, emails, and extra trips to the schools with whom they programmed to pick up surveys and distribute gift cards to ensure that these participants did not drop out of the study.

Total attrition was calculated as well as differential attrition. The differential attrition analysis in Table 11 consists of a comparison of baseline values of outcomes for those who dropped out of the study, by group assignment. As shown, more participants who dropped out of the study were in the comparison group. This analysis on participants lost to follow-up show that the only evidence of differential attrition between the comparison and implementation groups is in perceived screen time. Of note, refusal-to-consent rate was essentially a nonfactor in the study. Out of all participants selected for evaluation (not just those for whom we have data), 2 were not consented. This was .15% of the total selection. Of the total 2,603 children who received programming, 56 dropped out of the program by leaving their respective education centers. This totaled 2.15% of the total number of children who received programming. The two who did not consent are not considered part of the dropout rate as they never consented to participate in the evaluation component in the first place.

<b>Group</b>	<b>% Drop Out</b>
<b>Comparison</b>	41.63
<b>Implementation</b>	40.94

**Table 11: Differential Attrition Analysis (Drop Out by Study Groups) (n = 353)**

	<b>Comparison<sup>i</sup></b> (n = 179 drop outs)	<b>Implementation<sup>i</sup></b> (n = 174 drop outs)	<b>P value</b>
<b>Fruit &amp; Veg. (actual)<sup>ii</sup></b>	5.67 (.10)	5.55 (2.05)	0.5725
<b>Fruit &amp; Veg. (perceived)<sup>iii</sup></b>	0.67 (0.81)	0.73 (0.82)	0.4849
<b>Physical Activity (actual)<sup>iv</sup></b>	14.80 (9.03)	15.61 (9.26)	0.4313
<b>Physical Activity (perceived)<sup>iii</sup></b>	0.69 (0.79)	0.63 (0.84)	0.5234
<b>Screen time (actual)<sup>iv</sup></b>	13.73 (9.71)	13.50 (7.35)	0.8189
<b>Screen time (perceived)<sup>iii</sup></b>	1.36 (1.00)	1.59 (0.97)	0.0363*

\* p &lt; 0.05

<sup>i</sup> Given as mean (sd)<sup>ii</sup> Number of Fruit and Vegetable servings on a typical day<sup>iii</sup> Grade given by parent (0 = A, 1 = B, 2 = C, 3 = D, 4 = F)<sup>iv</sup> Measured in hours per typical week

The evaluation team also investigated study participants by drop out status and cohort status by performing selective attrition analyses. Those who had matching pre/post surveys were considered part of the true cohort. These analyses took place in order to ensure that no particular demographic group was more likely to drop out of the study. Table 12 below shows baseline-only characteristics of the drop out group and the pre/post cohort group and illustrates that race/ethnicity correlates with dropping out of the study. Therefore all analyses will adjust for race/ethnicity.

**Table 12: Selective Attrition Analysis of Study Participants in Year 4 (N = 855)**

<b>Baseline Characteristics</b>	<b>Drop Outs</b> (n = 353)	<b>Pre/Post Cohort</b> (n = 502)	<b>p-value</b>
<b>Age (mean, sd)</b>	4.16 (0.55)	4.10 (0.56)	0.1650
<b>Gender (%)</b>			0.9659
Female	47.44	47.29	
Male	52.56	52.71	
<b>Race/Ethnicity (%)</b>			<.0001*
Black	71.39	62.95	
White	3.68	3.19	
Hispanic/Latino	17.56	11.16	
Arab/Arab American	2.27	1.00	
Other	5.10	21.71	
<b>Parental Education (%)</b>			0.7261
Less than HS	15.13	16.67	
HS to some college	76.56	74.02	
College or above	8.31	9.31	
<b>Parental Income (%)</b>			0.5961
Less than 20K	72.33	72.00	
20K to 35K	19.50	21.50	
35K and above	8.18	6.50	
<b>Group (%)</b>			0.8384
Comparison	41.63	58.37	
Implementation	40.94	59.06	

\*p &lt; .05

Table 13 shows the number (and percentage) of participants who provided responses to the survey questions that measure the main outcomes listed above. As shown, these responses were collected at either the baseline time point only, the follow-up timepoint only, or both the baseline and follow-up timepoints. Those who provided responses to these questions at both the baseline and follow-up timepoints make up the matched pair, pre/post cohort.

**Table 13: Survey Responses of Main Outcomes by Evaluation Timepoints (N = 855)**

Variable Name	Variable Description	Pre data only		Post data only		Both Pre and Post data	
		n	%	n	%	n	%
Amt_Fru	Servings Fruit	768	89.82%	513	60.00%	428	50.06%
Amt_Veg	Servings Vegetables	767	89.71%	513	60.00%	428	50.06%
FVComposite	Total fruit and vegetable, plus up to one serving juice	767	89.71%	513	60.00%	428	50.06%
Totalvhrs	Total hours watching TV	758	88.65%	508	59.42%	418	48.89%
Totalgame	Total hours video games	719	84.09%	493	57.66%	387	45.26%
Totalscreentime	Total screen time hours	707	82.69%	492	57.54%	384	44.91%
PA_week	Total hours of physical activity	709	82.92%	474	55.44%	369	43.16%

## 2. Addressing Attrition and Treatment of Missing Data

The dataset for Year 4 evaluation did not have any major issues. Most missing data were left missing, however in order to minimize missing demographic data, variables were pulled from multiple sources. For instance, where gender was missing from a teacher survey, but indicated on a parent survey, the gender was pulled from the parent survey to analyze the teacher survey data.

Missing data will be dealt with in the future by identifying amounts and patterns of missingness in the final data set using a few different techniques. We will explore multiple imputation if supported by the data and missingness is neither too great nor not random. Multiple imputation is advisable given our multiple regression model, however, we do experience a large amount of missing data. Our biostatistician will set the rate of post-test response at which multiple imputation can be considered. FIML will also be considered should the missing data prove to be missing at random. A missing data analysis in SPSS can be completed: The SPSS Missing Values Analysis (MVA) option supports Little's MCAR test, which is a chi-square test that determines if data are missing completely at random. If the p-value is not significant, then the data may be assumed to be missing completely at random and the missingness is assumed not to

matter for analyses. The Little's MCAR test in SPSS can be used if deemed appropriate. Whatever methods we decide to test will be fully explored and key analysis results will be compared to then determine which specific technique is best to use to deal with missing data. Missing data and any patterns of missingness will not be addressed until the end of Year 5, in preparation for final analyses and the final report.

PEACH included all baseline surveys and all follow up surveys in analyses instead of using only the matched pairs in the pre/post cohort, in order to increase sample size and power. Newer statistical models allow for estimates to be more accurate by including all data that is collected. These newer models take advantage of all data while also taking advantage of data specific to the true, pre/post cohort.

At the end of SIF our final analyses will primarily report on data collected from the true pre/post cohorts from each year of study as well as report data from the overlapping cross-sectional design. An overlapping cross sectional design is when, at each assessment time period for each tool, we have different people responding, and those people sometimes overlap (a person may fill out only a PRE PG survey and then a POST CBCL parent survey but does not fill out a pre *and* a post survey of either of the tools in order to be part of the true pre/post cohort).

Both selective and differential attrition analyses were conducted and will continue to be conducted in future analyses to control for any baseline differences. The former compares those retained in outcomes analyses to those with baseline values but no further posttests. This helps establish external validity or generalizability. Conversely, differential attrition examines drop outs between implementation and comparison groups. This is important for internal validity, if for example, higher risk youth drop out of the intervention arm, this could bias results in favor of the intervention. See Table 11 in this Year 4 Annual Report for differential attrition analyses, which shows mean baseline values of confirmatory outcomes of those who dropped out, arranged by study group assignment. Table 12 of this Year 4 Annual Report shows selective attrition analyses and provides a baseline description of study participants arranged by drop out and true cohort (matched pairs with both pre/post data) status.

## Section III. Statistical Analysis of Impacts

### A. Analysis Approach

Year 4 preliminary impact analyses focused on these confirmatory research questions:

- Will children who participate in RRA have significantly higher fruit and vegetable consumption?
- Will children who participate in RRA engage in significantly more physical activity and less screen time?

The PEACH study addresses these questions through calculating effect size statistics to determine if the RRA program is showing a generally positive effect on the study population and that the study is in alignment with the power analyses. PEACH statistical consultants in Year 4 are confident that effect size analyses are a better metric of interim success than measuring p-values. Final analyses will indicate p-value findings.

Most of the PEACH evaluation impact variables are continuous, which will require statistical analyses methods of ANOVA and regression, while binary outcomes will be analyzed via logistic regression. The PEACH evaluation team has committed to running p-value analyses on effect sizes only when the final sample is reached.

For this year's effect size analyses, new variables were calculated for the difference between follow-up and baseline outcome variables. The Cohen's d statistic was chosen because two means are being compared. SPSS was then used to acquire the mean, standard deviation, and n of each new variable grouped by Comparison (1) and Implementation (2). Using these values, the Cohen's d effect sizes were calculated for each outcome variable using the formula below:

$$d = \frac{\bar{x}_1 - \bar{x}_2}{s}, \text{ where } s = \sqrt{\frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 1}}$$

Baseline data was used for adjustment. Low-range (or small) program effects will be classified as follows: small  $\geq .20$ ; medium  $\geq .50$ ; large  $\geq .80$ .

### B. Unit of Assignment and Analysis

Year 4 evaluation assigned the individual as the unit of analysis, and individuals were randomly assigned to the evaluation within early childhood education centers through the random selection of classrooms for participation. However, the unit of assignment for the SIF study is the center. The final report will compare effects on centers. Analyses for the final report will nest the child within the classroom and the classroom within the center.

While this nesting is a cause for concern, our analysis models (below in section D) adjust for the nesting of the child as well as temporal nesting. No child can participate in the evaluation component more than once. Temporal nestedness of observations of the same participants over time is essentially a non-issue. Each participant has their post measurement as the outcome and their baseline measurement adjusted for as a covariate. Should we model both the baseline and post as repeated measures, the temporal effect will be accounted for by including the treatment x visit interaction. Our pre-post outcome model considers the center as a random effect, which will account for the nesting of the child within the center.

### C. Formation of Matched Groups

As centers are unable to be randomly assigned, nonrandom differences may exist between the treatment and control group. This was confirmed via baseline equivalence with a difference between implementation and comparison groups in race/ethnicity. There could be several reasons that differences may occur between any groups, even though groups were matched based on demographic data by region. The PEACH study includes two Great Start Readiness Programs (GSRP) centers, with the rest being Head Starts. GSRPs are different than Head Starts in that they have a different income requirement and their age group is for age four only, where Head Starts accept children aged three to five. In two instances in the PEACH study, a Head Start and GSRP were matched together. PEACH has justified these matched pairs by investigating characteristics at the center level. Further investigation revealed that the educational framework is similar for both systems and that income levels for the pairs were similar despite the different

income requirements. Even though the age requirement is age four only, children still varied on age within the school throughout the year. Therefore, for some known characteristics, the centers were matched to the best of the study's ability. However, as they are different educational systems, there is still the chance that unknown differences exist between the two. In future studies of matched pairs, PEACH suggests the use of this center-specific matching method instead of using zip code level data.

Another reason differences may exist between matched groups is that PEACH assigns NKFM program coordinators to centers during SIF programming, and in many instances different program coordinators may be leading each center within a matched pair. Program coordinators train teachers on program implementation and evaluation processes. For example, one coordinator may train a comparison site and another coordinator may train its matched implementation site. This causes a difference in how matched sites may be treated. As in many quasi-experimental study designs, some aspects of a project are designed to fit the needs of the community. In this case, many program coordinators already had positive working (and sometimes long-term) relationships with sites. These relationships facilitate rapport and trust which ultimately lead to a smoother evaluation, particularly when troubleshooting is necessary.

When matching groups, more characteristics may remain unknown (such as religious propensity, household sizes, and parent vs. grandparent guardianship). Given these limitations to matched group formation, the statistical analyses will control for any demographic differences and also use effect size analysis to further standardize program effects.

#### D. Analysis Model

The Year 4 analysis model includes effect size calculations without p-values and power analyses to determine how much power is needed to detect even small program effects.

##### 1. Model

Multi-level regression models will be employed to assess program effects on these outcome variables: children's reported behavior in fruit and vegetable consumption, engagement in physical activity and screen time, controlling for child-level covariates (baseline outcome measurements, age, parents participating in HFSY).

At the lowest level (child level), the model can be expressed as

$$y_{ij} = b_{0j} + b_{1j} * y_{ij\_baseline} + b_{2j} * age + b_{3j} * (HFSY) + b_{4j} * (MTK) + b_{5j} * (Center Practice) + e_{ij}$$

where  $y_{ij}$  is the outcome variable measured at post-intervention for child  $i$  of center  $j$ ,  $y_{ij\_baseline}$  is the baseline measurement of  $y_{ij}$ , HFSY and MTK indicate whether the child's parents participate in HFSY and MTK, respectively, Center Practice indicates center  $j$ 's practice in regards to physical activity and nutrition and participation in SIF programming other than that offered by NKFM, and  $e_{ij}$  is the residual error term. The intercept and the slopes may vary across centers. We predict intercept and the slopes with second level (center level) regression models:

$$b_{0j} = a_{00} + a_{01} * (RRA) + a_{02} * (NAP) + u_{0j}$$

$$b_{1j} = a_{10} + a_{11} * (RRA) + a_{12} * (NAP) + u_{1j}$$

$$b_{2j} = a_{20} + a_{21} * (RRA) + a_{22} * (NAP) + u_{2j}$$

$$b_{3j} = a_{30} + a_{31} * (RRA) + a_{32} * (NAP) + u_{3j}$$

$$b_{4j} = a_{40} + a_{41} * (RRA) + a_{42} * (NAP) + u_{4j}$$

$$b_{5j} = a_{50} + a_{51} * (RRA) + a_{52} * (NAP) + u_{5j}$$

where (RRA) indicates whether or not center j implemented RRA, (NAP) indicates whether or not center j implemented NAP SACC, and random intercept  $u_{0j}$  and random slopes  $u_{1j}, \dots, u_{5j}$  are the center specific random effect. We will start out with the simplest model, namely, the intercept-only model, then include the explanatory variables but not the cross-level interactions, finally include the cross-level interactions, and use likelihood ratio tests to find the best model.

All the model assumptions will be tested, including linearity between an outcome variable and its explanatory variables, collinearity between the same level explanatory variables, and normality of the outcome variables. Data transformations might be performed, some explanatory variables might be dropped, depending on the diagnostic test results of the assumptions.

## 2. Coding of Variables

Reported variables within this analysis were physical activity and screen time amount, and fruit and vegetable consumption. Physical activity was created by generating means of weekday and weekend hours of physical activity and then weighted to create a combined variable. Screen time was created through the same method, plus creating a composite variable of TV, video game, and computer screen times. Fruit and vegetable measures were created into a composite variable of the number of servings of fruits and vegetables. If the child drinks juice, up to one extra serving is added to this variable. See tables C, D, & E in Appendix A for more details on this information.

## 3. Assumptions

Effect size analyses rely on the assumption that there is low intraclass correlation. In Year 2, the assumption was made that there was a large ICC (intraclass correlation coefficient) of .05. In Year 3 evaluation, specific analysis was conducted to determine the estimate ICC to ensure that current power analyses are an accurate projection. An ICC of .1 or higher would require larger sample sizes and warrant efforts of over recruitment.

## 4. Carryover Effects

Upon further discussion with UWSEM, CNCS and JBS, it has come to our attention that the potential for carryover effects in the final analyses exists because of the fact that some centers have switched from Implementation to Comparison throughout the 5 years of the evaluation study. This carryover relates to teacher and center practices only and is not related to the selection of children for evaluation. A child who has previously received the program (but was

not selected for evaluation) is not eligible for evaluation in the future. A child who has previously been selected for evaluation (and thus received the program) is not eligible for evaluation in the future. These statements hold true in both Implementation and Comparison intervention arms.

NKFM has kept records of the centers that switched from Implementation to Comparison and between what programming years they did so. NKFM also has records of all participants who, subsequent to their center changing from Implementation to Comparison, were then selected for evaluation. All of these participants and centers will be removed from the final sample such that all final analyses will be conducted twice: The entire final sample, including participants of centers (and those centers, themselves) that switched from Implementation to Comparison, and then a smaller, “clean” final sample that removes those participants and centers in order to avoid carryover effects.

This potential for carryover does not affect our model in any way, just our sample. The best case scenario is that the conclusions from running all analyses twice are identical, and no carryover effects are detected. If results are not the same, however, the impact of the carryover effects would be to shrink the treatment effect (type II error). Therefore any carryover effects would not create an artificial effect but could make the treatment effect smaller than it should be. Any significant findings in regard to carryover effects will be identified, analyzed, controlled for and reported in our final report.

## 5. Power Analyses

Power analyses were run along with the ICC. Our power calculations focus on our primary outcome, posttest fruit and vegetable intake. Across the five years of RRA programming, we estimated there will be 3,000-4,000 students from 100-140 centers included in the evaluation (although some centers will receive more than one round of programming). To clarify, we estimated that 3,000-4,000 students will take part in any part of the evaluation efforts over the 5 years of SIF evaluation. We are not assuming this many students will have matched pair, pre/post cohort data but that they will contribute some data, from any number of the evaluation tools, at any evaluation time point. As such, we are overpowered. Our sample of students from Year 3 is bigger than it was in Year 2 and the sample of students from Year 4 is bigger than that in Year 3. Our sample of children in Year 5 is projected to be even larger than that in Year 4. This is due to the way PEACH adds regions to program within each year. PEACH will be programming in all 10 of the identified SIF regions in Year 5, thus effectively reaching more children than ever before. The power analyses conducted in Year 1 concluded that 240 observations for each assigned group were needed to achieve significant findings. The number of students on whom we receive any sort of data each year, in each group, far exceeds this number.

Because this is a cluster randomized design we must account for the similarity of responses within center. Based on our baseline and follow-up data to date, our estimate ICC (which accounts for said clustering) is between .03 and .05. With 3,000-4,000 students contributing data from any evaluation tool at any data collection time point, there will be more than adequate power to detect even small differences in the main outcome of fruit and vegetable servings. Specifically, based on our first three years of data, we know the mean intake of fruit and

vegetables is 5.6 servings per day, and the standard deviation of fruit and vegetable servings is 2.1. With these assumptions, we have .80 power to detect differences as small as ½ serving between groups with and ICC of .05 and ¼ serving difference between groups with an ICC of .03. These equate to effect sizes of .12 to .24. Similarly, for externalizing behaviors, there will be power to detect effects in the range of 0.2-0.4 standard deviation units.

To calculate the ICC, a one-way ANOVA of the variable FVComposite grouped by school was run using SPSS. Then using the equation (provided by a document written by Pierre Foy, noted in the references) shown below, the ICC was calculated by hand.

$$IC = \frac{MS_B - MS_W}{MS_B + (n' - 1) MS_W}$$

Once all participants from centers that have switched from I to C and those centers themselves have been accounted for, we will run new power analyses without them. Regardless of whether or not there will be enough sample power, we will maintain the above mentioned inclusion criteria: parcel out participants from centers that switched from I to C and run all analyses without them as well as with them. We estimate approximately 500 children from 5 different centers will be excluded from final analyses due to possible carryover effects. With over 3,000 children and 75 centers, we still expect to be overpowered, even without this group of children. Power analyses conducted at the end of Year 3 (that were based on baseline and follow-up data to date at that time) estimated the ICC between .03 and .05 and thus having .80 power to detect differences as small as ½ serving between groups with an ICC of .05 and ¼ serving difference between groups with an ICC of .03.

