

WIC Special Project Grant (WISP-06-NY-1)
Revitalizing WIC Nutrition Services: NY Fit WIC

FINAL GRANT REPORT

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EXECUTIVE SUMMARY

The New York State Department of Health (NYS DOH) was awarded a WIC Special Projects Grant in 2006 to conduct the evaluations of a statewide Fit WIC initiative and two pilot interventions. The grant was implemented as a joint collaboration among staff from the NYS DOH, Health Research, Inc., the University at Albany School of Public Health, and The Sage Colleges. The components of the *NY Fit WIC* initiative and the two pilot interventions were informed by recommendations and lessons learned from the U.S. Department of Agriculture (USDA), Food and Nutrition Service (FNS)-supported Five-State Fit WIC pilot projects. This report presents evaluation findings and lessons learned from each of the three projects.

I. Evaluation of the *NY Fit WIC* Initiative

The *NY Fit WIC* initiative sought to revitalize WIC nutrition education by training WIC staff to incorporate physical activity and other healthy lifestyle messages into counseling sessions and other aspects of their WIC clinics. The initiative had the following short-term and long-term objectives:

- Improvement of staff self-efficacy and healthy lifestyles;
- Improvement of parents'/caregivers' self-efficacy and healthy lifestyles;
- Improvement in healthy lifestyles among WIC children; and
- Improvement in retention rates among WIC children.

The main components of the initiative included a full-day interactive workshop for WIC staff, as well as a *NY Fit WIC* Resource book that emphasized the *NY Fit WIC* concepts. Trained WIC coordinators and educators incorporated these *NY Fit WIC* concepts (healthy nutritional habits and active lifestyles) at their respective clinics and during counseling sessions. The initiative emphasized the promotion of physical activity and decreased TV viewing time because evidence from the Five-State Fit WIC pilot project showed that WIC educators were not comfortable discussing overweight or obesity of WIC children with parents/caregivers. To support the adoption and implementation of the *NY Fit WIC* concepts and strategies within WIC clinics, the NYS DOH awarded healthy lifestyle grants to WIC local agencies.

The impact of the *NY Fit WIC* initiative was assessed through a pretest-posttest evaluation design using staff and parent/caregiver surveys. The evaluation results were assessed separately among agencies that were trained at baseline and among agencies that were trained after the baseline survey. Administrative data collected by the NYS WIC program were used to evaluate the implementation of the *NY Fit WIC* initiative across all agencies.

During the evaluation of the *NY Fit WIC* initiative, the NYS WIC program implemented several interventions aimed at promoting the consumption of fruits, vegetables and low-fat dairy. As a result, any reported improvements observed in these healthy nutritional-related habits could not be solely attributed to the *NY Fit WIC* initiative. Therefore, the evaluation of participant

outcomes was refocused to assess only the impact of physical activity-related outcomes (i.e., TV viewing and time spent playing outdoors).

Results of the process evaluation suggest that the *NY Fit WIC* activities implemented by WIC agencies did create a potential for observing meaningful staff and participant outcomes as a result of the *NY Fit WIC* initiative. The process evaluation results indicated that WIC agencies implemented activities related to physical activity by a ratio of two to one when compared with activities related to nutritional practices. Similarly, the evaluation of staff outcomes suggests that adoption of *NY Fit WIC* concepts within WIC clinics improved the ability of staff to discuss physical activity with parents/caregivers, and also improved staff physical activity behavior, especially among staff from agencies trained before the baseline staff surveys were administered.

There were no significant statistical changes in either group with regard to the “amount of hours parents/caregivers spend watching TV daily” or the “frequency of watching TV during meals.” In contrast, the proportions of parents/caregivers who reported “doing as much physical activity with their children as they would like” significantly increased between baseline and follow-up among both agencies that were trained at baseline and those that were not trained at baseline. The mean “number of minutes children spend playing outdoor daily” increased significantly between baseline and follow-up, with the greatest improvement occurring among children who were served by agencies that had been trained at baseline.

The impact of the *NY Fit WIC* initiative differed by race/ethnicity; white children experienced the greatest improvements in the mean time spent playing outdoors. While all three major NYS racial/ethnic groups (i.e., whites, African Americans and Hispanics) showed improvement in physical activity behavior, at each measurement point the “average number of minutes children spent playing outside” was consistently higher among white children than among African American and Hispanic children, or children from other racial/ethnic categories.

Due to the lack of adequate post-*NY Fit WIC* data at many WIC local agencies, retention analyses were conducted using data from only one-third of all NYS WIC local agencies (n=32). Of the total 32 agencies that had adequate pre- and post-*NY Fit WIC* recertification data, only three agencies showed improved retention rates between baseline and follow-up. This finding underscores the need for a study design that allows for a longer follow-up period in order to adequately assess the impact of the *NY Fit WIC* initiative on agency-specific retention rates.

A critical review of the results suggests that the observed impact of the *NY Fit WIC* initiative on physical activity-related outcomes among staff, caregivers, and children may not be due to chance or systematic error in the conduct of the study. All observed results were consistent with the hypothesized effects of the initiative in the *NY Fit WIC* evaluation logic model.

While the components of the *NY Fit WIC* should be readily transferrable to any other state WIC program, the main lesson learned from this evaluation is that the adoption and implementation of *NY Fit WIC* concepts and strategies require additional financial resources. NY WIC local agencies used the healthy lifestyles mini-grants provided by the NYS DOH to purchase physical activity toolkits and various other resources used to promote opportunities for

indoor and outdoor play, as well as healthy nutritional habits. These resources undoubtedly contributed to the observed improvement in WIC educators' enthusiasm about adopting and implementing *NY Fit WIC* concepts.

Finally, the long-standing statewide Eat Well Play Hard (EWPH) framework for promoting healthy lifestyles among young children provided a supportive context for the adoption and implementation of the *NY Fit WIC* initiative. The EWPH framework facilitated easy buy-in from WIC agency managers and educators throughout the State. In turn, the *NY Fit WIC* initiative provided the NYS WIC program with an opportunity for implementing the long-standing statewide EWPH strategy of promoting age-appropriate physical activity among all children receiving nutrition assistance services in NYS.

II. Evaluation of the *Families on the Go (FOTG)* Pilot Intervention

Families on the Go (FOTG) was developed as an enhancement to the *NY Fit WIC* initiative and was implemented as a pilot intervention in one WIC clinic located in Central New York. *FOTG* sought to enhance the *NY Fit WIC* initiative by providing WIC educators with additional resources and training to assist parents'/caregivers' in increasing their children's physical activity. Building on results and recommendations from the Five-State Fit WIC pilot project, the key components of the intervention included:

- Incorporating into WIC counseling sessions, a community resource guide that outlined safe places for active recreation in the community, highlighted strategies to increase children's physical activity (PA) and reduce their TV viewing, and included a calendar of local events;
- Training WIC counselors on how to use the guide during counseling sessions to discuss physical activity with parents; and
- Promoting the goals of *FOTG* through the Nutrition Spotlight, a newsletter published at the clinic during the implementation period.

The evaluation team solicited and incorporated input and feedback from staff and parents'/caregivers' during the development of the community resource guide. The specific goals of the intervention were to increase the time children spend playing outdoors and reduce the time children spend watching television.

A pretest-posttest design was used to assess the impact of *FOTG* on TV viewing and outdoor play among children receiving WIC services at the study site. Self-administered surveys using validated physical activity questions were completed by parents'/caregivers' at baseline and at follow up. The post-intervention survey included process-related questions to examine whether caregivers received the guide, how many copies they received, whether they read the guide, and how the guide was used.

The proportion of children who watched TV for less than two hours per day and the proportion of children who played outdoors for 60 minutes or more per day increased between baseline and follow up. Consistent with the evaluation logic model, higher proportions of WIC

parents/caregivers reported that they were “confident in their ability to limit their children’s TV viewing time and to increase their children’s physical activity” after the intervention. Caregivers who “recalled receiving” and “reading the community resource guide” reported that they used it to: 1) identify the list of community events; 2) be more active themselves; 3) help their children to be active or reduce their children’s TV viewing time; 4) find places to take their children; and 5) find winter clothing for their children.