## Findings, Lessons Learned, and Next Steps

### A. Fidelity

#### 1. Research Question: Were the interventions implemented with fidelity?

Based on teacher responses from the Implementation Checklist, an average of 93% of the program was completed with a maximum of 100% and a minimum of 80%.

### B. Satisfaction with Program Delivery

#### 2. Research Question: What types of RRA content are most liked by participants?

As always, teachers report that their students really love the books. One teacher in particular enjoyed the effect the last book had on her students, explaining how her “kids realized that when he [Regie] ate sweets, he was down and didn’t have his muscles.” Her students were overjoyed when “he went back to his friends and he got strong again.” Students were so excited to try fruits and vegetables that they encouraged their classmates to try them as well. Many students started calling broccoli “Regie Rainbow”. Teachers appreciated that not all the tastings were completely new and exotic fruits and vegetables, expressing that their students could be so unfamiliar with some foods that they just “wouldn’t get it” if every food tasting was “a blood orange or a star

fruit every time.” It was important that their students try, and try again, common fruits and vegetables that they served for lunch or snack in their classrooms.

Many teachers talked about how their students were excited to tell their parents what they tried for Regie and that the program was a way to open up conversation with parents and families about healthy eating and healthy lifestyles in general. Staff members continued to hold paloozas (survey collection events) to hand out surveys and provide a food tasting to parents and students in Year 4. Teachers felt that these events “were successful at reaching parents” and appreciated that NKFM staff members were present, “offering help when filling out surveys.”

In addition to teaching the importance of fruits and vegetables, teachers felt that RRA helped students with other skills. Teachers noticed that the program helped students express their creativity, as many became more interested in drawing and when doing so, made sure to use all the colors of the rainbow. Many teachers expressed that the program helps children with shape and color identification, which are important domains of preschool curricula. Teachers explained that RRA aided children with language and communication. Some students started having verbal conversations about fruits and veggies and would retell the stories from memory. One teacher expressed how “the rhyming was impactful, when you teach the children how to rhyme, that’s something they hold on to.” And lastly, children really understood the connection between fruits and vegetables and being healthy. These statements qualitatively describe the effect of RRA on several domains of kindergarten readiness.

Teachers provided staff with valuable feedback to improve the program. Most teachers enjoy doing the program and think it is so successful that they wish the program were more days of the week, so that if a child was absent one day, they could still take part in that week’s lessons. With that in mind, almost every teacher creatively expanded some aspect of the program into their school day. Many teachers incorporated Regie into snack and meal times, using the books or the Regie puppet to encourage their students to taste foods. Other teachers would use the matching cards to emphasize remembering what they have tasted in the classroom, while some teachers would bring the Regie books when their students were waiting in line for the bathroom, passing the time by doing the physical activities from the book with their students. Other feedback that teachers provided included wanting additional games and activities for the teacher manual and having more riddles to use with their students, as many teachers commented on the rhyming and critical thinking aspect of the riddles. Teachers also added that they would like to see healthy recipes, activities, and riddles on the Media Toolkit, expressing that they want the program to be even more accessible to families at home. The feedback gathered from these interviews will be discussed at future internal program planning meetings, especially as we enter the final year of SIF funding.

The Media Toolkit (MTK) is comprised of a PEACH resource page found at [nkfm.org/kids-teens/early-childhood-elementary-education-programs](http://nkfm.org/kids-teens/early-childhood-elementary-education-programs) and a Regie’s Rainbow Adventure<sup>®</sup> Facebook page at [facebook.com/Regie.Rainbow](https://facebook.com/Regie.Rainbow). The evaluation of the MTK used web-based analytics to determine quantity and quality of use.

3. Research Question: How many people are reached through the MTK via Regie’s Rainbow Adventure® Facebook Page?

This research question is answered through Facebook Insights to determine how many people are reached and what types of content experience the highest user engagement from the beginning of Year 4 to the end of Year 4 (September 2015 through August 2016). PEACH initiated implementation efforts for this component of the MTK at the beginning of Year 3.

a) *Monthly Trends*

**Table 14: Reach and Engagement by Month**

Month	Engaged Users	Total Reach
September	1,199	14,126
October	881	11,857
November	740	10,710
December	731	9,972
January	572	8,215
February	852	9,865
March	1,453	16,797
April	1,654	24,141
May	1,564	23,373
June	1,875	22,694
July	1,202	16,034
August	1,243	15,550
<b>Total</b>	<b>13,966</b>	<b>183,328</b>

“Engaged Users” is defined as the number of unique users who engaged with the page, where engagement includes any click (including clicking on the page or a post, “likes”, reactions, and comments) or story created (shares). “Total Reach” is the number of people who have seen any content associated with the page. The total values are the sums of all engaged users as well as total reach for September 2015 through August 2016.

b) *General Page Analysis*

Referring to table 15 below, daily metrics measure a certain value that is calculated per day. The total value was calculated by adding all daily values. For instance, by August 31, 2016 (the last day of the evaluation year), there were 381 different users (total consumers) who clicked on any page content since the beginning of the grant year on September 1, 2015.

**Table 15: Total Counts for Page-Level Metrics**

Metric	Description	Total
Total Likes	Users who have “Liked” page	218
Unlikes	Users who have “Unliked” page	7
Daily Total Reach	Unique users who have seen content related to page	890
Daily Organic Reach	Unique users who visited page or saw content on their home page	890
Daily total impressions	Number of times page posts are displayed	28,512
Daily total consumers	Unique users who clicked on any post content	381

4. Research Question: What types of MTK content are most “liked”, “shared”, and “commented” on by Facebook participants?

The top 25 posts (with the most clicks, likes, shares, and comments) were coded into three themes to answer this research question: Child Health and Development Information, Family Health Events and Information, and Physical Activity. These are comprised of photos, links, post shares from external pages, and posts written by the NKFM Facebook team.

**Table 16: Total Counts for Top 25 Posts**

Metric	Total
Comments on posts	13
Likes/Loves of Posts	152
Shares of Posts	42
Clicks on Posts	249

#### Top “Child Health and Development Information” posts:

1. Grab and Go! A Handy Guide to Help You Get the Recommended Amount of Fruits and Vegetables (See Figure 4)
2. Is your child typically hungry right before bedtime? Here are some great tips on giving your child a snack before they sleep!
3. Wondering what to have for lunch? Try experimenting with different wraps! Your child can help you put together some creative wraps, and might even have fun eating them, too. Some foods to include are cheese, meat, spinach, cucumbers, humus, and colorful bell peppers.
4. Do you have a child between the ages of 1 and 3 years old? Register for Kohl's Safe Toddler University to learn about child safety! Participants will receive a FREE car seat. The event will be on May 5th - click the link to learn more about it and don't forget to register! <http://www.childrensdmc.org/KIPPSafeToddler>
5. During Halloween children will be eating a lot of "sometime foods" such as candy. Show your children that healthy yummy snacks are also on the menu!

**Figure 5: Recommended Amounts of Fruits and Vegetables RRA Post**



**Top “Family Health Events and Information” posts:**

1. It's time to get ready for summer Meet Up and Eat Up events! Please share this information with families who may be interested. (See Figure 5)
2. Save the date for a fun-filled event hosted by [Kids-TALK Children's Advocacy Center!](#) Everyone in the community is welcome!
3. Make sure you are taking precautions to keep your food safe to eat and keep those nasty illnesses away! Read up on these tips for food safety! <http://articles.extension.org/pages/71082/summer-food-safety>
4. Did you know that you can use your EBT ("food stamps") to purchase fruit and vegetable plants? That way you can grow your own food and stretch your dollars. And if you go to a Farmer's Market that has plants, you can double up your food bucks! Many tomatoes, peppers, strawberries, lettuces and other plants grow well in containers so you don't have to have a large garden.
5. Smoke alarms save lives! The American Red Cross will install smoke alarms for you for free, and check to see if your existing ones are working. Fill out this form to request a visit. Filling out the form only takes a few seconds and the home visit only takes 20 minutes. <http://www.redcross.org/local/mi/emergency-services/home-smoke-alarm>

**Figure 6: Meet Up and Eat Up Events RRA Post**



**Top “Physical Activity” posts:**

1. Have you ever heard your children say "I'm bored!" when they are out of school? Well here's a fun activity for them to do outside! It gets them moving and actively learning about their outside environment! (See Figure 6)
2. Wow! Being outside in nature has some amazing health benefits. Whether it's a walk around the block or a hike in the woods, the evidence is clear: getting outside and moving has positive benefits on the mind, body, and soul. <http://www.wimp.com/what-hiking-does-to-the-brain-is-pretty-amazing/>
3. Have you and your children been watching the Olympics? The Olympics are a great way to get your children excited about physical activity. Try making an "Olympic" recipe with your children while watching the games this week: 5 circle wheat crackers, strawberries (red ring), blueberries (blue ring), bananas (yellow ring), blackberries (black ring), grapes (green ring).
4. Here's another song with simple moves for your child to follow along with and get in some physical activity! Fair warning: this song might get stuck in your head! [https://www.youtube.com/watch?v=9jppQ-3UU\\_U](https://www.youtube.com/watch?v=9jppQ-3UU_U)

**Figure 7: Nature Scavenger Hunt RRA Post**



3. Research Question: How many people are reached through the Media Toolkit: NKFM.org Early Childhood page?

The Early Childhood Resources page was evaluated using Google Analytics to determine how many people were reached throughout the year via this component of the MTK. Once users enter the webpage, they have the option of following several links that offer handouts, games, recipes, and other resources. The website functionality limits the analytical reach of these individual items, however this is a reflection of the current metrics.

**Table 17: Website Page Metrics**

Metric	Description	Total
Total Page Views	Number of times page was viewed by any user	1,927
Unique Page Views	Number of times page was viewed by unique users	1,542

### C. RRA Effect Sizes

Year 4 evaluation reports on the following confirmatory research questions that pertain to main program outcomes:

1. Research Question: Children who have participated in RRA will have significantly higher fruit and vegetable consumption.
2. Research Question: Children who have participated in RRA will engage in significantly more physical activity and significantly less screen time.

**Table 18: Baseline Adjusted Posttest Effect Sizes for Year 4 Pre/Post Cohort**

Variable Name	Variable Description	Comparison			Implementation			Pooled SD	Cohen's d
		Mean	SD	n	Mean	SD	n		
Amt_Fru	Servings Fruit	-0.00	1.11	212	0.04	1.03	216	1.07	0.04
Amt_Veg	Servings Vegetable	0.03	1.13	212	0.08	1.02	216	1.08	0.04
FVComposite	Total fruit and vegetable, plus up to one serving juice	0.00	2.02	212	0.10	1.80	216	1.91	0.05
Totalvhrs	Total hours watching TV	-0.73	5.36	208	-0.45	5.50	210	5.43	0.05*
Totalgame	Total hours video games	0.04	4.64	192	-0.14	5.32	195	4.99	-0.04
Totalscreentime	Total screen time hours	-0.82	7.94	191	-0.50	8.31	193	8.12	0.04*
PA_week	Total hours of physical activity	0.57	9.67	182	0.85	8.72	187	9.20	0.03

\* Inverse effect

As shown in Table 18, very low-range posttest effect sizes were seen when comparing those who had matched pair pre/post data in the comparison group to those who had matched pair pre/post data in the implementation group. This table shows effect sizes for those in the true pre/post cohort, only. There was a slight increase in effects of total fruit and vegetable intake (FV Composite) as well as in total hours spent playing video games.

These results continue to illustrate that the PEACH project is having a positive effect on the study population. It was ethically important to the evaluation team to determine there were no negative effects. The variables for the total number of hours spent watching TV per week and total number of hours of screen time per week both report inverse effects this year. There were decreases in both of these variables from baseline to follow up in the comparison and the

implementation groups, however, the decreases in these variables in the comparison groups were a little larger. This means that the mean change in these variables from baseline to follow-up was greater in the comparison group than in the implementation group. This is what produces an inverse effect. However, it is important to note that these differences in mean changes between the implementation and comparison groups are *not* statistically significant and that all effects were demonstrated in the appropriate direction (such as a decrease in screen time and an increase in fruit intake). While an inverse effect is not an expected outcome, it does not mean the intervention is causing harm or adverse outcomes in the population. The negative Cohen's *d* value for the variable of total hours spent playing games results from a decrease in the intervention group and a slight increase in the comparison group. Despite the negative sign, this is indeed a positive intervention effect.

#### D. Previous Program Analysis Approaches

It should be noted that there have been numerous approved changes to the evaluation since the original SEP was approved. In order to capture all changes in a clear and comprehensive format, PEACH submitted an updated SEP document to UWSEM and CNCS in February 2016. CNCS reviewed this and other past submitted SEPs and in May 2016 returned a document to NFKM which requested further explanation in many areas. NFKM submitted a document to CNCS in September 2016, providing further explanation and answers to all questions CNCS posed. This document was reviewed November 2016 and outstanding concerns are currently being addressed.

##### *a) Year 1*

It should be noted that there have been numerous approved changes to the evaluation since the original SEP was approved. In order to capture all changes in a clear and comprehensive format, PEACH submitted an SEP document to UWSEM and CNCS in January, 2016. CNCS reviewed this and other past submitted SEPs and in May 2016 returned a document to NFKM which requested further explanation in many areas. NFKM submitted a document to CNCS in September 2016, providing further explanation and answers to all questions CNCS posed. This document is currently under review at this time.

Year 1 evaluation used a different set of instruments to collect program data, so analysis approaches also differed from Year 4. The power analyses conducted in Year 1 concluded that a much smaller number of observations (240) were needed to achieve significant findings, with an assumed ICC of .03. T-tests were used to analyze the outcomes in the implementation group compared to the comparison group. Paired t-tests analyzed outcomes from baseline to follow up in the implementation group.

##### *b) Year 2*

Year 2 power analyses differed from Year 4 because the research/evaluation focus had evolved and the targeted outcomes changed. Specifically, BMI decrease was a targeted outcome from the original SEP which has since been eliminated from the SIF PEACH study. There were also more students projected (target number of 4,000) as the SIF evaluation was planned to run for 5 years instead of 4. An ICC of .05 was assumed.

Linear and logistic regression were employed that adjusted for baseline values and covariates consistent with clinical trial methodology. Based on the power analyses, statistical analyses were underpowered at that time.

Missing data was an issue with Year 2 analyses as many participants were lost to follow up. This was a motivating factor in developing future efforts for improving response rates. However, within Year 2, several statistical techniques were also employed to maximize the sample size. When scales were created, participants for whom at least half the scale was completed were included. For multi-item scales in which scores are based on a mean, it is common that not all items have to be included to use data. Any missing items can be removed from the denominator so that only scales that are half filled out or more are computed. Commands exist in both SPSS and SAS to carry out the function of only selecting participants for analyses who have scales that are half filled out or more. For an index score-based tool such as the CBCL and Classroom Problem Behaviors Survey, we do not employ this practice. If more than 20 items are missing from the CBCL form, no scores can be calculated as the scale scores are likely to be invalid.

An overlapping cross sectional design was used so that all baseline and all follow-up surveys were included in the analyses instead of only the surveys for which there were matched baseline and follow-up pairs. This means that data were used when there was just a follow-up survey and no baseline data (or vice versa). The rationale for this, as previously stated, is that newer statistical models allow for estimates to be more accurate by including all data that is collected. And as noted, we will make our primary reports on true cohorts throughout the five years of the SIF study.

### *c) Year 3*

NKFM employed several strategies in Year 3 to combat missing data issues and losing participants to follow up. There was a noteworthy increase in response rate from Year 2 to Year 3 due to the increased funds spent on survey incentives and increased presence of survey staff at the early childhood centers during the pre and post time frames. In Year 2, there was a 37.5% response rate for the baseline parent/guardian surveys, a 22.7% response rate for the follow-up parent/guardian surveys and a 14.8% response rate for matched pairs compared to 63.5% 46.0% and 36.8%, respectively in Year 3. The statistical techniques employed in Year 2 were also employed in Year 3, and an overlapping cross sectional design was again used so that all baseline and follow-up surveys were included in the analyses, regardless of whether they were part of a matched baseline and follow-up pair. See Table 19 below for the response rate by survey type in Year 3.

The response rate analysis shows that for RRA, about a third (30-37%) of all child level survey data were a matched pre and post pair (the parent or teacher filled out both pre and post surveys for a single child). These rates may be lower than others due to the nature of data collection in a school: children may be absent on some data collection days and not others. Post survey rates were uniformly lower than pre survey rates, which could be due to challenges that accrue throughout the year such as illness, weather, paperwork, responsibility, and morale. NKFM recognizes the hard work that teachers undergo as a part of typical teacher duties, and asking

them to complete PEACH evaluation activities are an added burden even when incentives are offered. Additionally, PEACH does not have the funds for the traditional methods such as reminder postcards and phone calls which may serve to increase post survey response rates.

**Table 19: Year 3 Response Rate**

Survey	Pre	Response Rate	Post	Response Rate	Matched Pairs	Response Rate
<b>Regie's Rainbow Adventure®</b>						
<b>Child Level Information</b>						
Parent Guardian Survey	626	63.5%	454	46.0%	363	36.8%
Parent CBCL/1.5-5	569	57.7%	421	42.7%	303	30.7%
Teacher C-TRF	609	61.8%	407	41.3%	371	37.6%
<b>Classroom Level Surveys</b>						
Classroom Behaviors	76	75.2%	43	42.6%	34	33.7%
Implementation Checklist*	N/A	N/A	31	57.4%	N/A	N/A
Weekly Attendance Sheet*	N/A	N/A	35	64.8%	N/A	N/A
<b>Healthy Families Start with You</b>						
Parent Chats	55	78.6%	51	72.3%	51	72.3%
<b>NAP SACC</b>						
Center Self-Assessments	2	100%	1	50%	1	50%
* There is no post assessment for this survey because it is completed throughout the program						

The Media Toolkit was introduced in Year 3, which comprised of the RRA® Facebook page and the NKFM.org Early Childhood page. The evaluation of the MTK used web-based analytics to determine quantity and quality of use. Facebook Insights was used to determine how many people were reached and what types of content experienced the highest user engagement. The Early Childhood Resources page was evaluated using Google Analytics to determine how many people were reached throughout the year via this component of the MTK.

### E. Program Implications

Based on effect size findings and alignment of internal validity requirements discussed, the PEACH evaluation team is confident in making causal inferences in regards to the RRA program. As each confirmatory outcome was analyzed via effect sizes, it is apparent that the program shows additional preliminary evidence. This project has helped the NKFM conduct a rigorous evaluation that preserves internal validity which will ultimately allow PEACH to demonstrate a moderate level of evidence that the programs have a significant effect on health and social emotional aspects of school readiness.

As the study has a limited degree of external validity; findings will not be not generalizable to populations that are not similar to the PEACH study without weighting data. However, findings can be appropriately applied to similar populations. Predominately low income and high African American and Latino populations are those to whom PEACH deems it appropriate to generalize findings. For these populations, the RRA program may be beneficial in increasing fruit and vegetable intake, increasing physical activity, and reducing screen time in preschool aged children. This could be particularly beneficial in areas like Detroit where there are calls for innovative efforts to increase school readiness.

## F. Lessons Learned and Next Steps

NKFM continued to implement strategies in Year 4 that were successful in increasing the response rate, reducing the amount of missing data in the sample, and increasing the response rate for the Child Behavior Checklists (CBCL). During Year 4, staff held paloozas (survey collection events) at centers to pass out surveys and answer questions in order to reduce the burden on teachers. In addition, incentives were given at the pre and post events. Both paloozas and incentives will continue to be used in Year 5. NKFM has also adjusted the incentive budget for Year 5 so that gift cards can again be given out at both the pre and post paloozas, as the gift cards were the best received by parents (versus the non-cash gift for post surveys). In addition, giving the CBCL to the entire sample of evaluated participants and attaching it to the Parent Guardian survey was effective in increasing the sample size and NKFM will continue this practice into Year 5.