Compared to caregivers from WIC sites that had only received the *NY Fit WIC* initiative, caregivers from the *FOTG* site were approximately twice as likely to report that they watched TV fewer than two hours per day, 4.5 times as likely to report that they were confident in their ability to limit their child’s TV viewing, and twice as likely to limit their child’s TV viewing to less than two hours. Similarly, caregivers from the *FOTG* site were 2.4 times as likely, while children were 1.4 times as likely, to meet the recommended physical activity requirements compared to those at non-*FOTG* sites who received only the *NY Fit WIC* training.

Despite the limitation of not using paired pretest-posttest data, these results demonstrated that it is feasible to incorporate a community resource guide into WIC counseling sessions to simultaneously improve WIC caregivers’ practices and self-efficacy as well as their children’s TV viewing and physical activity behavior. Existing evidence shows that enhanced access to places for physical activity combined with informational activities that are aimed at at-risk families is effective in increasing levels of physical activity. By incorporating a community-tailored resource guides into WIC counseling and nutrition education sessions, *FOTG* functioned as both a family-based and an environment-based determinant of physical activity behavior among WIC children enrolled at the study site.

A key lesson learned from this pilot intervention is that program planners should solicit and incorporate caregivers’ input and feedback when developing similar interventions to ensure that programs address caregivers’ needs, are feasible to execute, facilitate caregiver buy-in and compliance, and are sustainable. Once parental and caregiver input and feedback have been sought and incorporated, use of a community resource guide should be easily transferable and sustainable within any other WIC sites.

III. Evaluation of the *Client-Centered Nutrition Education Pilot Intervention*

The *Client-Centered Nutrition Education (CCNE)* pilot project was the second enhancement to the *NY Fit WIC* initiative. The *CCNE* intervention addressed two important recommendations and insights from the Five-State Fit WIC pilot project, namely: 1) WIC programs needed to develop client-centered techniques for nutrition assessment and education; and 2) WIC programs needed to expand and update staff trainings. In addition to increasing WIC educators’ expertise and self-efficacy, the primary objectives of the *CCNE* pilot were to:

- Increase the proportion of WIC parents’/caregivers’ satisfied with WIC nutrition education resulting in healthier lifestyles among WIC children;
- Promote positive behavior change through nutrition education; and
- Improve parents’/caregivers’ self-efficacy with regard to nutrition.

- The key components of the *CCNE* intervention included:
- Incorporating a client-centered approach to WIC nutrition education through the use of facilitated group discussions instead of lectures to promote healthy lifestyles;
- Training WIC staff how to use nutrition education to foster behavior change in WIC participants in a manner that is responsive to their participants' needs; and
- Encouraging WIC parents/caregivers to actively promote their own healthy behavior.

The facilitated group discussion trainings emphasized WIC educators' use of open-ended questions as well as the importance of focusing group discussions on a nutrition education topic introduced by WIC parents/caregivers. Five sites were initially selected for the pilot study; however, only three study sites participated in all phases of the research.

Direct observations were conducted to evaluate the implementation of the intervention and to assess whether a potential for realizing key intervention objectives among staff and participants had been established. WIC educators at the three sites that successfully implemented the *CCNE* intervention were able to improve their facilitation skills over time. Educators easily mastered several facilitation skills (e.g., use of icebreakers/conversations starters, avoiding lecturing, and handling misinformation), but many still had difficulty using the more sophisticated skills, such as, critical thinking skills and use of open-ended questions. In the original research proposal, it was anticipated that educators would need as much as three months of support to master the art of facilitation. However, the progress was very individualized, happening instantly for some educators and taking much longer than three months for others.

Comparisons of baseline and follow-up staff outcomes did not show an improvement in the self-efficacy of Competent Professional Authorities (CPAs) and Nutrition Assistants with regard to discussing physical activity and TV viewing, and confidence in their ability to educate WIC parents/caregivers about healthy lifestyles and maintaining their children's healthy weight. However, the proportions of WIC staff who reported being comfortable discussing physical activity or TV viewing with parents/caregivers were relatively high at baseline and at follow up.