Where these steps were successful in increasing overall survey response rates, the evaluation team still hopes to increase survey response rates from teachers. In an effort to facilitate this, NKFM program coordinators will continue to offer “survey help days” for teachers where the NKFM staff member coordinates a morning or afternoon (typically Fridays when preschool teachers may not have class) to specifically provide an opportunity to be physically present at the center, help answer questions about surveys, and bring refreshments such as coffee or tea while teachers fill out surveys. In previous years, teachers were responsible for filling out evaluation instruments during their free time either at school or home, so this is an effort to provide a dedicated time to complete the evaluation.

Next steps in the PEACH evaluation study include collecting the final dataset, which will comprise of Years 2, 3, 4 and 5. Data collection in Year 5 takes place during the school year, so final survey data will be collected around May 2017. Statistical analyses for the final evaluation report will focus on the center as the unit analysis and report on all research questions. Careful steps will be taken to ensure that we find the right approach to deal with missing data and patterns of missingness as well as separate out the participants from centers that switched from implementation to comparison such that all analyses will be conducted twice and any carryover effects can be identified.

## Section V: Study Logistics and Updates

### A. SEP Amendments

#### 1. August 2013

Key changes to the research team (hiring of an internal evaluator and academic assistance) and the change in the kindergarten readiness instrument from the EDI to the CBCL 1.5/5 were described.

#### 2. June 2014

Updated consent process from active to passive consent, development of survey collection events, and a decrease of family take-home produce items for implementation sites from six times to two times per program year were described.

### 3. December 2014

Updates to evaluation sample size and power analysis are described. Additionally, the end of the IRB and evaluation partnership with MPHI was noted.

### 4. June 2015

Updates to the Media Toolkit and the evaluation questions of the project were described.

### 5. September 2015

A comprehensive list of research questions, analysis methods plan, updates to the evaluation of the Media Toolkit, and literature support for utilizing a parent reported fruit and vegetable metric were provided.

### 6. February 2016

A revised, comprehensive SEP was submitted, describing all current evaluation questions and tools, evidence levels, protocols and processes in full.

### 7. December 2016

An SEP memo was submitted, clarifying certain equivalence and analysis practices per the request of CNCS and JBS.

## B. IRB

In November of Year 3, PEACH experienced a switch in IRBs. Previously, Michigan Department of Community Health (MDCH) served as PEACH's IRB, however a change in administration brought about a new policy that prevented MDCH from serving as an IRB for projects that it does not fund. As a result, PEACH applied for a new IRB with Argus. Argus was chosen because they were already familiar with the structure of SIF. The letter of the approval from Argus was included in the Appendix of the Year 3 Report.

## C. Evaluation Staff

There was a transition in evaluator near the end of Year 4. A previous program coordinator at NKFM, Sarah Wesolek-Greenson became the new NKFM internal evaluator for the SIF PEACH project in June 2016. In Year 4, PEACH also enlisted the help of two key part-time staff to assist in SIF evaluation. These part-time staff members comprised of one graduate student at the University Of Michigan School Of Public Health and a recent graduate of the University of Michigan with a Bachelor's in Social Theory and Practice. They both helped with data entry, evaluation survey preparation, and Key Informant Interviews. Since Year 1, there have been other changes and additions to the evaluation staff. In Year 1, the project manager changed to Crystal D'Agostino. Since then, many people have been added to help take on this major evaluation project such as attending survey collection events at centers. No changes have affected the timeline of evaluation.

## D. Funding

United Way of Southeastern Michigan was approved for continuation funds for Year 5, which will be the last year of the PEACH SIF project.

## E. Current Study Timeline

See timeline below for current study plan. Final report of findings will occur after Year 4 programming.

- **April 2012: Funding Initiated**
- **Year 1**
  - January 2013: Final SEP Approval, Initiation of Programming and Evaluation
  - SIF Regions Added to Programming in Year 1:
    - Northwest Detroit
    - River Rouge
- **Year 2**
  - September 1 2013-August 31 2014: Programming and Evaluation
  - Current SIF Regions:
    - Northwest Detroit, River Rouge
  - SIF Regions Added to Programming in Year 2:
    - Inkster
    - Southwest Detroit
- **Year 3**
  - September 1 2014- August 31 2015: Programming and Evaluation
  - Current SIF Regions:
    - Northwest Detroit, River Rouge, Inkster, Southwest Detroit
  - SIF Regions Added to Programming in Year 3:
    - Hamtramck
    - Pontiac
- **Year 4**
  - September 1 2015-August 31 2016: Programming and Evaluation
  - Current SIF Regions:
    - Northwest Detroit, River Rouge, Inkster, Southwest Detroit, Hamtramck, Pontiac
  - SIF Regions Added to Programming in Year 4:
    - Northeast Detroit
    - South Oakland
- **Year 5**
  - September 1 2016-August 31 2017: Final Year of Programming and Evaluation
  - Current SIF Regions:
    - Northwest Detroit, River Rouge, Inkster, Southwest Detroit, Hamtramck, Pontiac, Northeast Detroit, South Oakland
  - SIF Regions Added to Programming in Year 4:
    - Detroit Northend Central
    - South Macomb Warren/Eastpointe

## F. Year 4 Study Budget

Refer to Figure 9 for Year 4 SIF Budget details. In Year 4, a portion of the budget was spent on center implementation only. All centers who implement PEACH through SIF participate in the

evaluation process, so implementation resources ultimately contribute to the overall evaluation mission. Heights and weights of children are no longer measured and therefore no portion of the staff budget for Year 4 was allocated to this practice.

**Figure 9: Year 4 NKFM SIF PEACH Budget**

SIF EVALUATION DETAILS 2015-16												
	Implement		Analysis		Data Entry		Meeting		Other		Cost	Hours
	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	TOTALS	TOTALS
Evaluator	10,259.28	514.6	4,542.39	226.6	4,542.39	226.6	6,056.51	302.1	6,056.51	302.1	31,457.08	
Data Entry	895.96	81.5	3,747.01	307.0	13,159.84	965.3					17,802.81	
Staff	67,763.81	3,065.5					14,148.34	236.6	41,063.01	977.3	122,975.16	
Salaries	78,919.05	3,661.6	8,289.40	533.6	17,702.23	1,191.9	20,204.85	538.7	47,119.52	1,279.4	172,235.05	7,205.20
Fringe	25,254.10		2,652.61		5,664.71		6,465.55		15,078.25		55,115.22	
Matls/Supplies	19,639.49										19,639.49	
Consultant/Contract	200.00										200.00	
Grant Consultant	30.00		8,377.25								8,407.25	
Postage											-	
Mileage & Auto	690.69										690.69	
	124,733.33		19,319.26		23,366.94		26,670.40		62,197.77		256,287.70	
Indirect	50,336.47		5,287.18		11,290.91		12,887.14		30,053.96		109,855.66	
TOTAL	175,069.80		24,606.44		34,657.85		39,557.54		92,251.73		366,143.36	

The National Kidney Foundation of Michigan would like to acknowledge the contribution of early childhood education providers in this rigorous evaluation of the PEACH project. The PEACH team is pleased to report these positive preliminary findings of the Regie’s Rainbow Adventure® program.

## Appendix A: Tables and Figures

Table A: Year 4 Centers

Grantee	Center	Implementation/ Comparison	RRA	HFSY	NAP SACC
<b>New St. Paul</b>					
	Bibleway I	Implementation	X		
	Citadel	Comparison	X		
	Metro	Implementation	X		
	Third New hope	Comparison	X		
	St. Timothy's	Implementation	X		
	St. John	Comparison	X		
<b>The Guidance Center</b>					
	River Rouge	Implementation	X		
<b>Starfish Family Services</b>					
	Inkster-Hiveley	Implementation	X	X	X
	Westwood head Start	N/A*			X
<b>Matrix Head Start</b>					
	Eternal Rock	Implementation	X		
	Hernandez	Comparison	X		
	Holy Redeemer	Comparison	X		
	Fiore Center	Implementation	X		
	St. Stephen	Implementation	X		
	SS Peter & Paul	Comparison	X		
	Lighthouse	Implementation	X		
	Care Village	Comparison	X		
	Infinity I	Comparison	X		
	Samaritan	Comparison	X		
<b>United Children and Family</b>					
	Charity	Implementation	X	X	
	Mt. Calvary	Implementation	X	X	
	Mt. Zion	Implementation	X	X	
	Kids-in-Zion	Implementation	X		
<b>Wayne Metro Community Action</b>					
	Hamtramck Mitchell	Implementation	X	X	X
	Highland Park Cortland	Comparison	X	X	X
<b>Wayne County RESA</b>					
	Ecorse GSRP	Comparison	X		
	Hanley International GSRP	Comparison	X		
<b>OLHSA</b>					
	Pontiac Head Start	Implementation	X	X	X
	Oak Park Head Start	Implementation	X		X
<b>Southwest Solutions</b>					
	Mark Twain	Comparison	X		
<b>Development Centers</b>					
	7 Mile	Comparison	X		

Other Centers					
	Helping Hands Child Care	N/A*			X
	Kittie's Lovin Care	N/A*			X
	Gracie Fox	N/A*			X
	Above and Beyond	N/A*			X
	Second Home Child Development	N/A*			X
	Something Special Daycare	N/A*			X
	A Place 4 Jake	N/A*			X
	Willi's Wonderland	N/A*			X
	Young Faith Child Care	N/A*			X
	Seay's Home Child Care	N/A*			X
	Susie Q Kiddie Kare	N/A*			X
	My Grannie's Child	N/A*			X
	Lona's Learning Zone	N/A*			X
	Open Arms Child Care	N/A*			X
	DHDC	N/A*			X

\* N/A sites are neither comparison nor implementation sites, as The NAP SACC program utilizes pre and post survey tools that track the progress each individual site made during the course of the intervention. The comparison will be between each individual site's own pre-assessment and post-assessment.

**Table B: Year 4 Evaluation Measures for PEACH Programs**

<b>Construct</b>	<b>Respondent</b>	<b>Data Instrument</b>	<b>Time Point</b>
<b>Regie’s Rainbow Adventure®</b>			
Nutrition outcomes, physical activity, screen time, internalizing behaviors	Parent/guardian	Parent/Guardian Survey	Pre and post
Program fidelity	Teacher	Implementation Checklist	Post
Program implementation process and satisfaction	Teacher	Key Informant Interviews	Post
Classroom level kindergarten readiness-externalizing problem behaviors	Teacher	Teacher Classroom Level Problem Behaviors Survey	Pre and post
Individual level kindergarten readiness-externalizing problem behaviors	Teacher	C-TRF	Pre and post
Individual level kindergarten readiness-externalizing problem behaviors	Parent/guardian	CBCL 1.5/5	Pre and post
Program dosage	Teacher	Weekly Attendance Sheet	Post
<b>NAP SACC</b>			
Self-assessment tool for nutrition and physical activity policies, practices, and procedures	Teachers/administrators	Self-assessment tool	Pre and post
<b>Healthy Families Start with You!</b>			
Health and nutrition outcomes, smoking and other correlates to chronic diseases	Parent/Guardian	Chat 1 and Chat 2	Pre and post

**Table C: Description of Composite Response Variables**

Response Variables			
Composite Variable Name <sup>1</sup>	Variables Used	Variable Location <sup>2</sup> (# <sup>3</sup> )	Description
PA_weekx	ACTWEEKx ACTWENDx	PG Survey (4) PG Survey (4)	The number of hours a child is physically active each week
Totaltvhrsx	TV_WEEKx TV_WENx	PG Survey (7) PG Survey (8)	The number of hours a child watches TV each week
Totalgamex	GAMEWEEKx GAMEWENx	PG Survey (7) PG Survey (8)	The number of hours a child plays video/computer games each week
Totalscreentimex	Totaltvhrsx Totalgamex	See above See above	The number of hours a child spends in front of a screen each week
Totalsweetdrinksnochocmilks	AMT Frudx AMTSPORx AMTREGSx AMTSTEAx	PG Survey (1b) PG Survey (1c) PG Survey (1d) PG Survey (1e)	The number of sweet drinks a child consumes on a typical day, not including chocolate milk
Totalsweetdrinksyeschocmilks	AMT Frudx AMTSPORx AMTREGSx AMTSTEAx AMTCMLKx	PG Survey (1b) PG Survey (1c) PG Survey (1d) PG Survey (1e) PG Survey (1h)	The number of sweet drinks a child consumes on a typical day, including chocolate milk
FVCompositex	AMTJUICx AMT_FRUx AMT_VEGx	PG Survey (1a) PG Survey (2) PG Survey (3)	The number of servings of fruits and vegetables. If the child drinks fruit juice, one serving is added to this variable.

<sup>1</sup> Both Baseline and Follow-up composite variables were created, only Baseline are shown here.

<sup>2</sup> All response variables can be located in the Parent Guardian Survey, which can be found in Appendix B.

<sup>3</sup> If a variable is used from the Parent Guardian Survey, the number following it will indicate which question the variable represents.

**Table D: Description of Composite Covariate Variables**

<b>Covariate Variables</b>				
<b>Composite Variable Name</b>	<b>Variables Used</b>	<b>Variable Location (#)</b>	<b>Location in Appendix</b>	<b>Description</b>
Sex <sup>4</sup>	Genderp Gendert	Parent CBCL Teacher CBCL	1C 1D	The gender of the child
AGE2 <sup>4</sup>	ChildDOB <sup>5</sup> DATE_COMPx DFOpx DFOtx	School Rosters PG Survey <sup>6</sup> Parent CBCL Teacher CBCL	N/A 1A 1C 1D	The age of the child at the beginning of the program
RACE <sup>4</sup>	WHITEx BLACKx ASIANx NATHAWx ARABx AMERINDx RACE_OTHx ETHNICCODEp ETHNICCODEt	PG SURVEY (19) PG SURVEY (19) PG SURVEY (19) PG SURVEY (19) PG SURVEY (19) PG SURVEY (19) PG SURVEY (19) Parent CBCL Teacher CBCL	1A 1A 1A 1A 1A 1A 1A 1C 1D	The race of the child grouped into Black, White, Hispanic, and Other

<sup>4</sup>In order to minimize missing data, these variables were pulled from multiple sources and each source was accessed in the order listed

<sup>5</sup>Date of Birth (ChildDOB) was used to calculate AGE2, using the dates listed below it. Since ChildDOB has no missing data, there was no need to pull from the Parent and teacher CBCL (dobp and dobt, respectively).

<sup>6</sup>DATE\_COMPx (“Today’s date”) is found in the General Information section of the Parent Guardian Survey.

**Table E: Description of Combined Variables**

<b>Construct</b>	<b>Question Numbers</b>	<b>Survey</b>
Screen time	#7 & 8	Parent/Guardian Survey
Physical activity	#4	Parent/Guardian Survey
Fruit and vegetable consumption	#1a & #3	Parent/Guardian Survey
Sugar sweetened beverage consumption with chocolate milk	#1b, c, d, e, h	Parent/Guardian Survey
Sugar sweetened beverage consumption without chocolate milk	#1b, c, d, e,	Parent/Guardian Survey
Parent reported externalizing behaviors percentile score	#4, 5, 6, 8, 10, 11, 13, 14, 16, 17, 18, 19, 22, 23, 25, 27, 29, 31, 32, 34, 35, 37, 38, 39 were combined, then compared to previous samples of children	Parent Child Behavior Checklist
Parent reported attention problems subscale percentile score	#4, 5, 25, 29, 38 were combined, then compared to previous samples of children	Parent Child Behavior Checklist
Parent reported aggressive behavior subscale percentile score	#6, 8, 10, 11, 13, 14, 16, 17, 18, 19, 22, 23, 27, 31, 32, 34, 35, 37, 39 were combined, then compared to previous samples of children	Parent Child Behavior Checklist
Teacher reported externalizing behaviors percentile score	#1-33 were combined, then compared to previous samples of children	Teacher Child Behavior Checklist
Teacher reported attention problems subscale percentile score	#1, 2, 11, 18, 19, 21, 23, 24, 32 were combined, then compared to previous samples of children	Teacher Child Behavior Checklist
Teacher reported aggressive behavior subscale percentile score	#3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 17, 20, 22, 25, 26, 27, 28, 29, 30, 31, 33 were combined, then compared to previous samples of children	Teacher Child Behavior Checklist

**Figure A: PEACH SIF Logic Model**

**National Kidney Foundation of Michigan: Project for EARLY Childhood Health (PEACH) Logic Model**



## **Appendix B: Year 4 Survey instruments**

1. RRA PG Survey English\*
2. RRA PG Survey Spanish\*
3. RRA PG Survey Arabic\*
4. RRA Parent CBCL\*
5. RRA Teacher CBCL\*
6. RRA Classroom Level Problem Behaviors Survey\*
7. RRA Implementation Checklist
8. RRA Weekly Attendance Sheet
9. NAP SACC Nutrition Section\*
10. NAP SACC Physical Activity Section\*
11. HFSY Chat 1 English
12. HFSY Chat 2 English
13. HFSY Chat Spanish

\*Only pre surveys are included. All post surveys are available upon request.



**Thank you for agreeing to take part in this important survey about you and your child!**

The information you provide us will help us to understand the nutrition and physical activity needs of preschool aged children in the Detroit area. This survey is voluntary and all responses are confidential. If you have any questions or concerns, please contact Maria Houroian (313) 259-1574 ext. 223

**General Information**

Today's date \_\_\_\_/\_\_\_\_/\_\_\_\_

Parent/Guardian Name: \_\_\_\_\_

Child's Name: \_\_\_\_\_

Child's Date of Birth \_\_\_\_/\_\_\_\_/\_\_\_\_

Child's Sex (circle one):            Male            Female

Teacher's name: \_\_\_\_\_

**Drinks**

1. For each of the following drinks, **circle** the number of servings your child drinks **on a typical day**.  
**Please circle only one answer for each type of drink listed.**

**1 serving = 8 ounces = ¾ can = 2 juice boxes**

	Type of drink	Number of servings					
a.	Juice (such as 100% juice; orange/apple/grape etc)	0 or less than 1/day	1	2	3	4	5+
b.	Fruit drinks (such as Hi-C, Hawaiian punch, lemonade, Koolaid, Capri-Sun)	0 or less than 1/day	1	2	3	4	5+
c.	Sports drinks (such as Gatorade)	0 or less than 1/day	1	2	3	4	5+
d.	Regular Soda (pop)	0 or less than 1/day	1	2	3	4	5+
e.	Sweetened Tea	0 or less than 1/day	1	2	3	4	5+
f.	Water	0 or less than 1/day	1	2	3	4	5+
g.	Skim (fat-free), 1-2% milk	0 or less than 1/day	1	2	3	4	5+
h.	Chocolate/flavored milk	0 or less than 1/day	1	2	3	4	5+



## Fruits & Vegetables

2. How many servings of fruit (fresh fruit, frozen fruit, canned fruit, but NOT including juice) does your child eat on a typical day? A serving is about 8 oz, or one medium piece of fruit, or one half-cup of raw fruit.

Please circle only one answer below.

Type of food	Servings/day					
Fruit:	Less than 1/day	1	2	3	4	5+

3. How many servings of **vegetables** (fresh, frozen or canned, but NOT including potatoes) does your child eat on a typical day? A serving is about 8 oz, or one half-cup of cooked vegetables, or one cup of raw vegetables.