With regard to participant outcomes, the proportions of parents/caregivers who reported that they had "learned something new about TV viewing" and "about physical activity" from WIC educators increased between baseline and follow up. The proportion of caregivers who reported that they "offered or encouraged their children to be physically active" increased at post-intervention. Similarly, the proportion of parents/caregivers who reported that their "children played outdoors for 60 minutes or more daily" also increased between pre- and post-intervention. Comparisons of parent/caregiver outcomes between *CCNE* sites and selected *NY Fit WIC* sites showed, after adjusting for child's gender, caregivers' race/ethnicity and education, that parents/caregivers at *CCNE* sites were nearly twice as likely to report that they did not "watch TV during meals" and nearly twice as likely to report that their children played outdoors for at least 60 minutes daily.

With regard to the transferability of the intervention to other WIC sites, the results of this study point to the need to have widespread commitment to the adoption of facilitated group

discussions among WIC site managers and educators alike. Most importantly, WIC site managers must be open to the use of facilitated discussions both in groups and in one-on-one sessions, since group scheduling may initially be a challenge.

A key lesson learned from this pilot study is that good facilitation takes time. The targeted goal of establishing good facilitated group discussions at the study sites in three months was not accomplished. WIC staff needed time and continued support to become comfortable using facilitated group discussion skills. The relatively high level of job satisfaction observed at follow up, suggests that WIC educators did not have a negative outlook as a result of the intervention and were open to adopting the methods as a counseling strategy to contribute to the revitalization of WIC nutrition services at their clinics.

IV. Conclusions

This study showed that the *NY Fit WIC* initiative was able to positively influence physical activity behavior among WIC staff, WIC parents/caregivers and WIC children through the incorporation of physical activity messages into WIC nutrition services. Results from the two pilot studies provided evidence of the feasibility of enhancing the impact of the *NY Fit WIC* intervention through the incorporation of community resource guides and use of facilitated group discussions during WIC nutrition education sessions.

The observed results validate the evidence-based decision made by the NYS WIC program to focus *NY Fit WIC* messages on physical activity and other healthy lifestyles and exclude overweight and obesity – both of which have been shown to be difficult topics for staff to discuss with parents/caregivers. The differential impact of the intervention by race/ethnicity points to the need for continued efforts to address health disparities within all WIC local agencies, particularly those that serve diverse populations.

Future research and evaluation efforts should focus on adequate assessment of the impact of the initiative on retention rates as well as the feasibility of replicating the results of the pilot studies in a larger number of WIC local agencies.

I. INTRODUCTION

Within the Women, Infants, and Children (WIC) population, childhood overweight has slowly and steadily increased at the national level. Between 1994 and 2003, the prevalence of overweight (Body Mass Index (BMI) at or above the 95th percentile) among children that presented at WIC clinics increased from 10.9 to 14.7 percent, and the prevalence of at risk of overweight (BMI at or above the 85th and less than 95th percentile) in that same group, increased from 13.9 to 15.7 percent.¹

The United States Department of Agriculture (USDA) Food and Nutrition Services (FNS) recognized the critical importance of this public health issue and called for research that identified, evaluated, enhanced and strengthened the effectiveness of WIC nutrition services with a focus on counseling methods. In 1999, the USDA sponsored pilot projects in five states (California, Kentucky, Vermont, Virginia, and the Inter Tribal Council of Arizona) to develop interventions that targeted childhood obesity in the WIC program. Participating states considered the impact of issues such as staff training, case management, food policies, nutrition education, promotion of physical activity and other areas on the program's effectiveness in addressing childhood obesity.² The five grantees worked collaboratively with FNS and the Centers for Disease Control and Prevention (CDC) to create the Fit WIC initiative. Fit WIC promoted healthy lifestyles behaviors among staffs, WIC participants, and WIC families without focusing on weight. It targeted ways in which WIC policies and practices could be changed to influence WIC participants and staff at WIC agencies.²

The Fit WIC grantees learned that:

- Parents of overweight children did not perceive their child as overweight nor did they feel that their child's weight was a problem.
- Parents were eager to receive detailed information and instructions on how to adopt healthy lifestyle choices and activities that targeted the entire family.
- WIC staff were uncomfortable talking about weight issues with participants because they lacked training.
- WIC staff were uncomfortable encouraging participants to lead healthy lifestyles because they were not satisfied with their own weight or health-related habits.³
- WIC staff who received the intervention, reported improvements in their own lifestyle choices as well as in their efforts to counsel families in making healthy choices.⁴

The five grantees recommended that WIC programs developed client-centered techniques for nutrition assessment, include physical activity as part of nutrition assessment and education, focus on healthy lifestyles rather than weight, provide WIC staff with opportunities for wellness at work, encourage staff to be positive role models of healthy behaviors, and expand and update staff trainings.³

THE NEED FOR FIT WIC IN NEW YORK STATE

Like the rest of the nation, the New York State (NYS) WIC program is not immune to the increases in obesity and overweight rates seen in young children. From 1989 to 2003, the prevalence of overweight among WIC children (two to five years old) in NYS increased from 12.1 to 16.5 percent and the prevalence of “at risk of overweight” increased from 13.3 to 16.6 percent.⁵ Research identifies low rates of physical activity and high rates of TV viewing as key risk factors of overweight among children.^{6,7} A large body of literature highlights the important role parents play in shaping their children’s physical activity and TV viewing behaviors. Children and adolescents are more likely to be physically active when their parents are active, when children are encouraged to be active, and when parents participate in sports or physical activities with their children.^{8,9,10,11} In addition, a recent study showed that children are more likely to exceed TV viewing recommendations when parents are high volume TV viewers and when parents fail to limit their children’s TV viewing time.¹²

A 2004 study determined that NYS WIC participants found nutrition education useful, but boring and repetitive.¹³ Over the past several years, anecdotal reports from agency staff trainings and evaluations from trainings on client-centered counseling have indicated that WIC educators were interested in learning and applying new methods of nutrition education. Lastly, the NYS WIC program had a problem retaining children within the program.¹⁴ If WIC nutrition education was to become more relevant to WIC parents/caregivers, it is possible that parents/caregivers would return to the WIC program. The national Fit WIC model provided a solution to the challenges that the NYS WIC nutrition services faced.

The strategy to revitalize the NYS WIC nutrition services consisted of using and adopting the materials, trainings, lessons learned, and recommendations of the FNS-supported Fit WIC pilot project.¹⁵ The *NY Fit WIC* revitalization project consisted of *NY Fit WIC* training to all WIC local agency staff, in addition to the implementation and evaluation of two enhancement projects that were piloted at a small subset of WIC sites. The first pilot project enhanced the *NY Fit WIC* initiative by providing additional training and resources to increase physical activity and community involvement; and the second pilot project enhanced *NY Fit WIC* by training staff in client-centered nutrition education.

The *NY Fit WIC* initiative chose to address the following factors to successfully develop strategies that contributed to healthy lifestyles habits and normal weight among WIC children:

1) *Physical Activity* - The body of research summarized above suggested that parents need to be involved in any efforts to both increase physical activity and decrease TV viewing in children. Furthermore, qualitative studies indicate that parents experience barriers in their efforts to encourage their children to be physically active.^{16,17} Any effort by *NY Fit WIC* to engage parents in promoting active lifestyles among their children needed to address these limitations.

2) *Cultural Differences* - National data shows wide variations in childhood overweight rates for different race/ethnic groups. In 2003, Hispanic children had the highest overweight rates (21.7%) followed by African American (15.4%) and white (12.8%) children in NYS.⁵ There are no clear explanations for these differences in rates. However, since cultural norms,

attitudes, and values are shown to have strong influences on eating patterns, levels of physical activity, and perceptions about weight and health,¹⁸ they could all indirectly influence overweight. Levels of physical activity are lower among Mexican American children compared to non-Hispanic white children; and Mexican children are also more likely to watch TV than their counterparts.^{19, 20} These results highlighted the importance of developing and evaluating interventions that accounted for the racial/ethnic make-up of participants.