Please circle only one answer below.

Type of food	Servings/day					
Vegetables:	Less than 1/day	1	2	3	4	5+

## Activity

4. How many hours is your child involved in sports or active play on a typical weekday or weekend?

Please circle only one answer for weekday and one answer for weekend.

Day	Hours/day					
Active play/sports on a typical <b>weekday</b> :	Less than 1 hour/day	1-2 hours	2-3 hours	3-4 hours	4-5 hours	5+ hours
Active play/sports on a typical <b>weekend</b> :	Less than 1 hour/day	1-2 hours	2-3 hours	3-4 hours	4-5 hours	5+ hours

5. Compared to other children of the same age and sex, how would you rate your child's activity level? Circle one answer below:

Much less active	Somewhat less active	About the same	A little more active	Much more active
------------------	----------------------	----------------	----------------------	------------------

6. During a typical week, how many hours do **you** exercise (for example: walk, run, play ball) with your child?  
\_\_\_\_\_ hours per week.

### Television and Screen Time

7. On a typical **weekday**, how many hours does your child spend doing the activities below?

<b>Watching shows or movies</b> (including those on a TV or streaming device like a tablet, computer or smartphone)	Less than 1 hour/day	1-2 hours/day	2-3 hours/day	More than 3 hours/day
<b>Playing video games</b> on a console or handheld (including X-box, PlayStation, Wii, or Nintendo DS)	Less than 1 hour/day	1-2 hours/day	2-3 hours/day	More than 3 hours/day
<b>Playing computer or internet games</b> (including a tablet, iPad and/or smartphone)	Less than 1 hour/day	1-2 hours/day	2-3 hours/day	More than 3 hours/day

8. On a typical **weekend day**, how many hours does your child spend doing the activities below?

<b>Watching shows or movies</b> (including those on a TV or streaming device like a tablet, computer or smartphone)	Less than 1 hour/day	1-2 hours/day	2-3 hours/day	More than 3 hours/day
<b>Playing video games</b> on a console or handheld (including X-box, PlayStation, Wii, or Nintendo DS)	Less than 1 hour/day	1-2 hours/day	2-3 hours/day	More than 3 hours/day
<b>Playing computer or internet games</b> (including a tablet, iPad and/or smartphone)	Less than 1 hour/day	1-2 hours/day	2-3 hours/day	More than 3 hours/day

### Current Eating/Exercise Habits

9. Does your child usually eat breakfast?

- No  
 Yes

10. For each of the behaviors below **grade** how well your child is doing from A (great/healthy) to F (poor/unhealthy) in terms of how much or how often they are doing each thing. **Circle the response.**

	Great/Healthy			Poor/Unhealthy	
a. Snack foods	A	B	C	D	F
b. Drinking sweetened beverages	A	B	C	D	F
c. Eating out/ carry out dinners	A	B	C	D	F
d. Eating fruits	A	B	C	D	F
e. Eating vegetables	A	B	C	D	F
f. Watching TV/ screen time	A	B	C	D	F
g. Playing video games/ internet	A	B	C	D	F
h. Physical activity/ exercise	A	B	C	D	F

## Your Child's Health

11. On the scale below of 0-10, where 0 = very unhappy and 10 = very happy, select the answer that best represents your child's general mood.

Please circle only one option below.

		Very unhappy			In between					Very happy		
My child's mood:	Don't know	0	1	2	3	4	5	6	7	8	9	10

12. How often was your child unhappy, sad or depressed **in the past month?**

Circle only one answer below.

Never	Rarely	Sometimes	Usually	Always	Don't know
-------	--------	-----------	---------	--------	------------

13. How often did your child have trouble falling or staying asleep **in the past month?**

Circle only one answer below.

Never	Rarely	Sometimes	Usually	Always	Don't know
-------	--------	-----------	---------	--------	------------

14. **In the past month**, how often was your child tired during the day?

Circle only one answer below.

Never	Rarely	Sometimes	Usually	Always	Don't know
-------	--------	-----------	---------	--------	------------

15. How would you rate the quality of your child's sleep?

Circle only one answer below.

Very good	Fairly good	Fairly bad	Very bad
-----------	-------------	------------	----------

## School

16. For the following statements where 0 = strongly disagree and 10 = strongly agree, **circle only one answer that best represents** your child's participation in school or daycare activities.

	Strongly Disagree				Neutral				Strongly Agree			
a. My child is not interested in school	0	1	2	3	4	5	6	7	8	9	10	
b. My child tries his/her best at school	0	1	2	3	4	5	6	7	8	9	10	
c. My child enjoys school	0	1	2	3	4	5	6	7	8	9	10	
d. My child gets good grades at school	0	1	2	3	4	5	6	7	8	9	10	
e. My child dreads going to school	0	1	2	3	4	5	6	7	8	9	10	
f. My child gets teased at school	0	1	2	3	4	5	6	7	8	9	10	
g. My child has trouble finding friends to play with	0	1	2	3	4	5	6	7	8	9	10	
h. My child joins in with family activities	0	1	2	3	4	5	6	7	8	9	10	

## Your Family History

This is the last section. We are required to ask these questions. **Your answers will not be shared with your child's preschool or Head Start and will not in any way affect your eligibility for services.**

17. What is your relationship to the child you care for?

- Mother
- Father
- Grandparent
- Other family member
- Foster Parent/ Adoptive Parent
- Other: \_\_\_\_\_

18. Who lives with you other than your child/children? (**Check all that apply**)

- No one
- My male or female partner (husband, wife, boyfriend or girlfriend)
- Grandparent(s)
- Other relative(s)
- Other nonrelative(s)

19. What is your child's race? **(Check all that apply)**

- White
- Black or African American
- Hispanic/ Latino
- Asian
- Native Hawaiian or other Pacific Islander
- Arab/Arab American OR Middle Eastern/Middle Eastern American
- American Indian or Alaska Native
- Other (fill in) \_\_\_\_\_

20. What is the highest level of school that you have completed?

- Some grade school
- Some high school
- High school diploma or GED
- Trade or training certificate
- Some college
- Bachelor's degree
- Graduate degree

21. What is your annual household income? **Please check only one answer below**

- |  |    |                                   |
|--|----|-----------------------------------|
| <input type="checkbox"/> Less than \$10,000 per year   | or | about \$800 per month             |
| <input type="checkbox"/> \$10,001 to \$15,000 per year | or | about \$801-\$1,250 per month     |
| <input type="checkbox"/> \$15,001 to \$20,000 per year | or | about \$1,251- \$1,600 per month  |
| <input type="checkbox"/> \$20,001 to \$25,000 per year | or | about \$1,601 - \$2,000 per month |
| <input type="checkbox"/> \$25,001 to \$35,000 per year | or | about \$2,001 - \$2,900 per month |
| <input type="checkbox"/> \$35,001 to \$45,000 per year | or | about \$2,901 - \$3,750 per month |
| <input type="checkbox"/> \$45,001 to \$60,000 per year | or | about \$3,751 - \$5,000 per month |
| <input type="checkbox"/> \$60,001 and above per year   | or | \$6,600 or more per month         |

22. What type of health insurance or health care coverage does your child have?

- Private health insurance
- Medicaid
- SCHIP (CHIP – Children's Health Insurance Program)
- Military Healthcare (TRICARE/VA/CHAMP-VA)
- Indian Health Service
- Other government Program
- Single Service Plan (e.g. Dental, Vision, Prescriptions)
- No health insurance

23. Over the past 12 months, about how many of the following types of health care visits has your child had?

Type of visit	Number of visits
a. Emergency room visits	
b. Sick visits to a physician for a new illness/problem	
c. Sick visits to a physician for a chronic illness/problem (asthma etc.)	
d. Check-up visits to a physician	

24. Are you on any of the following public assistance programs? **(Check all that apply)**

- WIC
- SNAP (Bridge Card, Food Stamps)
- FIP (Cash Assistance)
- Other: \_\_\_\_\_
- I am not on public assistance

**Thank you! Please return this form to your child's school.**

**¡Gracias por participar en este cuestionario importante sobre usted y su niño!**

La información que usted nos proporcione nos ayudará entender las necesidades de nutrición y actividad física de niños de edad preescolar en el área de Detroit. Este cuestionario es voluntario y todas las respuestas son confidencial. Si usted tiene alguna pregunta o preocupación, por favor no dudé en contactar a Maria Houroian (313) 259-1574 ext. 223

**Información General**

Fecha: \_\_\_\_/\_\_\_\_/\_\_\_\_

Nombre del cuidador/padre: \_\_\_\_\_

Nombre del niño(a): \_\_\_\_\_

Fecha de nacimiento del niño(a): \_\_\_\_/\_\_\_\_/\_\_\_\_

Sexo del niño(a):     Masculino             Femenino

Nombre del maestro del niño(a): \_\_\_\_\_

**Bebidas**

1. En cada una de las siguientes bebidas, haga un círculo en **el número de porciones** que su niño(a) toma en **un día típico**.

**Por favor elija una respuesta para cada tipo de bebida en la lista (a – h).**

**1 porción = 8 oz = ¾ lata = 2 pequeñas cajas de jugo**

	<b>Tipo de bebida</b>	<b>Porciones</b>					
a.	Jugo (100% jugo; por ej. naranja/manzana/tropical/uva)	Ninguna / menos de 1 por día	1	2	3	4	5+
b.	Bebidas de fruta ( por ej. Hi-C, Hawaiian Punch, limonada, Koolaid, Capri-Sun)	Ninguna / menos de 1 por día	1	2	3	4	5+
c.	Bebidas deportivas (por ej. Gatorade, Poweraid)	Ninguna / menos de 1 por día	1	2	3	4	5+
d.	Soda regular (no de dieta; por ej. Coca-Cola, Pepsi, Sprite)	Ninguna/ menos de 1 por día	1	2	3	4	5+
e.	Té Endulzado	Ninguna/ menos de 1 por día	1	2	3	4	5+
f.	Agua	Ninguna/ menos de 1 por día	1	2	3	4	5+
g.	Leche sin grasa o con 1-2% grasa	Ninguna/ menos de 1 por día	1	2	3	4	5+
h.	Leche con chocolate u otro sabor	Ninguna/ menos de 1 por día	1	2	3	4	5+



## Frutas & Vegetales

2. ¿Cuántas porciones de **frutas** come su niño(a) en **un día** típico – incluyendo fruta entera, congelada o enlatada pero no incluyendo jugo? Una porción pesa aproximadamente 8 oz, o es equivalente a una fruta de tamaño mediano o media taza de fruta fresca.

**Por favor haga un círculo solamente en la respuesta adecuada.**

Tipo de comida	Porciones					
Fruta:	Menos de 1 por día	1	2	3	4	5+

3. ¿Cuántas porciones de **vegetales** come su niño(a) en **un día** típico – incluyendo vegetales frescos, congelados o enlatados pero no incluyendo patatas/papas o yuca? Una porción pesa aproximadamente 8 oz, o es equivalente a media taza de vegetales cocinados o una taza de vegetales crudos.

**Por favor haga un círculo solamente en la respuesta adecuada.**

Tipo de comida	Porciones					
Vegetales:	Menos de 1 por día	1	2	3	4	5+

## Actividad

4. ¿En una semana típica, cuántas horas en **un día** está involucrado su niño(a) en deportes o juego físico?  
¿Y por cuántas horas en **un día** típico del fin de semana?

**Por favor haga un círculo solamente en la respuesta adecuada.**

Día	Horas por Día					
Juego físico/deportes por día: <b>durante una semana típica:</b>	Menos de 1 hora por día	1-2 horas	2-3 horas	3-4 horas	4-5 horas	5+ horas
Juego físico/deportes por día: <b>fin de semana típica</b>	Menos de 1 hora por día	1-2 horas	2-3 horas	3-4 horas	4-5 horas	5+ horas

5. ¿En comparación a otros niños de la misma edad y sexo, como usted calificaría el nivel de actividad física de su niño(a)? **Por favor haga un círculo solamente en la respuesta adecuada.**

Mucho menos activo	Un poco menos activo	Más o menos igual	Un poco más activo	Mucho más activo
--------------------	----------------------	-------------------	--------------------	------------------

6. ¿Durante una semana típica, por cuántas horas usted hace ejercicios (caminar, correr, juega) con su niño(a)?  
\_\_\_\_\_ horas por semana

### Televisión y Tiempo Frente La Pantalla

7. ¿En un día típico durante la semana, cuánto tiempo dura su niño(a) en las próximas actividades?

**Por favor haga un círculo solamente en la respuesta adecuada.**

<b>Tiempo viendo televisión o películas</b> (incluyendo la tableta electrónica, computadora o celular)	Menos de 1 hora/día	1-2 horas/día	2-3 horas/día	Más de 3 horas/día
<b>Tiempo jugando videojuegos</b> (incluyendo X-box, PlayStation, Wii, o Nintendo DS)	Menos de 1 hora/día	1-2 horas/día	2-3 horas/día	Más de 3 horas/día
<b>Tiempo jugando juegos en la computadora o internet</b> (incluyendo la tableta electrónica, iPad o celular)	Menos de 1 hora/día	1-2 horas/día	2-3 horas/día	Más de 3 horas/día

8. ¿En un día típico durante el **fin de semana**, cuánto tiempo dura su niño(a) en las próximas actividades?

**Por favor haga un círculo solamente en la respuesta adecuada.**

<b>Tiempo viendo televisión o películas</b> (incluyendo la tableta electrónica, computadora o celular)	Menos de 1 hora/día	1-2 horas/día	2-3 horas/día	Más de 3 horas/día
<b>Tiempo jugando videojuegos</b> (incluyendo X-box, PlayStation, Wii, o Nintendo DS)	Menos de 1 hora/día	1-2 horas/día	2-3 horas/día	Más de 3 horas/día
<b>Tiempo jugando juegos en la computadora o internet</b> (incluyendo la tableta electrónica, iPad o celular)	Menos de 1 hora/día	1-2 horas/día	2-3 horas/día	Más de 3 horas/día

### Hábitos de Comida y Ejercicio

9. ¿Su niño(a) come desayuno usualmente?

- No  
 Si

10. En cada una de los siguientes comportamientos (líneas a-h), califique como su niño(a) se comporta desde A (muy bien/saludable) hasta F (mal/no saludable) de CUANTO o que tan FRECUENTE su niño hace cada uno.

**Por favor haga un círculo solamente en la respuesta adecuada.**

	Muy Bien / Saludable			Mal/ No Saludable	
	A	B	C	D	F
a. Bocadillos	A	B	C	D	F
b. Tomar bebidas endulzadas	A	B	C	D	F
c. Comer fuera de la casa/pedir comida para llevar	A	B	C	D	F
d. Comer frutas	A	B	C	D	F
e. Comer vegetales	A	B	C	D	F
f. Mirar TV o pasar tiempo frente a la pantalla	A	B	C	D	F
g. Jugar videojuegos (cualquier tipo) o usar el internet	A	B	C	D	F
h. Hacer actividad física/ ejercicios	A	B	C	D	F

## La Salud De Su Niño(a)

11. En una escala de 0 a 10, donde 0 = muy infeliz/descontento y el 10 = muy feliz/bien contento, elija la respuesta que mejor representa el estado de ánimo general de su hijo(a). **Por favor haga un círculo solamente en la respuesta adecuada.**

	Muy infeliz/descontento contento				Entre Medio				Muy feliz/bien			
<b>El estado de animo de mi niño:</b>	No se	0	1	2	3	4	5	6	7	8	9	10

12. **¿En el mes pasado,** cuántas veces estuvo su niño(a) descontento, triste y/o deprimido?  
**Por favor haga un círculo solamente en la respuesta adecuada.**

Nunca	Casi nunca	Algunas veces	Usualmente	Siempre	No sé
-------	------------	---------------	------------	---------	-------

13. **¿En el mes pasado,** con qué frecuencia su niño(a) tuvo problemas quedándose dormido y/o hiendo a dormir?  
**Por favor haga un círculo solamente en la respuesta adecuada.**

Nunca	Casi nunca	Algunas veces	Usualmente	Siempre	No sé
-------	------------	---------------	------------	---------	-------

14. **¿En el mes pasado,** con qué frecuencia estuvo su niño(a) cansado durante el día?  
**Por favor haga un círculo solamente en la respuesta adecuada.**

Nunca	Casi nunca	Algunas veces	Usualmente	Siempre	No sé
-------	------------	---------------	------------	---------	-------

15. **¿Cómo calificarías la calidad del sueño de su niño(a)?**  
**Por favor haga un círculo solamente en la respuesta adecuada.**

Muy bien	Más o menos bien	Más o menos mal	Muy mal
----------	------------------	-----------------	---------

## Escuela

16. Para **cada una** de las siguientes declaraciones (a – h) donde 0 = muy en desacuerdo y 10 = muy de acuerdo, por favor elija **la respuesta que mejor representa** la participación de su niño(a) en la escuela o actividades durante el cuidado de niños.

	Muy en Desacuerdo			Neutral						Muy en Acuerdo	
	0	1	2	3	4	5	6	7	8	9	10
a. Mi niño(a) no está interesado en la escuela	0	1	2	3	4	5	6	7	8	9	10
b. Mi niño(a) intenta lo mejor que puede en la escuela	0	1	2	3	4	5	6	7	8	9	10
c. Mi niño(a) disfruta la escuela	0	1	2	3	4	5	6	7	8	9	10
d. Mi niño(a) recibe buenas calificaciones en la escuela	0	1	2	3	4	5	6	7	8	9	10
e. A mi niño(a) no le gusta ir a la escuela	0	1	2	3	4	5	6	7	8	9	10
f. Mi niño(a) es intimidado por otros en la escuela	0	1	2	3	4	5	6	7	8	9	10
g. Mi niño(a) tiene problemas en encontrar amigos con quien puede jugar	0	1	2	3	4	5	6	7	8	9	10
h. Mi niño(a) comparte en actividades junto a la familia	0	1	2	3	4	5	6	7	8	9	10

## Su Historial Familiar

Esta es la última sección. Es requerido hacer estas preguntas. **Sus respuestas no serán compartidas con la escuela preescolar o el Head Start de su niño(a) y no afectarán en ninguna manera la elegibilidad para servicios.**

17. ¿Cuál es su relación con el niño(a) que usted cuida?

- Madre
- Padre
- Abuelo/a
- Padre adoptivo
- Otro (especifique): \_\_\_\_\_

18. ¿Quién vive con usted aparte de sus niños? (Marque todas que apliquen.)

- Nadie
- Mi pareja (esposo/a, novio/a, conviviente)
- Abuelo(s)
- Otro pariente(s)
- Otra persona no pariente(s)

19. ¿Cuál es la raza de su niño(a)? (Marque todas que apliquen.)

- Blanco
- Negro o Africano Estadounidense
- Hispano/Latino
- Asiático
- Hawaiano Nativo u otro Isleño Del Pacifico
- Árabe/Árabe Americano O Personas del Oriente Medio/Personas del Oriente Medio Americano
- Indio Americano o Nativo de Alaska
- Otro (especifique): \_\_\_\_\_

20. ¿Cuál es el nivel escolar más avanzado que usted cumplió?

- Parte de la escuela primaria
- Parte de la escuela secundaria
- Diploma de escuela secundaria o GED
- Certificado en algún tipo de comercio o de entrenamiento
- Parte del colegio/universidad
- Bachillerato
- Postgrado (Maestría o Doctorado)

21. ¿Qué es el ingreso anual de su hogar (en total)?

**Por favor marque una sola respuesta a continuación.**

- |  |                       |                                |
|--|-----------------------|--------------------------------|
| <input type="checkbox"/> Menos de \$10,000 anual   | <input type="radio"/> | casi \$800 mensual             |
| <input type="checkbox"/> \$10,001 a \$15,000 anual | <input type="radio"/> | casi \$801-\$1,250 mensual     |
| <input type="checkbox"/> \$15,001 a \$20,000 anual | <input type="radio"/> | casi \$1,251- \$1,600 mensual  |
| <input type="checkbox"/> \$20,001 a \$25,000 anual | <input type="radio"/> | casi \$1,601 - \$2,000 mensual |
| <input type="checkbox"/> \$25,001 a \$35,000 anual | <input type="radio"/> | casi \$2,001 - \$2,900 mensual |
| <input type="checkbox"/> \$35,001 a \$45,000 anual | <input type="radio"/> | casi \$2,901 - \$3,750 mensual |
| <input type="checkbox"/> \$45,001 a \$60,000 anual | <input type="radio"/> | casi \$3,751 - \$5,000 mensual |
| <input type="checkbox"/> \$60,001 o más anual      | <input type="radio"/> | \$6,600 o más mensual          |

22. ¿Qué tipo de seguro médico o plan/programa médico tiene su niño(a)? (Marque todas las que apliquen)

- Seguro privado
- Medicaid
- SCHIP (CHIP – Children’s Health Insurance Program, Programa De Seguridad De Salud De Niños)
- Seguridad militar (TRICARE/VA/CHAMP-VA)
- Servicios Médicos Para Indígenas
- Otro programa del gobierno
- Plan de servicio individual (ej. Dental, Visión, Recetas)
- Sin seguro médico o plan/programa médico

23. ¿En los últimos 12 meses, cuantas veces visitó su niño(a) una clínica, hospital etc.? **Por favor llene un número para cada tipo de visita (a-d).**

Tipo de visita	Número de visitas
a. Visitas a la sala de emergencias	
b. Visitas a un doctor para una nueva enfermedad y/o problema médica	
c. Visita a un doctor para una enfermedad y/o problema crónica (por ej. asma, diabetes etc.)	
d. Visitas de seguimiento/rutinarias a un doctor	

24. ¿Usted es parte de algunos de los siguientes programas de asistencia pública? (Marque todas que apliquen)

- WIC
- SNAP (Asistencia Alimenticia)
- FIP (Asistencia en efectivo)
- Otra (especifique): \_\_\_\_\_
- No estoy recibiendo asistencia pública

**¡Gracias! Por favor devuelva esta encuesta al maestro/a de su niño(a).**

**شكراً للموافقة على المشاركة في هذا الإستقصاء الهام عنك وعن طفلك!**

المعلومات التي تعطيها لنا ستساعدنا على بيان الاحتياجات الغذائية واحتياجات النشاط الجسدى لأطفال سن ما قبل المدرسة في منطقة ديترويت.

هذا الإستقصاء إختياري وكل الإجابات سرية. إذا كان لديكم أسئلة أو استفسارات تفضلوا بالإتصال بتريزا تيجادا (313) 259-1574 ext. 223

**معلومات عامة**

تاريخ اليوم \_\_\_\_/\_\_\_\_/\_\_\_\_

اسم الأب أو الأم/ ولى الأمر \_\_\_\_\_

اسم الطفل \_\_\_\_\_

تاريخ ميلاد الطفل \_\_\_\_/\_\_\_\_/\_\_\_\_

نوع الطفل (ضع دائرة حول أحد الاختيارات): ذكر أنثى

اسم المعلم/المعلمة \_\_\_\_\_

**المشروبات**

1. لكل من المشروبات الآتية ضع دائرة حول عدد الحصص التي يتناولها طفلك في اليوم عادة

من فضلك ضع دائرة حول إجابة واحدة فقط لكل من المشروبات المذكورة.

الحصة = 8 أونصات = 3/4 معلب (كان) = 2 علبه عصير

**عدد الحصص**

**نوع المشروب**

5+	4	3	2	1	صفر أو أقل من 1 في اليوم	عصير (مثل 100% عصير؛ برتقال/ تفاح/ عنب إلخ)	a.
5+	4	3	2	1	صفر أو أقل من 1 في اليوم	مشروبات فواكه (مثل هاي-سى، هاوايان بانش، الليمونادة، كولبيد، كابري-صن) (Hi-C, Hawaiian punch, lemonade, Koolaid, Capri-Sun)	b.
5+	4	3	2	1	صفر أو أقل من 1 في اليوم	مشروبات رياضية (مثل جيتوريد) (Gatorade)	c.
5+	4	3	2	1	صفر أو أقل من 1 في اليوم	مشروبات غازية عادية	d.
5+	4	3	2	1	صفر أو أقل من 1 في اليوم	شاي محلى	e.
5+	4	3	2	1	صفر أو أقل من 1 في اليوم	ماء	f.
5+	4	3	2	1	صفر أو أقل من 1 في اليوم	حليب خالي من الدسم، لبن بنسبة دسم 1-2%	g.
5+	4	3	2	1	صفر أو أقل من 1 في اليوم	حليب بنكهة الشوكولاتة أو بنكهات أخرى	h.

فواكة & خُضروات

2. كم حصة من الفواكه (فواكه طازجة، فواكه مثلجة، فواكه معلبة، لايتضمن العصائر ) يأكلها طفلك في يوم عادي ؟ الحصة الواحدة تساوي حوالى 8 أونصات أو ثمرة فاكهة متوسطة أو نصف كوب من الفاكهة غير المطهية.

ضع دائرة حول إجابة واحدة فقط أدناه

عدد الحصص في اليوم					نوع الأكل	
5+	4	3	2	1	أقل من 1 في اليوم	فواكه:

3. كم حصة من الخضروات (طازجة أو مثلجة أو معلبة باستثناء البطاطا "البطاطس") يأكلها طفلك في يوم عادي؟ الحصة الواحدة تساوي حوالى 8 أونصات أو نصف كوب من الخضروات المطهية أو كوب من الخضروات غير المطهية.  
من فضلك ضع دائرة على إجابة واحدة فقط أدناه

عدد الحصص في اليوم					نوع الأكل	
5+	4	3	2	1	أقل من 1 في اليوم	خضروات:

النشاط

4. كم عدد الساعات التي يشارك فيها طفلك في الرياضة أو اللعب النشط في يوم عادي من أيام الاسبوع أو أيام عطلة نهاية الاسبوع؟  
من فضلك ضع دائرة حول إجابة واحدة فقط لأيام الاسبوع و إجابة واحدة فقط لعطلة نهاية الاسبوع.

عدد الساعات في اليوم					اليوم	
5+ ساعات	5-4 ساعات	4-3 ساعات	3-2 ساعات	2-1 ساعات	أقل من ساعة في اليوم	لعب نشيط /رياضة في يوم عادي من أيام الاسبوع:
5+ ساعات	5-4 ساعات	4-3 ساعات	3-2 ساعات	2-1 ساعات	أقل من ساعة في اليوم	لعب نشيط /رياضة في يوم عادي من أيام عطلة نهاية الاسبوع

5. بالمقارنة مع الأطفال الآخرين من نفس العمر والنوع، كيف تقيم مستوى النشاط لطفلك ؟ ضع دائرة حول إجابة واحدة ادناه:

أقل نشاطاً بكثير	أقل نشاطاً نوعاً ما	نفس المستوى تقريباً	أكثر نشاطاً بعض الشيء	أكثر نشاطاً جداً
------------------	---------------------	---------------------	-----------------------	------------------

6. خلال أسبوع عادي كم ساعة تمارس أنت الرياضة (مثل المشي، الجري ، لعب الكرة) مع طفلك ؟

عدد الساعات في الأسبوع \_\_\_\_\_

عدد ساعات مشاهدة التلفاز والشاشات الأخرى

7. فى يوم عادى من أيام الأسبوع كم ساعة يقضيها طفلك فى كل من الأنشطة الآتية؟

أقل من ساعة فى اليوم	2-1 ساعات/اليوم	3-2 ساعات/اليوم	أكثر من 3 ساعات/اليوم	مشاهدة البرامج والأفلام (فى التلفاز أو أجهزة البث التدفقى مثل التابلت أو الكمبيوتر أو الهاتف الذكى)
أقل من ساعة فى اليوم	2-1 ساعات/ اليوم	3-2 ساعات/اليوم	أكثر من 3 ساعات فى اليوم	اللعب بألعاب الفيديو ذات وحدة تحكم أو الممسوكة بالأيدى (وتشمل الأكس بوكس، بلاى ستيشين، الويى أو نينتندو دى إس)
أقل من ساعة فى اليوم	2-1 ساعات/ اليوم	3-2 ساعات/اليوم	أكثر من 3 ساعات فى اليوم	اللعب بألعاب الكمبيوتر (وتشمل التابلت، الأيباد أو الهاتف الذكى)

8. فى يوم عادى من أيام عطلة نهاية الأسبوع كم ساعة يقضيها طفلك فى كل من الأنشطة الآتية؟

أقل من ساعة فى اليوم	2-1 ساعات/اليوم	3-2 ساعات/اليوم	أكثر من 3 ساعات/اليوم	مشاهدة البرامج والأفلام (فى التلفاز أو أجهزة البث التدفقى مثل التابلت أو الكمبيوتر أو الهاتف الذكى)
أقل من ساعة فى اليوم	2-1 ساعات/ اليوم	3-2 ساعات/اليوم	أكثر من 3 ساعات فى اليوم	اللعب بألعاب الفيديو ذات وحدة تحكم أو الممسوكة بالأيدى (وتشمل الأكس بوكس، بلاى ستيشين، الويى أو نينتندو دى إس)
أقل من ساعة فى اليوم	2-1 ساعات/ اليوم	3-2 ساعات/اليوم	أكثر من 3 ساعات فى اليوم	اللعب بألعاب الكمبيوتر (وتشمل التابلت، الأيباد أو الهاتف الذكى)

عادات الاكل/ النشاط حالياً

9. هل يتناول طفلك وجبة الإفطار عادة؟

لا

نعم

10. لكل من السلوكيات المذكورة أدناه، قم بتقييم أداء طفلك باختيار حرف من A (عظيم/صحي) إلى F (سيئ/ غير صحي) وذلك تعبيراً عن مدى قيام طفلك بكل منها. ضع دائرة حول اختيارك.

سيئ/ غير صحي

عظيم/ صحي

F	D	C	B	A	a. الوجبات الخفيفة
F	D	C	B	A	b. شرب المشروبات المحلاة
F	D	C	B	A	c. الأكل بالخارج / إحضار عشاء من مطعم
F	D	C	B	A	d. أكل الفواكة
F	D	C	B	A	e. أكل الخضروات
F	D	C	B	A	f. مشاهدة التلفاز/شاشات أخرى
F	D	C	B	A	g. لعب ألعاب الفيديو/إنترنت
F	D	C	B	A	h. النشاط البدني/ الرياضة

صحة طفلك

11. على المقياس أدناه من 0 الى 10 حيث 0 = غير سعيد بالمرة و 10 = سعيد جداً، اختر أحسن إجابة تمثل المزاج العام لطفلك.  
من فضلك ضع دائرة على إجابة واحدة فقط أدناه.

سعيد جداً		متوسط السعادة						غير سعيد بالمرة		لا أعرف	وضع مزاج طفلي:
10	9	8	7	6	5	4	3	2	1	0	

12. كم مرة كان طفلك غير سعيد او حزين او مكتئب في خلال الشهر الماضي؟  
ضع دائرة حول إجابة واحدة فقط أدناه.

لا أعرف	دائماً	عادةً	أحياناً	نادراً	أبداً
---------	--------	-------	---------	--------	-------

13. كم مرة عانى طفلك من صعوبة في الخلود إلى النوم أو البقاء نائماً خلال الشهر الماضي؟  
ضع دائرة حول إجابة واحدة فقط أدناه.

لا أعرف	دائماً	عادةً	أحياناً	نادراً	أبداً
---------	--------	-------	---------	--------	-------

14. في خلال الشهر الماضي، كم مرة كان طفلك متعباً خلال النهار؟  
ضع دائرة حول إجابة واحدة فقط أدناه.

لا أعرف	دائماً	عادةً	أحياناً	نادراً	أبداً
---------	--------	-------	---------	--------	-------

15. كيف تقيم نوعية نوم طفلك ؟  
ضع دائرة حول إجابة واحدة فقط أدناه.

سيئة جداً	سيئة نوعاً ما	جيدة نوعاً ما	جيدة جداً
-----------	---------------	---------------	-----------

## المدرسة

16. بالنسبة للجمل الآتية حيث 0 = لا أوافق أبداً و 10 = أوافق بشدة، ضع دائرة واحدة فقط حول أفضل إجابة تمثل مشاركة طفلك في أنشطة المدرسة أو الحضانة.

	أوافق بشدة			محايد				لا أوافق أبداً				
	10	9	8	7	6	5	4	3	2	1	0	
a.	10	9	8	7	6	5	4	3	2	1	0	طفلي غير مهتم بالمدرسة
b.	10	9	8	7	6	5	4	3	2	1	0	طفلي يحاول قدر استطاعته في المدرسة
c.	10	9	8	7	6	5	4	3	2	1	0	طفلي يستمتع بالمدرسة
d.	10	9	8	7	6	5	4	3	2	1	0	طفلي يحصل على درجات جيدة في المدرسة
e.	10	9	8	7	6	5	4	3	2	1	0	طفلي يخشى الذهاب إلى المدرسة
f.	10	9	8	7	6	5	4	3	2	1	0	طفلي يتعرض للسخرية في المدرسة
g.	10	9	8	7	6	5	4	3	2	1	0	طفلي لديه مشكلة في إيجاد أصدقاء للعب معهم
h.	10	9	8	7	6	5	4	3	2	1	0	طفلي يشارك في الأنشطة العائلية

## معلومات عائلية

هذه الجزء الأخير . يتوجب علينا طرح هذه الأسئلة . إجاباتك لن تعرض على مسؤلى حضانة طفلك أو برنامج هيد ستارت ولن تؤثر بأى شكل من الأشكال على أهليتك للخدمات .

17. ماهى علاقتك بالطفل الذي تقوم برعايته

- أم
- أب
- جد / جدة
- فرد آخر من أفراد الأسرة
- الأب المحتضن أو الام المحتضنة / الأب أو الام بالتبني
- آخر: \_\_\_\_\_

18. من يعيش معك بخلاف طفلك/ أطفالك؟ (علم على كل من ينطبق عليه)

- لا أحد
- شريكى سواء ذكر او انثى (زوج، زوجة، صاحب، صاحبة)
- جد / جدة
- قريب آخر او أقارب آخرون
- آخر أو آخرون غير أقارب

19. ماهو العرق الأصلي لطفلك (علم على كل ما ينطبق عليه)

- أبيض
- أسود / أمريكي إفريقي
- هسباني / لاتيني
- آسيوي
- من هاواي أو جزر المحيط الهادي الأخرى
- عربي / عربي أمريكي / شرق أوسطي / شرق أوسطي أمريكي
- هندي أمريكي أو من سكان الألسكا الأصليين
- آخرين (وضح) \_\_\_\_\_

20. ما هو أعلى مستوى دراسي أكملته؟

- بعض من الدراسة الابتدائية
- بعض من الدراسة الثانوية
- دبلوم ثانوي أو اجتياز اختبار تطوير التعليم العام (GED)
- شهادة تدريب تجارية أو مهنية
- بعض من الدراسة الجامعية
- بكالوريوس
- شهادة أعلى من البكالوريوس

21. ماهو دخل الأسرة السنوي ؟ من فضلك ضع علامة على إجابة واحدة فقط أدناه.

- |                          |                                |    |                                    |
|--------------------------|--------------------------------|----|------------------------------------|
| <input type="checkbox"/> | أقل من \$10,000 في السنة       | أو | حوالي \$800 في الشهر               |
| <input type="checkbox"/> | 10,001 إلى \$15,000 في السنة   | أو | حوالي \$801 إلى 1,250 في الشهر     |
| <input type="checkbox"/> | \$15,001 إلى \$20,000 في السنة | أو | حوالي \$1,251 إلى 1,600 في الشهر   |
| <input type="checkbox"/> | \$20,001 إلى \$25,000 في السنة | أو | حوالي \$1,601 إلى \$2,000 في الشهر |
| <input type="checkbox"/> | \$25,001 إلى \$35,000 في السنة | أو | حوالي \$2,001 إلى \$2,900 في الشهر |
| <input type="checkbox"/> | \$35,001 إلى \$45,000 في السنة | أو | حوالي \$2,901 إلى \$3,750 في الشهر |
| <input type="checkbox"/> | \$45,001 إلى \$60,000 في السنة | أو | حوالي \$3,751 إلى \$5,000 في الشهر |
| <input type="checkbox"/> | \$60,001 أو أكثر في السنة      | أو | \$6,600 أو أكثر في الشهر           |

22. ماهو نوع التأمين الصحي أو الرعاية الصحية التي تغطي طفلك ؟

- تأمين صحي خاص
- مديكيد (MEDICAID)
- برنامج التأمين الصحي للأطفال – SCHIP (CHIP)
- الرعاية الصحية العسكرية (TRICARE/VA/CHAMP-VA)
- خدمات صحية للهنود
- برامج حكومية أخرى
- خدمة صحية أحادية (أسنان، عيون، أدوية)
- لا يوجد تأمين صحي

23. على مدى الإثنى عشر شهراً الماضية كم نوعاً من أنواع الزيارات الصحية تقريباً قام بها طفلك ؟

عدد الزيارات	نوع الزيارة
	a. زيارة لغرفة الطوارئ
	b. زيارة للطبيب لمرض جديد أو مشكلة جديدة
	c. زيارة للطبيب لمرض مزمن أو مشكلة مزمنة ( ربو، إلخ )
	d. زيارة للطبيب لفحص عام

24. هل أنت مدرج في برنامج من برامج المساعدة الحكومية ؟ ( ضع علامة على كل ما ينطبق )

- WIC  
 SNAP ( طوابع الغذاء أو كارت بريدج )  
 مساعدات نقدية (FIP)  
 أخرى: \_\_\_\_\_  
 أنا لا أحصل على مساعدات حكومية

شكراً ! الرجاء إعادة الإستمارة إلى مدرسة طفلك .