3) *Regional Differences* - A national study that examined the geographic distribution of physical activity facilities found that neighborhoods with lower socio-economic statuses and a higher concentration of minorities, have reduced access to recreational facilities and an increase in overweight among adolescents.²¹ Since physical activity was a central tenet of the *NY Fit WIC* initiative, the evaluation of the initiative needed to examine the impact of rural versus urban locations of residence on the implementation of the project.

4) *Satisfaction among WIC Staff* - The five-state Fit WIC pilot project reported that WIC staff were uncomfortable discussing children's weight issues with parents/caregivers because of insufficient time or training. The *NY Fit WIC* initiative obtained local WIC agency staff support and acceptance, by: 1) training all WIC local agency staff in Fit WIC; 2) clearly explaining the need and importance of the instituted changes, 3) obtaining staff input; and, lastly 4) encouraging local agencies to develop a plan of action specific to their population.

NYS was uniquely positioned to evaluate the transferability of the Five-State Fit WIC Pilot Project. The racial/ethnic diversity of the population (36% Hispanic, 25% African American and 26% white) provided a unique opportunity to test the program among different racial/ethnic groups. Finally, *NY Fit WIC* could be tested in diverse locations within the state because: 1) 70 percent of NYS WIC participants live in the New York City metropolitan region, 2) WIC served over 60,000 children in the Capital and Western regions each month, and 3) NYS WIC agencies varied in size.

II. EVALUATION OF THE *NY FIT WIC* INITIATIVE

An expert panel consisting of staff from various NYS DOH units, and faculty from The University at Albany, State University of New York (SUNY), and The Sage Colleges faculty members was convened to provide guidance on all aspects of the initiative's evaluation methods. From within the NYS Division of Nutrition, the panel consisted of individuals from the Bureau of Administration and Evaluation (BAE), the Bureau of Supplemental Food Programs (BSFP), and the Bureau of Nutrition Policy and Risk Reduction (BNRR). The panel from The University at Albany SUNY included faculty from the Department of Epidemiology and Biostatistics, the Department of Health Policy, Management and Behavior, and the Department of Sociology. Lastly, faculty from the Department of Nutrition Science from The Sage Colleges also participated in the panel.

An outcome assessment of the *NY Fit WIC* initiative was necessary to determine if the initiative revitalized WIC nutrition services by impacting local agency staff, parents/caregivers, and participants. It also determined whether the impact of the initiative varied by the race/ethnic make-up of WIC participants, or by the urban/rural locations of WIC agencies.