# Parent Child Behavior Checklist

**BASELINE**

<b>Child's Full Name</b>				
First	Middle	Last		
<b>Child's gender</b> <input type="checkbox"/> Boy <input type="checkbox"/> Girl		<b>Child's age</b>	<b>Child's ethnic group or race</b>	
<b>Today's Date</b> Mo. ____ Day ____ Year ____		<b>Child's Birthdate</b> Mo. ____ Day ____ Year ____	<b>Name of preschool</b>	
<b>This form filled out by: (print your full name)</b>				
<b>Your relationship to child:</b> <input type="checkbox"/> Mother <input type="checkbox"/> Father <input type="checkbox"/> Other (specify): _____				
<b>Does the child have any illness or disability? (Either physical or mental)?</b> <input type="checkbox"/> No <input type="checkbox"/> Yes – Please describe:				
Please fill out this form to reflect your view of the child's behavior even if other people might not agree. Feel free to write additional comments beside each item and in the space provided on page 2. <b>Be sure to answer all items.</b>				
Below is a list of items that describe children. For each item that describes the child <b>now or within the past 2 months</b> , please circle the 2 if the item is <b>very true or often true</b> of the child. Circle the 1 if the item is <b>somewhat or sometimes true</b> of the child. If the item is not true of the child, circle 0. Please answer all items as well as you can, even if some do not seem to apply to the child.				
<b>0 = Not True (as far as you know)      1 = Somewhat or Sometimes True      2 = Very true or Often True</b>				
1.	0	1	2	Plays well with others
2.	0	1	2	Enjoys preschool/child care
3.	0	1	2	Is good at 'make believe' play
4.	0	1	2	Can't concentrate, can't pay attention for long
5.	0	1	2	Can't sit still, restless or hyperactive
6.	0	1	2	Can't stand waiting; wants everything now
7.	0	1	2	Dresses him/herself
8.	0	1	2	Defiant
9.	0	1	2	Enjoys listening to/reading books
10.	0	1	2	Demands must be met immediately
11.	0	1	2	Destroys things belonging to his/her family or other children
12.	0	1	2	Expresses joy
13.	0	1	2	Disobedient
14.	0	1	2	Doesn't seem to feel guilty after misbehaving



**PLEASE FLIP OVER** 

# Parent Child Behavior Checklist

## BASELINE

				0 = Not True (as far as you know)	1 = Somewhat or Sometimes True	2 = Very true or Often True
15.	0	1	2	Does something you are proud of		
16.	0	1	2	Easily frustrated		
17.	0	1	2	Gets in many fights		
18.	0	1	2	Hits others		
19.	0	1	2	Hurts animals or people without meaning to		
20.	0	1	2	Enjoys learning letters and words		
21.	0	1	2	Does chores without complaining		
22.	0	1	2	Angry moods		
23.	0	1	2	Physically attacks people		
24.	0	1	2	Goes to bed when asked		
25.	0	1	2	Poorly coordinated or clumsy		
26.	0	1	2	Can play by him/herself		
27.	0	1	2	Punishment doesn't change his/her behavior		
28.	0	1	2	Laughs		
29.	0	1	2	Quickly shifts from one activity to another		
30.	0	1	2	Shares		
31.	0	1	2	Screams a lot		
32.	0	1	2	Selfish or won't share		
33.	0	1	2	Is appreciative/says thank you		
34.	0	1	2	Stubborn, sullen or irritable		
35.	0	1	2	Temper tantrums or hot temper		
36.	0	1	2	Can express him/herself well		
37.	0	1	2	Uncooperative		
38.	0	1	2	Wanders away		
39.	0	1	2	Wants a lot of attention		
40.	0	1	2	Cleans up his/her mess		
41.	0	1	2	Does something fun with a parent/caregiver		

## Teacher Child Behavior Checklist

### BASELINE

<b>Child's Full Name</b> First		Middle	Last	
<b>Child's gender</b> <input type="checkbox"/> Boy <input type="checkbox"/> Girl		<b>Child's age</b>	<b>Child's ethnic group or race</b>	
<b>Today's Date</b> Mo. ____ Day ____ Year ____		<b>Child's Birthdate</b> Mo. ____ Day ____ Year ____	<b>Name of preschool</b>	
<b>How many hours does the child spend at the facility?</b> _____ hours per week				
<b>Has he/she ever been referred for a special education program or special services?</b> <input type="checkbox"/> Don't know <input type="checkbox"/> No <input type="checkbox"/> Yes – what kind and when?				
<b>This form filled out by (print your full name):</b>				
Please fill out this form to reflect your view of the child's behavior even if other people might not agree. Feel free to write additional comments beside each item and in the space provided on page 2. <b>Be sure to answer all items.</b>				
Below is a list of items that describe children. For each item that describes the child <b>now or within the past 2 months</b> , please circle the 2 if the item is <b>very true or often true</b> of the child. Circle the 1 if the item is <b>somewhat or sometimes true</b> of the child. If the item is not true of the child, circle 0. Please answer all items as well as you can, even if some do not seem to apply to the child.				
<b>0 = Not True (as far as you know)    1 = Somewhat or Sometimes True    2 = Very true or Often True</b>				
1.	0	1	2	Can't concentrate, can't pay attention for long
2.	0	1	2	Can't sit still, restless or hyperactive
3.	0	1	2	Can't stand waiting; wants everything now
4.	0	1	2	Cruel to animals
5.	0	1	2	Defiant
6.	0	1	2	Demands must be met immediately
7.	0	1	2	Destroys his/her own things
8.	0	1	2	Destroys property belonging to others
9.	0	1	2	Disobedient
10.	0	1	2	Cruelty, bullying or meanness to others
11.	0	1	2	Difficulty following directions
12.	0	1	2	Doesn't seem to feel guilty after misbehaving

**PLEASE FLIP OVER** 

## Teacher Child Behavior Checklist

### BASELINE

<b>0 = Not True (as far as you know)</b>				<b>1 = Somewhat or Sometimes True</b>				<b>2 = Very true or Often True</b>			
13.	0	1	2	Disturbs other children							
14.	0	1	2	Easily frustrated							
15.	0	1	2	Gets in many fights							
16.	0	1	2	Hits others							
17.	0	1	2	Angry moods							
18.	0	1	2	Fails to carry out assigned tasks							
19.	0	1	2	Fidgets							
20.	0	1	2	Physically attacks people							
21.	0	1	2	Poorly coordinated or clumsy							
22.	0	1	2	Punishment doesn't change his/her behavior							
23.	0	1	2	Quickly shifts from one activity to another							
24.	0	1	2	Inattentive, easily distracted							
25.	0	1	2	Screams a lot							
26.	0	1	2	Selfish or won't share							
27.	0	1	2	Not liked by other children							
28.	0	1	2	Stubborn, sullen or irritable							
29.	0	1	2	Teases a lot							
30.	0	1	2	Temper tantrums or hot temper							
31.	0	1	2	Uncooperative							
32.	0	1	2	Wanders away							
33.	0	1	2	Wants a lot of attention							
Does the child have any illness or disability (either physical or mental)?				<input type="checkbox"/> No				<input type="checkbox"/> Yes – Please describe:			
Please describe the best things about the child:											

# Teacher Classroom Behaviors Questionnaire

## BASELINE

Teacher Name: \_\_\_\_\_

Classroom Name (ex: 1 or red): \_\_\_\_\_

Type of class (circle one):      AM      PM      FULL DAY      GSRP Blend

Center Name: \_\_\_\_\_

Today's Date: \_\_\_\_\_

Below is a list of statements about children. **Please circle the response that indicates the percentage of children in your classroom that can be described by the statement.** Please answer all items as well as you can, even if some do not seem to apply to your classroom.

**What percentage of children in your classroom can be described by this statement?**

	<b>0-25%</b>	<b>26-50%</b>	<b>51-75%</b>	<b>76-100%</b>	
1.	<b>0-25%</b>	<b>26-50%</b>	<b>51-75%</b>	<b>76-100%</b>	Are fidgety and have difficulty sitting still
2.	<b>0-25%</b>	<b>26-50%</b>	<b>51-75%</b>	<b>76-100%</b>	Pay attention
3.	<b>0-25%</b>	<b>26-50%</b>	<b>51-75%</b>	<b>76-100%</b>	Are unhappy
4.	<b>0-25%</b>	<b>26-50%</b>	<b>51-75%</b>	<b>76-100%</b>	Talk out of turn
5.	<b>0-25%</b>	<b>26-50%</b>	<b>51-75%</b>	<b>76-100%</b>	Obey class rules
6.	<b>0-25%</b>	<b>26-50%</b>	<b>51-75%</b>	<b>76-100%</b>	Pout and sulk
7.	<b>0-25%</b>	<b>26-50%</b>	<b>51-75%</b>	<b>76-100%</b>	Do not cooperate
8.	<b>0-25%</b>	<b>26-50%</b>	<b>51-75%</b>	<b>76-100%</b>	Work hard
9.	<b>0-25%</b>	<b>26-50%</b>	<b>51-75%</b>	<b>76-100%</b>	Break rules
10.	<b>0-25%</b>	<b>26-50%</b>	<b>51-75%</b>	<b>76-100%</b>	Take turns and play fair
11.	<b>0-25%</b>	<b>26-50%</b>	<b>51-75%</b>	<b>76-100%</b>	Fight

**Thank you!**





## Implementation Checklist

Please fill this checklist out honestly each week so that we can improve our program and training.

Early Childhood Site: \_\_\_\_\_

Teacher Name: \_\_\_\_\_

Classroom Name (ex: 1 or red): \_\_\_\_\_ Classroom type: AM / PM / Full Day / GSRP Blend

Some teachers find that they only have time to read the story to their class and sample the fruit or vegetable. There are other parts to the lesson:

- Introducing the color of the week and describing fruit/ vegetables of that color
- Encouraging students to share their favorite fruit/vegetable of that color
- Reading the riddle in the book
- Asking students to describe their senses during the sampling
- Giving the parent handouts to the children
- Additional activities in the manual

The questions below ask how much of each lesson you were able to do.

**Week 1 – RED WEEK**

Today's Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

How much of the **red** lesson were you able to do?

None  Some  Most  All

**Week 2 – ORANGE WEEK**

Today's Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

How much of the **orange** lesson were you able to do?

None  Some  Most  All

**Week 3 – YELLOW WEEK**

Today's Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

How much of the **yellow** lesson were you able to do?

None  Some  Most  All



**Week 4 – GREEN WEEK**

Today's Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

How much of the **green** lesson were you able to do?

- None  Some  Most  All

**Week 5 – BLUE/WHITE/BROWN WEEK**

Today's Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

How much of the **blue** lesson were you able to do?

- None  Some  Most  All

**Week 6 – PURPLE WEEK**

Today's Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

How much of the **purple** lesson were you able to do?

- None  Some  Most  All

**Week 7 – PHYSICAL ACTIVITY WEEK**

Today's Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

How much of the **physical activity** lesson were you able to do?

- None  Some  Most  All

**The Entire Program**

When you think about the seven weeks of the Regie's Rainbow Adventure program and the seven lessons, what percentage of the **whole program** do you think you completed?

\_\_\_\_%

**Thank you very much for your help with Regie's Rainbow Adventure®!**



# Weekly Attendance & Time Worksheet

## Regie's Rainbow Adventures

Mark the weekly attendance of the children in your class with this worksheet. For each week that you did the Regie lesson, **put an A if the child is absent and a ✓ if the child is present.** Thank you very much!

Site: \_\_\_\_\_

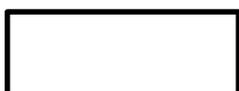
Teacher's Name: \_\_\_\_\_

Circle one: AM / PM / Full Day / After School Program

Classroom name (ex: 1 or red): \_\_\_\_\_

Start date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Child's Name	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							



## NAPSACC NUTRITION SECTION PRINT VERSION

### Introduction:

The Nutrition Section of the online Nutrition and Physical Activity Self-Assessment for Child Care is comprised of 49 questions organized into 12 sub-sections or subject areas. Each question represents a best practice. The online assessment saves the child care center's or home's responses and when the assessment is submitted, the online system provides a customized feedback report. The report shows which best practices the child care center or home is

- Achieving
- Nearly achieving
- Started but more effort is needed to achieve
- Not achieving at all

The feedback report is used to help the child care center or home build an action plan for improvement.

This document provides a print version of the Nutrition Section of NAPSACC, listing the questions and response options, and organized in the same subject area groups as the online version.

- Fruits & Vegetables
- Meats, Fats & Grains
- Beverages
- Menus & Variety
- Feeding Practices
- Foods Offered Outside of Regular Meals & Snacks
- Support for Healthy Eating
- Nutrition Education
- Nutrition Policy
- Breastfeeding Support
- Breastfeeding Education
- Breastfeeding Support Policy

## NAPSACC NUTRITION SECTION

### Fruits & Vegetables

1. Fruit (not juice) is offered:
  - 3 times a week or less
  - 4 times per week
  - 1 time per day
  - 2 or more times per day
  
2. Fruit is offered canned in its own juice (no syrup), fresh or frozen:
  - Rarely or never
  - Some of the time
  - Most of the time
  - All of the time
  
3. Vegetables, (not including French fries, tater tots, hash browns or dried beans) are offered:
  - 2 times a week or less
  - 3 to 4 times per week
  - 1 time per day
  - 2 or more times per day
  
4. Vegetables, other than potatoes, corn and green beans are offered:
  - Less than 1 time per week
  - 1 to 2 times per week
  - 3 to 4 times per week
  - 1 or more times per day
  
5. Cooked vegetables are prepared with added meat fat, margarine, or butter:
  - All of the time
  - Most of the time
  - Some of the time
  - Rarely or never

## Meats, Fats & Grains

1. Fried or pre-fried potatoes (French fries, tater tots, hash browns) are offered:
  - 3 or more times per week
  - 2 times per week
  - 1 time per week
  - Less than once a week or never
  
2. Fried or pre-fried (frozen and breaded) meats (chicken nuggets) or fish (fish sticks) are offered:
  - 3 or more times per week
  - 2 times per week
  - 1 time per week
  - Less than once a week or never
  
3. High-fat meats (sausage, bacon, hot dogs, bologna, ground beef) are offered:
  - 3 or more times per week
  - 2 times per week
  - 1 time per week
  - Less than once a week or never
  
4. Beans or lean meats (baked or broiled chicken, turkey or fish) are offered:
  - Less than 1 time per week
  - 1 to 2 times per week
  - 3 to 4 times per week
  - 1 or more times per day
  
5. High-fiber, whole grain foods (whole wheat bread, oatmeal, brown rice, Cheerios, etc.) are offered:
  - 1 time per week or less
  - 2 to 4 times per week
  - 1 time per day
  - 2 or more times per day
  
6. Sweets or salty foods (cookies, cakes, muffins, chips, etc.) are offered:
  - 1 or more times per day
  - 3 to 4 times per week
  - 1 to 2 times per week
  - Less than once a week or never

## Beverages

1. Drinking water outside is:

- Not visible
- Visible but only available during designated water breaks
- Easily visible and available on request
- Easily visible and available for self serve

2. Drinking water inside is:

- Not visible
- Visible but only available during designated water breaks
- Easily visible and available on request
- Easily visible and available for self serve

3. 100% fruit juice is offered:

- 2 or more times per day
- 1 time per day
- 3 to 4 times per week
- 2 times per week or less

4. Sugary drinks (Kool-Aid, sports drinks, sweet tea, punches, soda) other than 100% juice are offered:

- 1 or more times per week
- Less than 1 time per week
- Less than 1 time per month
- Rarely or never

5. Milk served to children ages 2 years and older is usually:

- Whole or regular
- 2% reduced fat
- 1 to 2% reduced fat
- Always 1% or Skim/Nonfat

6. Soda and other vending machines are located:

- In the entrance or front of the building
- In public areas, but not at the entrance
- Out of sight of parents and children
- No vending machines on site

## Menus & Variety

1. Menus used are:
  - 1-week cycle or no menus used
  - 2-week cycle
  - 3-week cycle or more without seasonal changes
  - 3-week cycle or more with seasonal changes
  
2. Weekly menus include a combination of both new and familiar foods:
  - Rarely or never
  - Some of the time
  - Most of the time
  - All of the time
  
3. Weekly menus include food from a variety of cultures:
  - Rarely or never
  - Some of the time
  - Most of the time
  - All of the time

## Feeding Practices

1. When children eat less than half a meal or snack, caregivers help determine if they are full before removing the plate:

- Rarely or never
- Some of the time
- Most of the time
- All of the time

2. When children request seconds, caregivers help determine if they are still hungry before serving additional food:

- Rarely or never
- Some of the time
- Most of the time
- All of the time

3. Children are encouraged by caregivers to try a new or less favorite food:

- Rarely or never
- Some of the time
- Most of the time
- All of the time

4. Food is used to encourage positive behavior:

- All of the time
- Most of the time
- Some of the time
- Rarely or never

## Foods Offered Outside of Regular Meals & Snacks

1. Guidelines provided to parents for food brought in for holidays or celebrations are:
  - Not available
  - Loose guidelines with healthier options encouraged
  - Written guidelines for healthier options that are not always enforced
  - Written guidelines for healthier options that are usually enforced
  
2. Holidays are celebrated with mostly healthy foods or non-food treats, like stickers:
  - Rarely or never
  - Some of the time
  - Most of the time
  - All of the time
  
3. Fundraising consists of selling only non food items (like wrapping paper, coupon books, magazines):
  - Rarely or never
  - Some of the time
  - Most of the time
  - All of the time OR We do not conduct fundraising activities

## Support for Healthy Eating

1. Caregivers join children at the table for meals:
  - Rarely or never
  - Some of the time
  - Most of the time
  - All of the time
  
2. Meals are served family style (children serve themselves with limited help):
  - Rarely or never
  - Some of the time
  - Most of the time
  - All of the time
  
3. Caregivers consume the same food and drinks as the children:
  - Rarely or never
  - Some of the time
  - Most of the time
  - All of the time
  
4. Caregivers eat or drink less healthy foods (especially sweets, soda and fast food) in front of the children:
  - All of the time
  - Most of the time
  - Some of the time
  - Rarely or never
  
5. Caregivers talk informally with children about trying and enjoying healthy foods:
  - Rarely or never
  - Some of the time
  - Most of the time
  - All of the time
  
6. Support for good nutrition is visibly displayed in common areas by:
  - No posters, pictures or books about healthy foods displayed
  - Visual support for healthy eating is available for lessons or upon request
  - Posters, pictures or books about healthy foods displayed in some areas
  - Posters, pictures or books about healthy foods displayed in all areas where children spend most of their time.

## Nutrition Education

1. Training opportunities on nutrition (other than food safety and food program guidelines) are provided for caregivers:

- Rarely or never
- Less than 1 time per year
- 1 time per year
- 2 or more times per year

2. Nutrition education for children is offered:

- Rarely or never
- 1 time per month
- 2 to 3 times per month
- 1 time or more per week

3. Nutrition information is offered to parents (workshops, activities, and take home materials):

- Rarely or never
- Less than 1 time per year
- 1 time per year
- 2 or more times per year

## Nutrition Policy

1. We have a nutrition policy which addresses all key nutrition areas: food/beverages offered, menu variety, feeding practices, provider behaviors, healthy eating support and education:

- No such policy exists
- Informal policy, not written
- Written policy, but not always followed
- Written policy that is regularly followed

2. Our nutrition policy is communicated to parents, families and visitors.

- Rarely or never OR No such policy exists
- Sometimes
- Usually
- Always

## Breastfeeding Support

1. A designated area for mothers to breastfeed their infants, other than a bathroom, is:
  - Not available
  - Only available upon request
  - Always available, but lacks one or more of these: appropriate seating, privacy, or electrical outlet
  - Always available, with appropriate seating, an electrical outlet, shielded from view and free from intrusion
  
2. Culturally appropriate breastfeeding support materials, such as pictures, posters, pamphlets and other print/media resources, are: *(Do not include materials produced by commercial entities, such as manufacturers of infant formulas):*
  - Not displayed
  - Available but not displayed
  - Displayed and include at least one of the following: pictures, posters, pamphlets, other print/media resources
  - Displayed and include all of the following: pictures, posters, pamphlets, other print/media resources
  
3. Our childcare facility provides sufficient refrigerator/freezer space for mothers to store expressed milk:
  - Never/not provided
  - Limited or occasional availability
  - Available space most of the time
  - Always available
  
4. Our childcare program provides learning and play materials that normalize breastfeeding, including books with pictures of breastfeeding and baby dolls that are nursing:
  - No such toys and books are available
  - Available for lessons or upon request
  - Available in some areas
  - Available in all areas where children spend most of their time
  
5. A feeding plan filled out by the parent/guardian and/or healthcare provider is:
  - Not posted /No feeding plan
  - Posted but not regularly updated
  - Posted and regularly updated
  - Posted, regularly updated, with a daily report made to parents

6. Explicit support for breastfeeding is included in the feeding plan completed by the parents/caregivers. Plan includes age-appropriate introduction of solid food, feeding in response to baby's cues, and inviting the mother to nurse her baby onsite.

- Support not explicitly included or There is no feeding plan
- Sometimes included or only some of the topics covered
- Usually included and most of the topics covered
- Always included with all topics covered

### **Breastfeeding Education**

1. Caregivers obtain training on age-appropriate infant feeding practices and safe handling and storage of human milk.

- Rarely or never
- Once as part of new staff orientation or less than once per year
- At least once per year on some topics
- At least once per year on all these topics

2. Caregivers obtain training on promoting and supporting breastfeeding, including exclusive breastfeeding:

- Rarely or never
- Once as part of new staff orientation or less than once per year
- Once per year
- Two or more times per year

3. Breastfeeding families are instructed on how to properly label and store human milk for use in the child care facility:

- Instruction rarely or never provided
- Most/all instruction is informal/not in writing
- Most/all instructions are written guidelines provided to some but not all families
- Written guidelines provided to all families

### **Breastfeeding Support Policy**

1. We have a breastfeeding policy which includes both promotion of breastfeeding and support of breastfeeding families:

- No policy exists
- Informal policy, not written or not followed
- Written policy, but not always followed
- Written policy that is regularly followed

2. Our breastfeeding policy is communicated to expectant mothers, families of infants and visitors.

- Rarely or never OR No such policy exists
- Sometimes
- Usually
- Always

## NAPSACC PHYSICAL ACTIVITY SECTION

### Introduction:

The Physical Activity Section of the online Nutrition and Physical Activity Self-Assessment for Child Care is comprised of 33 questions organized into 9 sub-sections or subject areas. Each question represents a best practice. The online assessment saves the child care center's or home's responses and when the assessment is submitted, the online system provides a customized feedback report. The report shows which best practices the child care center or home is

- Achieving
- Nearly achieving
- Started but more effort is needed to achieve
- Not achieving at all

The feedback report is used to help the child care center or home build an action plan for improvement.

This document provides a print version of the Physical Activity Section of NAPSACC , listing the questions and response options, and organized in the same subject area groups as the online version.

- Active Play Time & Inactive Time
- Play Environment
- Support for Physical Activity
- Physical Activity Education
- Physical Activity Policy
- Screen Time Use
- Screen Time Provider Behaviors
- Screen Time Education
- Screen Time Policy

## PHYSICAL ACTIVITY SECTION

### Active Play Time & Inactive Time

1. Short supervised periods of tummy time are provided for ALL infants, including those with special needs:
  - Less than once per day or no daily schedule
  - At least once per day, every day
  - At least twice per day, every day
  - More than twice per day, every day
  - There are no infants in our care
  
2. Active play time (indoor and outdoor) is provided to ALL toddlers, included those with special needs.
  - Less than 30 minutes each day or no routine daily active play time
  - 30 to 45 minutes each day, every day
  - 46 to 60 minutes each day, every day
  - More than 60 minutes each day, every day
  - There are no toddlers in our care
  
3. Active play time is provided to preschool children:
  - 45 minutes or less each day
  - 46 to 90 minutes each day
  - 91 to 120 minutes each day
  - More than 120 minutes each day
  
4. Structured physical activity is provided to all children:
  - 1 time per week or less
  - 2 to 4 times per week
  - 1 time per day
  - 2 or more times per day
  
5. Outdoor active play is provided for ALL children:
  - 1 time per week or less
  - 2 to 4 times per week
  - 1 time per day
  - 2 or more times per day
  
6. When outdoors, infants are provided opportunities for exploration, such as rolling, scooting, crawling, walking:
  - Rarely/never or Infants are not given outdoor time
  - Sometimes
  - Usually
  - Always
  - There are no infants in our care

7. Active play is withheld for children who misbehave:
- Often
  - Sometimes
  - Never
  - Never and we provided more active play for good behavior
8. Children are seated (excluding naps and meals) more than 30 minutes at a time:
- 1 or more times per day
  - 3 to 4 times per week
  - 1 to 2 times per week
  - Less than once a week or never
9. Swings and infant seats, such as exersaucers, car seats, molded seats are used:
- More than 15 minutes at a time or more than 4 times per day for ANY child
  - 3 to 4 times per day, less than 15 minutes per time for ANY child
  - 2 times per day, less than 15 minutes per time for ANY child
  - 1 or fewer times per day, less than 15 minutes per time for ANY child

## Play Environment

1. Fixed play equipment (tunnels, balancing equipment, climbing equipment, overhead ladders) is:
  - Unavailable at our site
  - Only one type of equipment is available
  - Different equipment available that suits most children
  - Wide variety of equipment available and accommodates the needs of all children
  
2. Portable play equipment (wheel toys, balls, hoops, ribbons) consists of:
  - Little variety and children must take turns
  - Some variety but children must take turns
  - Good variety but children must take turns
  - Lots of variety for children to use at the same time
  
3. Outdoor portable play equipment is:
  - Available during special times only
  - Located out of child sight and reach; caregivers must access
  - In child sight but not reach; caregivers must access
  - Freely available by children at all time
  
4. Outdoor play space includes:
  - No open running spaces or track/path for wheeled toys
  - Very limited open running space; no track/path for wheeled toys
  - Plenty of open running space; no track/path for wheeled toys
  - Plenty of open running space and a track/path for wheeled toys
  
5. Indoor play space is available:
  - For quiet play only
  - For limited movement (jumping and rolling)
  - For some active play (jumping, rolling and skipping)
  - For all activities, including running

## Support for Physical Activity

1. During active play time, caregivers:
  - Supervise play only (mostly sit or stand)
  - Sometimes encourage children to be active
  - Sometimes encourage children to be active and join children in active play
  - Often encourage children to be active and join children in active play
2. Support for physical activity is visibly displayed in common areas by:
  - No posters, pictures or books about physical activity displayed
  - Visual support for physical activity is available for lessons or upon request
  - Posters, pictures or books about physical activity displayed in some areas
  - Posters, pictures or books about physical activity displayed in all areas where children spend most of their time.

## Physical Activity Education

1. Training opportunities are provided to caregivers on physical activity (not including playground safety):
  - Rarely or never
  - Less than 1 time per year
  - 1 time per year
  - 2 or more times per year
2. Physical activity education for children (motor skill development) is provided:
  - Rarely or never
  - 1 time per month
  - 2 to 3 times per month
  - 1 time or more per week
3. Physical activity information is offered to parents (workshops and take home materials):
  - Rarely or never
  - Less than 1 time per year
  - 1 time per year
  - 2 or more times per year

## Physical Activity Policy

1. We have a physical activity policy which includes most of the topics covered in the physical activity sections of this assessment, including active play time, play equipment and space, provider behaviors, support and education:

- No such policy exists
- Informal policy, not written
- Written policy, but not always followed
- Written policy that is regularly followed

2. Our physical activity policy is communicated to parents, families and visitors.

- Rarely or never OR No such policy exists
- Sometimes
- Usually
- Always

## Screen Time Use

1. Toddlers and infants are allowed:

- 1 or more hours per week of total screen time
- 30 to 59 minutes per week of total screen time
- Fewer than 30 minutes per week of total screen time
- No screen time ever
- There are no toddlers and infants in our care

2. Preschool children are allowed:

- More than 2 hours a week of total screen time
- 1 to 2 hours per week of total screen time
- 31 to 59 minutes per week of total screen time
- 30 minutes or less per week of total screen time

3. Televisions are:

- Located in every room where children spend their time
- Located in most rooms where children spend their time
- Located in some rooms where children spend their time
- Stored outside of rooms where children spend their time/No televisions onsite

4. For preschool children, television/DVD viewing includes:

- All types of programming and videos
- Mix of educational and commercial programming
- Mostly educational programming
- All education, noncommercial programming, or no TV/DVD viewing

5. Television/DVD are turned on during meals or snacks:

- All the time
- Most of the time
- Some of the time
- Rarely or never

6. Television/video watching is used as a reward:

- All the time
- Most of the time
- Some of the time
- Rarely or never

7. Computers are available to preschool children:

- All the time and there are few or no limits on duration
- Several times per day and/or more than 30 minutes per day
- At one set time per day for 15 to 30 minutes
- At one set time per day for 15 minutes or less or not available

## Screen Time Provider Behaviors

1. During screen time activities with preschool children, providers supervise and watch with the children:
  - Rarely or never
  - Some of the time
  - Most of the time
  - All of the time/There are no screen time activities

## Screen Time Education

1. Providers are offered training opportunities on screen time reduction and/or media literacy:
  - Rarely or never
  - Less than once per year
  - Once per year
  - Two or more times per year
2. Parents are offered screen time reduction and/or media literacy information, such as special programs, newsletters, or information sheets:
  - Rarely or never
  - Less than once per year
  - Once per year
  - Two or more times per year

## Screen Time Policy

1. We have a screen time policy which includes screen time use, provider behaviors and education:
  - No such policy exists
  - Informal policy, not written
  - Written policy, but not always followed
  - Written policy that is regularly followed
2. Our screen time policy is communicated to parents, families and visitors.
  - Rarely or never OR No such policy exists
  - Sometimes
  - Usually
  - Always



**Health Chat Survey #1**

**Date:** \_\_\_\_\_

**Early Childhood Site:** \_\_\_\_\_

**Family Service Coordinator/Family Advocate Name:** \_\_\_\_\_

**Parent/Caregiver Name:** \_\_\_\_\_

**Child/Children's Name(s):** \_\_\_\_\_

**Home Address:** \_\_\_\_\_

**City, State, Zip:** \_\_\_\_\_

**Telephone:** \_\_\_\_\_

**Email address:** \_\_\_\_\_



**Are you at risk for type 2 diabetes? One in four Americans with diabetes is undiagnosed. Take this test to learn more about your risk for developing type 2 diabetes.**

<b>Diabetes Risk Test</b>	<b>Write your point score in the box</b>
How old are you? a. Less than 40 years (0 points) b. 40-49 years (1 point) c. 50-59 years (2 points) d. 60 years or older (3 points)	
Are you a man or a woman? a. Man (1 point) b. Woman (0 points)	
Are you a woman who has ever been diagnosed with gestational diabetes or given birth to a baby weighing 9 pounds or more? a. Yes (1 point) b. No (0 points)	
Do you have a mother, father, sister or brother with diabetes? a. Yes (1 point) b. No (0 points)	
Have you ever been diagnosed with high blood pressure? a. Yes (1 point) b. No (0 points)	
Are you physically active? a. Yes (0 points) b. No (1 point)	
What is your weight status? (Look at the chart to the right)	
<b>TOTAL (add up your score)</b>	

<b>Height</b>	<b>Weight (lbs.)</b>		
4' 10"	119-142	143-190	191+
4' 11"	124-147	148-197	198+
5' 0"	128-152	153-203	204+
5' 1"	132-157	158-210	211+
5' 2"	136-163	164-217	218+
5' 3"	141-168	169-224	225+
5' 4"	145-173	174-231	232+
5' 5"	150-179	180-239	240+
5' 6"	155-185	186-246	247+
5' 7"	159-190	191-254	255+
5' 8"	164-196	197-261	262+
5' 9"	169-202	203-269	270+
5' 10"	174-208	209-277	278+
5' 11"	179-214	215-285	286+
6' 0"	184-220	221-293	294+
6' 1"	189-226	227-301	302+
6' 2"	194-232	233-310	311+
6' 3"	200-239	240-318	319+
6' 4"	205-245	246-327	328+
	<b>(1 point)</b>	<b>(2 points)</b>	<b>(3 points)</b>
<b>You weigh less than the amount in the left column (0 points)</b>			

**The higher your score, the higher your risk.**

- If you scored **below 5 points**: Even if you scored below 5, you may be at an increased risk for pre-diabetes. Talk to your doctor about your risk for diabetes and small steps you can take to prevent or delay type 2 diabetes.
- If you scored **5 or more** points, you are at a higher risk for having diabetes. Check with your doctor as soon as possible to learn if you have diabetes.



**Find out if you are at risk for having high blood pressure. Circle the number for each answer. When you are done, add up the numbers to get your total score.**

<b>High Blood Pressure Risk Assessment</b>	<b>Yes</b>	<b>No</b>
Does anybody in your family have high blood pressure?	1	0
Are you 50 years old or older?	1	0
Are you African American?	1	0
Do you have diabetes?	1	0
Do you or someone else add salt to the food that you eat?	1	0
Are you overweight? (Also circle 1 for 'yes' if you got 2 or 3 points on the scale above for your weight status.)	1	0
Do you do less than 25 minutes of physical activity per day??	1	0
Do you smoke cigarettes?	1	0
Do you regularly have more than two alcoholic drinks* each day?	1	0
<b>TOTAL (add up the values you circled)</b>		

\*NOTE: one alcoholic drink = a shot (1oz); a glass (4oz) of wine; or a can (12oz) of beer

The more numbers that you have circled, the greater your risk for having or developing high blood pressure.

If you do have a high risk, go to your doctor regularly to get it checked. He/she can also talk to you more about ways to prevent high blood pressure.

1.	Has a doctor ever told you that you have:			
	a. Diabetes?	Yes	No	Don't Know
	b. High Blood Pressure?	Yes	No	Don't Know
	c. Kidney Disease (reduced kidney function)?	Yes	No	Don't Know
	d. Kidney Failure (requires dialysis or kidney transplant to live)?	Yes	No	Don't Know
	e. Heart Disease?	Yes	No	Don't Know
	f. Stroke?	Yes	No	Don't Know

2.	Has a biological parent, child, brother, or sister ever been diagnosed with:			
	a. Diabetes?	Yes	No	Don't Know
	b. High Blood Pressure?	Yes	No	Don't Know
	c. Kidney Disease (reduced kidney function)?	Yes	No	Don't Know
	d. Kidney Failure (requires dialysis or kidney transplant to live)?	Yes	No	Don't Know
	e. Heart Disease?	Yes	No	Don't Know
	f. Stroke?	Yes	No	Don't Know

3.	Has your doctor prescribed medications for any of the above conditions? <b>(If No, please skip to Question 5)</b>	Yes	No
4.	Are you taking prescription medications the way they were prescribed? (e.g., same amount, number of times/day as written on the prescription label)	Yes	No

5.	Do you limit the amount of salt in your diet?	Yes	No
6.	Do you usually choose foods that are low in fat?	Yes	No
7.	Do you currently smoke cigarettes or cigars?	Yes	No

**The next few questions ask about the number of times you do something in an average day.**

8.	How many cups of pop do you drink per day? 1 cup = 8 ounces OR $\frac{3}{4}$ can		0	1	2	3	4	5 +
9.	How many hours of TV do you watch per day?		0	1	2	3	4	5 +
10.	How many servings of <b>fruit</b> do you eat per day? (NOTE: one serving = $\frac{1}{2}$ cup fresh, frozen or canned fruit; medium-sized fruit; $\frac{1}{4}$ cup dried fruit; $\frac{1}{2}$ cup 100% fruit juice)	1	0	1	2	3	4	5 +
11.	How many servings of <b>vegetables</b> do you eat per day? (NOTE: one serving = $\frac{1}{2}$ cup cut-up raw or cooked vegetable; raw leafy vegetable; $\frac{1}{2}$ cup vegetable juice)	1 cup	0	1	2	3	4	5 +
12.	How many servings of <b>whole-grain foods</b> do you eat per day? (NOTE: one serving = 1 slice whole-grain bread; 1 cup dry cereal; $\frac{1}{2}$ cup cooked rice, pasta or cereal)		0	1	2	3	4	5 +
13.	How many servings of <b>low-fat or fat-free dairy</b> products do you eat and/or drink? (NOTE: one serving = 1 cup low-fat/fat-free milk or yogurt; $\frac{1}{2}$ cup low-fat/fat-free cottage cheese; 1 $\frac{1}{2}$ ounces low-fat/fat-free natural cheese; 2 ounces low-fat/fat-free processed cheese (e.g., Velveeta, Kraft singles))		0	1	2	3	4	5 +

**The next few questions ask about the number of times you do something in an average week.**

14.	How many times do you eat <b>fast food</b> in an average week?	0	1	2	3	4	5 +
15.	How many days do you exercise for at least 30 minutes in an average week?	0	1	2	3	4	5 +

16.	What is your current age?
	<input type="checkbox"/> 18 – 30 years <input type="checkbox"/> 61 – 75 years <input type="checkbox"/> 31 – 45 years <input type="checkbox"/> 76 years or older <input type="checkbox"/> 46 – 60 years

17.	What is your gender?	Female	Male
-----	----------------------	--------	------

18.	Do you currently have health insurance?	Yes	No
-----	---	-----	----

19.	What is your race?
	<input type="checkbox"/> White / Caucasian <input type="checkbox"/> Asian or Pacific Islander <input type="checkbox"/> Black / African American <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> American Indian or Alaskan Native

20.	Are you Hispanic?	Yes	No
-----	-------------------	-----	----

21.	During the past month:
	<input type="checkbox"/> I have not been concerned about my health <input type="checkbox"/> I have had some concerns about my health, but have not thought about changing my lifestyle <input type="checkbox"/> I have thought about making changes in my lifestyle to improve my health <input type="checkbox"/> I have made healthy changes in my lifestyle

22.	Based on today's chat, which of the following steps do you plan to take to improve your health?
	<input type="checkbox"/> Eat healthier meals and snacks <input type="checkbox"/> Take prescription medicine as prescribed <input type="checkbox"/> Exercise regularly <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Stop smoking <input type="checkbox"/> Change my food shopping habits <input type="checkbox"/> Change my cooking methods

**Thank you!**

**Please remember to complete Health Chat Survey #2  
about 4 -6 weeks from today**

OFFICE USE (Do Not Complete)	Diabetes	<input type="checkbox"/>	<input type="checkbox"/>	High Blood Pressure	<input type="checkbox"/>	<input type="checkbox"/>
------------------------------	----------	--------------------------	--------------------------	---------------------	--------------------------	--------------------------

## Chat Form #2

Today's Date: \_\_\_\_\_

FSC / FA Name: \_\_\_\_\_

1.	Do you limit the amount of <b>salt</b> in your diet?	Yes	No
2.	Do you usually choose foods that are <b>low in fat</b> ?	Yes	No
3.	Do you currently smoke cigarettes or cigars?	Yes	No
4.	Has your doctor prescribed medications for diabetes, high blood pressure, kidney disease/failure heart disease or stroke? <b>If No, please skip to Question 7)</b>	Yes	No
5.	Are you taking your prescription medications as prescribed? (e.g., same amount, number of times/day as written on the prescription label)	Yes	No
6.	Do you currently have health insurance?	Yes	No

**The next few questions ask about the number of times you do something in an average day.**

7.	How many cups of <b>pop</b> do you drink per day? 1 cup = 8 ounces OR $\frac{3}{4}$ can <div style="text-align: center; margin-top: 10px;">  </div>	0	1	2	3	4	5 +
8.	How many hours of <b>TV</b> do you watch per day?	0	1	2	3	4	5 +
9.	How many servings of <b>fruit</b> do you eat per day? (NOTE: one serving = $\frac{1}{2}$ cup fresh, frozen or canned fruit; medium-sized fruit; $\frac{1}{4}$ cup dried fruit; $\frac{1}{2}$ cup 100% fruit juice)	0	1	2	3	4	5 +
10.	How many servings of <b>vegetables</b> do you eat per day? (NOTE: one serving = $\frac{1}{2}$ cup cut-up raw or cooked vegetable; 1 cup raw leafy vegetable; $\frac{1}{2}$ cup vegetable juice)	0	1	2	3	4	5 +
11.	How many servings of <b>whole-grain foods</b> do you eat per day? (NOTE: one serving = 1 slice whole-grain bread; 1 cup dry cereal; $\frac{1}{2}$ cup cooked rice, pasta or cereal)	0	1	2	3	4	5 +
12.	How many servings of <b>low-fat or fat-free dairy</b> products do you eat and/or drink? (NOTE: one serving = 1 cup low-fat/fat-free milk or yogurt; $\frac{1}{2}$ cup low-fat/fat-free cottage cheese; 1 $\frac{1}{2}$ ounces low-fat/fat-free natural cheese; 2 ounces low-fat/fat-free processed cheese (e.g., Velveeta, Kraft singles)	0	1	2	3	4	5 +

**The next few questions ask about the number of times you do something in an average week.**

13.	How many times do you eat <b>fast food</b> in an average week?	0	1	2	3	4	5+
14.	How many days do you <b>exercise</b> for at least 30 minutes in an average week?	0	1	2	3	4	5+

15.	Since Chat 1:
	<input type="checkbox"/> I have not been concerned about my health <input type="checkbox"/> I have had some concerns about my health, but have not thought about changing my lifestyle <input type="checkbox"/> I have thought about making changes in my lifestyle to improve my health <input type="checkbox"/> I have made healthy changes in my lifestyle

16.	Since Chat 1, which of the following steps did you take to improve your health?	
	<input type="checkbox"/> Eat healthier meals and snacks <input type="checkbox"/> Exercise regularly <input type="checkbox"/> Stop smoking <input type="checkbox"/> Change my food shopping habits <input type="checkbox"/> Change my cooking methods	<input type="checkbox"/> Take prescription medicine as prescribed <input type="checkbox"/> Other (specify): _____

17.	Did anyone else in your household make changes in their behavior because of the information provided by your Family Service Coordinator / Family Advocate?	Yes	No
	If yes, please list those individuals by relationship ( <u>not</u> name) and the changes they made:  <i>(Example = child)</i> _____ <i>(Example = plays outside more)</i> _____ _____ _____ _____		

18.	Have you seen a primary care doctor since the first health chat?
	<input type="checkbox"/> Yes (Go to <b>Question #19</b> ) <input type="checkbox"/> No, but I did make an appointment (Skip to <b>Question #21</b> ) <input type="checkbox"/> No (Skip to <b>Question #21</b> )



19.	If you saw a primary care doctor since the first chat, did you discuss diabetes, high blood pressure, or kidney disease with your doctor during your visit?
	<input type="checkbox"/> Yes <input type="checkbox"/> No (Skip to <b>Question #21</b> )

20.	If you answered yes to the above question, tell us whether you were tested for the following disease or diagnosed with the disease.				
		<b>Tested for the disease</b>		<b>Diagnosed with the disease</b>	
	a. Diabetes (e.g., drew blood or checked urine)	Yes	No	Yes	No
	b. High Blood Pressure (e.g., used blood pressure cuff)	Yes	No	Yes	No
	c. Kidney Disease (e.g., drew blood or checked urine)	Yes	No	Yes	No

21. Please tell us how the *Healthy Families* Program helped you:

---



---



---

**Thank you for completing this survey!**



**Encuesta #1 de Las Charlas De Salud**

**Fecha:** \_\_\_\_\_

**Local De La Edad Temprana:** \_\_\_\_\_

**Nombre de la Coordinadora De Servicios Familiares/Apoyo De Familias:** \_\_\_\_\_

**Nombre del Padre(s)/Cuidador:** \_\_\_\_\_

**Nombre del Niño/Niños:** \_\_\_\_\_

**Dirección del hogar:** \_\_\_\_\_

**Ciudad, Estado, Código Postal:** \_\_\_\_\_

**Teléfono:** \_\_\_\_\_

**Correo electrónico:** \_\_\_\_\_



**¿Está en riesgo de tener diabetes tipo 2? Uno de cada cuatro Americanos con diabetes no está diagnosticado. Tome este examen para aprender más sobre su riesgo de desarrollar diabetes tipo 2.**

<b>Examen de riesgo de diabetes</b>	<b>Escriba su puntuación en la casilla</b>
¿Cual es su edad? a. Menos de 40 años (0 puntos) b. 40-49 años (1 punto) c. 50-59 años (2 puntos) d. 60 años o más (3 puntos)	
¿Es hombre o mujer? a. Hombre (1 punto) b. Mujer (0 puntos)	
¿Es usted una mujer que alguna vez ha sido diagnosticada con diabetes gestacional o ha dado a luz a un bebe que pesó 9 libras o más? a. Sí (1 punto) b. No (0 puntos)	
¿Tiene una madre, padre, hermana o hermano con diabetes? a. Sí (1 punto) b. No (0 puntos)	
¿Alguna vez ha sido diagnosticado/a con presión alta? a. Sí (1 punto) b. No (0 puntos)	
¿Usted está activo/a físicamente? a. Sí (0 puntos) b. No (1 punto)	
¿Cual es el estatus de su peso? (Mire la grafica a la derecha)	
<b>TOTAL (añada su puntuación)</b>	

<b>Altura</b>	<b>Peso (lbs.)</b>		
4' 10"	119-142	143-190	191+
4' 11"	124-147	148-197	198+
5' 0"	128-152	153-203	204+
5' 1"	132-157	158-210	211+
5' 2"	136-163	164-217	218+
5' 3"	141-168	169-224	225+
5' 4"	145-173	174-231	232+
5' 5"	150-179	180-239	240+
5' 6"	155-185	186-246	247+
5' 7"	159-190	191-254	255+
5' 8"	164-196	197-261	262+
5' 9"	169-202	203-269	270+
5' 10"	174-208	209-277	278+
5' 11"	179-214	215-285	286+
6' 0"	184-220	221-293	294+
6' 1"	189-226	227-301	302+
6' 2"	194-232	233-310	311+
6' 3"	200-239	240-318	319+
6' 4"	205-245	246-327	328+

<b>(1 punto)</b>	<b>(2 puntos)</b>	<b>(3 puntos)</b>
<b>Si pesa menos que la cantidad en la columna de la izquierda (0 puntos)</b>		



- 
- Si su puntuación fue **menos de 5 puntos**: Aun si su puntuación fue menos de 5, puede estar en riesgo de pre-diabetes. Hable con su doctor sobre su riesgo de diabetes y sobre pequeños pasos que usted puede tomar para prevenir o atrasar el diabetes tipo 2.
- Si su puntuación fue **más de 5 puntos**, está en riesgo alto de tener diabetes. Haga cita con su doctor lo más pronto posible para saber si tiene diabetes.

Conozca si está en riesgo de tener presión alta. Circule el número para cada contestación. Cuando haya terminado, añada los números para obtener su puntuación total.

Evaluación de riesgo de presión alta	Sí	No
¿Alguien en su familia tiene la presión alta?	1	0
¿Tiene 50 años de edad o más?	1	0
¿Es usted africano-estadounidense?	1	0
¿Tiene diabetes?	1	0
¿Usted u otra persona le añade sal a la comida que usted come?	1	0
¿Esta sobrepeso? (Favor circule 1 para 'sí' si sacó 2 o 3 puntos en la escala arriba sobre el estatus de su peso.)	1	0
¿Usted hace menos de 25 minutos de actividad física por día?	1	0
¿Usted fuma cigarrillos?	1	0
¿Usted bebe más de dos tragos alcohólicos* regularmente cada día?	1	0
<b>TOTAL (añada los valores que usted circuló)</b>		

### Mientras más alta su puntuación, más alto su riesgo

\*NOTA: un trago alcohólico = un trago (1oz); una copa (4oz) de vino; o una lata (12oz) de cerveza

Mientras más números usted haya circulado, más alto su riesgo de tener o desarrollar presión alta.

Si usted tiene alto riesgo, vaya a su doctor regularmente para verificarlo. El/Ella también le puede hablar más sobre maneras de prevenir la presión alta.

1.	Alguna vez un doctor le ha dicho que usted tiene:			
	a. ¿Diabetes?	Sí	No	No se
	b. ¿La presión alta (hipertensión)?	Sí	No	No se
	c. ¿Enfermedad del riñón (función reducida de su riñón)?	Sí	No	No se
	d. ¿Insuficiencia renal (requiere diálisis o un trasplante de riñón para vivir)?	Sí	No	No se
	e. ¿Enfermedad del corazón?	Sí	No	No se
	f. ¿Derrame cerebral?	Sí	No	No se

2.	Alguna vez sus padres biológicos, hijos, hermanos, o hermanas han sido diagnosticado con:			
	a. ¿Diabetes?	Sí	No	No se
	b. ¿Presión alta?	Sí	No	No se
	c. ¿Enfermedad del riñón (función reducida de su riñón)?	Sí	No	No se
	d. ¿Insuficiencia renal (requiere diálisis o un trasplante de riñón para vivir)?	Sí	No	No se
	e. ¿Enfermedad del corazón?	Sí	No	No se
	f. ¿Derrame cerebral?	Sí	No	No se

3.	¿Su doctor ha recetado medicamentos para alguna de las condiciones listadas arriba? ( <b>Si No, por favor brinque a la Pregunta 5</b> )	Sí	No
4.	¿Está tomando los medicamentos recetados de acuerdo a la manera en que fueron recetados? (ej., la misma cantidad, cantidad de veces al día como está escrito en la etiqueta de la receta)	Sí	No

5.	¿Usted limita la cantidad de sal en su dieta?	Sí	No
6.	¿Usualmente escoge comidas que son bajas en grasa?	Sí	No
7.	¿Actualmente fuma cigarrillos o cigarros?	Sí	No



19.	¿Cual es su raza?
	<input type="checkbox"/> Blanca <input type="checkbox"/> Asiática o de las islas del pacifico <input type="checkbox"/> Negra o africana americana <input type="checkbox"/> Otro (especifique): _____ <input type="checkbox"/> India americana o nativa de Alaska

20.	¿Es usted hispano?	Sí	No
-----	--------------------	----	----

21.	Durante el mes pasado:
	<input type="checkbox"/> No he estado preocupado sobre mi salud <input type="checkbox"/> He tenido algunas preocupaciones sobre mi salud, pero no he pensado sobre cambiar mi estilo de vida <input type="checkbox"/> He pensado en hacer cambios a mi estilo de vida para mejorar mi salud <input type="checkbox"/> He hecho cambios saludables a mi estilo de vida

22.	¿Basado en la charla de hoy, cuales de los pasos siguientes planifica ejecutar para mejorar su salud?
	<input type="checkbox"/> Comer comidas y meriendas más saludables <input type="checkbox"/> Tomar mis medicamentos recetados de la manera recetada <input type="checkbox"/> Hacer ejercicios regularmente <input type="checkbox"/> Otro (especifique): _____ <input type="checkbox"/> Parar de fumar <input type="checkbox"/> Cambiar la manera en que acostumbro a comprar comida <input type="checkbox"/> Cambiar mis métodos de cocinar

**¡Gracias!**

**Por favor recuerde completar la Encuesta #2 de Las Charlas De Salud en 4 -6 semanas del día de hoy**

<b>PARA USO DE LA OFICINA (No Complete)</b>	Diabetes <input type="checkbox"/> <input type="checkbox"/>	Presión alta <input type="checkbox"/> <input type="checkbox"/>
---	--	--

## Appendix C: References

### References

- Achenbach, TM. (2014). Preschool (Ages 1.5-5) Assessments. Retrieved from <http://www.aseba.org/preschool.html>.
- Bandura, A. (1998). Health promotion from the perspective of social cognitive theory. *Psychology and Health*. 13,623-649.
- Blum RE, Wei EK, Rockett HRH, et al. (1993). Validation of a food frequency questionnaire in Native American and Caucasian children 1 to 5 Years of Age. *Maternal and Child Health Journal*. 3(3): 167-172.
- Bjelland M, Brantsaeter AL, Haugen M, et al. (2013). Changes and tracking of fruit, vegetables and sugar-sweetened beverages intake from 18 months to 7 years in the Norwegian Mother and Child Cohort Study. *BMC Public Health*. 13:793.
- Brylinsky, JA, Moore, JC. (1994). The identification of body build stereotypes in young children. *Journal of Research in Personality*. 28: 170–181.
- Burdette, HL & Whitaker, RC. (2005). Resurrecting free play in young children: looking beyond fitness and fatness to attention, affiliation, and affect. *Arch Pediatr Med*, 159(1), 46-50.
- Byers T, Treiber F, Gunter E, et al. (1993). The accuracy of parental reports of their children's intake of fruits and vegetables: validation of a food frequency questionnaire with serum levels of carotenoids and vitamins C, A and E. *Epidemiology*. 4(4): 350-355.
- Centers for Disease Control and Prevention (CDC). (2014). Vital Signs: Fruit and vegetable intake among children - United States, 2003–2010. *Morbidity and Mortality Weekly Report*. Vol 63, no. 31. 671-676. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.
- Centers for Disease Control and Prevention (CDC). (2015). Childhood Obesity Facts. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.
- Chaddock, L, Pontifex, MB, Hillman, CH, & Kramer, AF. (2011). A review of the Relation of Aerobic Fitness and Physical Activity to Brain Structure and Function in Children. *J Int Neuropsychol Soc*, 17(6), 975-85.
- Cloutier, MM, Wiley, J, Zhu, W, Grant, A, & Gorin, AA (2015). The early Childhood Obesity Prevention Program (ECHO): an ecologically-based intervention delivered by home visitors for newborns and their mothers. *BMC Public Health*, 15(1), 1-13.  
doi:10.1186/s12889-015-1897-9
- Cramer, P, Steinwert, T. (1998). Thin is good, fat is bad: how early does it begin? *Journal of Applied Developmental Psychology*. 19: 429–451.
- Datar, A, Sturm R. (2004). Childhood overweight and parent- and teacher-reported behavior problems: Evidence from a prospective study of kindergartners. *Archives of Pediatric and Adolescent Medicine*, 158, 804-810.

- Foy, P. P25: Intraclass correlation and variance components as population attributes and measures of sampling efficiency in PIRLES 2001. IEA Data Processing Center, Hamburg, Germany
- Florence, MD, Asbrige, M, Veugelers, PJ. (2008). Diet quality and academic performance. *The Journal of School Health*. 78(4): 209-15. doi: 10.1111/j.1746-1561.2008.00288.x.
- Ginsburg, et al. (2007). The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics*, 119(1), 182-91.
- Grembowski, D. (2001). Evaluation of program impacts. In D. Grembowski, *The Practice of Health Program Evaluation*. Thousand Oaks, CA: Sage, 67-104.
- Hoelscher DM, Butte, NF, Barlow, S, Vandewater, EA, Sharma, SV, et al. (2015). Incorporating primary and secondary prevention approaches to address childhood obesity prevention and treatment in a low-income, ethnically diverse population: study design and demographic data from the Texas childhood obesity research demonstration (TX CORD) study. *Childhood Obesity*. 11(1): 71-91. doi:10.1089/chi.2014.0084
- Neumark-Sztainer, D, Story, M, Resnick, MD, Blum, RWM. (1996). Correlates of inadequate fruit and vegetable consumption among adolescents. *Preventative Medicine*. 25,no. 0082. 497-505.
- Nielsen, SJ, Rossen, LM, Harris, DM, Ogden, CL. (2014). Fruit and vegetable consumption of U.S. youth, 2009–2010. NCHS data brief, no 156. Hyattsville, MD: National Center for Health Statistics.
- Nyaradi, A, Jianghong, L, Hickling, S, Foster, J, Oddy, WH. (2013). The role of nutrition in children's neurocognitive development, from pregnancy through childhood. *Frontiers in Human Neuroscience*, 7(97), 1-16. doi:10.3389/fnhum.2013.00097
- O'Connor, TM, Hilmers, A, Watson, K, Baranowski, T, & Giardino, A. P. (2011). Feasibility of an obesity intervention for paediatric primary care targeting parenting and children: Helping HAND. *Child Care Health Dev*, doi: 10.1111/j.1365-2214.2011.01344.x.
- Parris LA, Marshall JA, Krebs NF, et al. (2003). Validation of a food frequency questionnaire in preschool children. *Epidemiology*. 14(2): 213-217.
- Pate, R, et. al. (2004). Physical activity among children attending preschool. *Pediatrics*. 114: 1258-1263.
- Rosales, F J, Reznik, JS, Zeisel, SH (2009). Understanding the role of nutrition in the brain and behavioral development of toddlers and preschool children: identifying and addressing methodological barriers. *Nutritional Neuroscience*, 12(5), 190-202. doi:10.1179/147683009X423454
- Resnicow, K, McMaster, F, Woolford, S et al. (2011). Study design and baseline description of the BMI<sup>2</sup> trial: Reducing paediatric obesity in primary care practices. *Paediatric Obesity*, 7, 3-15.

- Rifas-Shirman, SL, Willett WC, Lobb, R. (2001). PrimeScreen, a brief dietary screening tool: reproducibility and comparability with both a longer food frequency questionnaire and biomarkers. *Public Health Nutrition*. 4(2): 249-254.
- Romano, E, Babchishin, L, Pagani LS, Kohen, D. (2010). School readiness and later achievement; replication and extension using a nationwide Canadian survey. *Developmental Psychology*, 46(5), 995-1007.
- Rossi, et al., Chapter 9 (“Assessing Program Impact: Alternative Designs”) in *Evaluation: A systematic approach*, 7th Edition. Sage Publications, 265-300.
- Schwimmer, JB, Burwinkle, TM, Varni, JW. (2003). Health-related quality of life of severely obese children and adolescents. *Journal of the American Medical Association*, 289:14: 1813-1819.
- Spernak, S, Schottenbauer, M, Ramey, S, Ramey, C. (2006). Child health and academic achievement among former Head Start children. *Children and Youth Services Review*. 28: 1250-1261
- Swinburn, B, Malakellis, M, Moodie, M, Waters, E, Gibbs, L, Millar, L, et al. (2014). Large reductions in child overweight and obesity in intervention and comparison communities 3 years after a community project. *Pediatric Obesity*. 9(6), 455-462. doi:10.1111/j.2047-6310.2013.00201.x
- Taveras EM, Gortmaker SL, Hohman KH, et al. (2011). Randomized controlled trial to improve primary care to prevent and manage childhood obesity. *Archives of Pediatric and Adolescent Medicine*. 165(8):714-722.
- U.S. Census Bureau, 2009-2013 5-Year American Community Survey. (Retrieved in 2015). Retrieved from: <http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>.
- U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, American Community Survey, Census of Population and Housing, County Business Patterns, Economic Census, Survey of Business Owners, Building Permits, Census of Governments. Last Revised: Wednesday, 14-Oct-2015 16:24:00 EDT.
- USDA. (2010). Dietary Guidelines for Americans.
- U.S. Department of Health and Human Services. (Retrieved in 2015) The poverty guidelines updated periodically in the Federal Register by the U.S. Department of Health and Human Services under the authority of 42 U.S.C. 9902(2). Retrieved from <http://aspe.hhs.gov/poverty-guidelines>.
- Veugelers, PJ and Fitzgerald, AL. (2005). Effectiveness of school programs in preventing childhood obesity: a multilevel comparison. *American Journal of Public Health*. Vol. 95, No. 3, pp. 432-435. doi: 10.2105/AJPH.2004.045898
- Wardle J, Volz C, Golding C. (1995). Social variation in attitudes to obesity in children. *International Journal of Obesity*. 19: 562–569.

Young, RF1, Schwartz, KL, Monsur, JC, West, P; Neale, AV. (2008) .Primary care of overweight children: the importance of parent weight and attitudes about overweight: a MetroNet study. *The Journal of the American Board of Family Medicine*. 21(4):361-3.