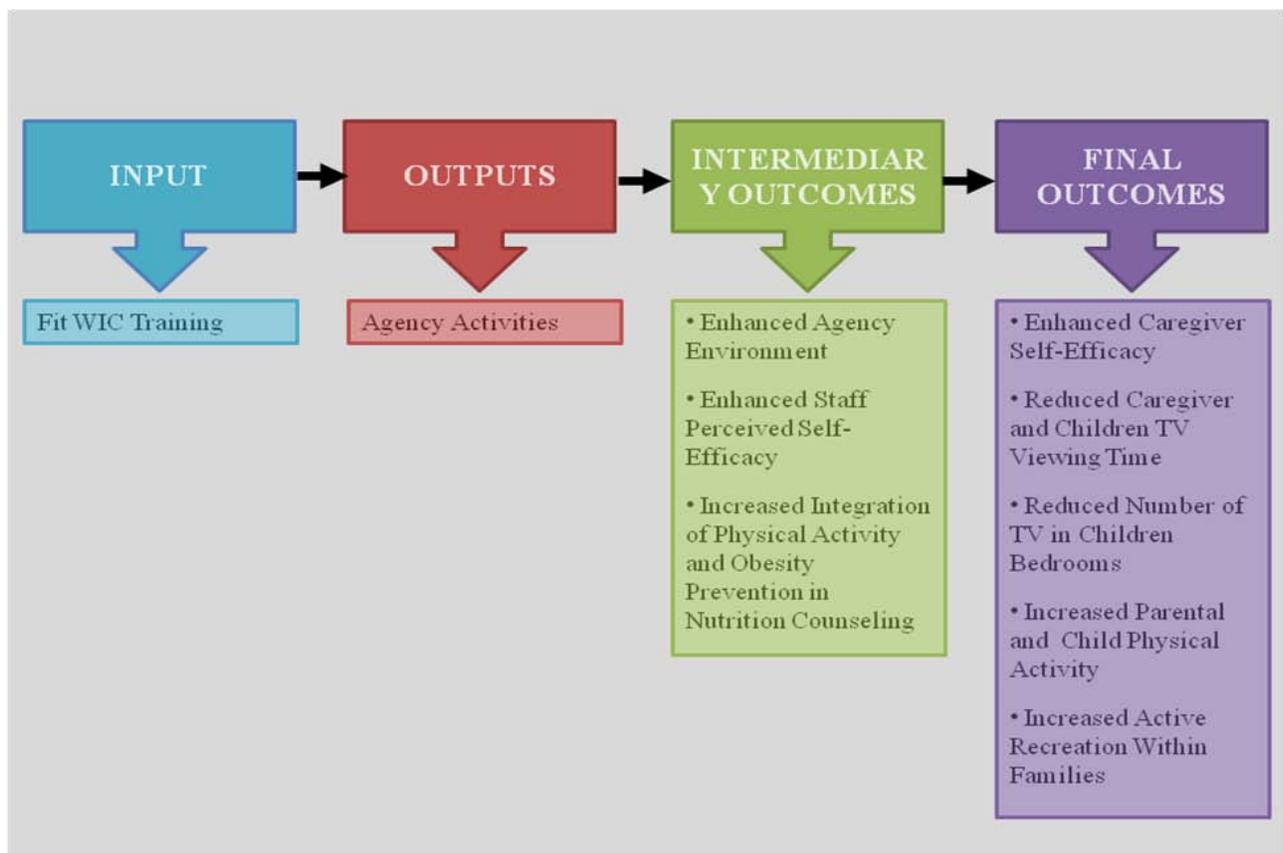
The evaluation of the *NY Fit WIC* initiative was guided by a logic model, which served as a map for the data analysis plan, and provided a graphic representation of the initiative activities and objectives. The logic model helped to link measures in the questionnaires to the program activities and outcomes (Refer to [Appendix II-A](#) for the *NY Fit WIC* Logic Model). The short-term, intermediate, and long-term outcomes for the *NY Fit WIC* initiative were as follows:

- 1) To revitalize the WIC Nutrition Services in order to:
 - Increase the proportion of WIC local agency staff satisfied with their jobs;
 - Increase WIC educators' self-efficacy in their ability to influence caregivers in adopting lifestyle habits for themselves and their families;
 - Reduce barriers that may prevent WIC educators from adopting *NY Fit WIC* strategies;
 - Increase the proportion of WIC caregivers satisfied with WIC nutrition education; and
 - Increase retention rates among WIC infants and children.
- 2) To improve the health behaviors of WIC staff by increasing the proportion who lead healthy lifestyles.
- 3) To improve the healthy behaviors of WIC families in order to increase the:
 - Self-efficacy of parents/caregivers in establishing active lifestyles
 - Proportion of WIC children and caregivers who lead healthier lifestyles

- 4) To reduce disparities in healthy behaviors by assessing the effects of *NY Fit WIC* training on caregivers' outcomes according to their race/ethnicity (African American, Hispanic, and white), and by location (urban/rural).
- 5) To ultimately reduce the prevalence of childhood overweight among WIC children.

During the evaluation of the *NY Fit WIC*, the NYS WIC Program implemented several non-physical activity-related interventions aimed at promoting the consumption of vegetables and fruits, and low-fat dairy. Refer to [Appendix II-B](#) for a timeline illustrating these interventions. Under these circumstances, any observed improvements in “discussing or consuming vegetables and fruits” or in “discussing or consuming low-fat dairy” cannot be solely attributed to the *NY Fit WIC* initiative. Accordingly, this final report will focus on the evaluation of outcomes related to physical activity. Figure II-1 displays a simplified logic model for the *NY Fit WIC* initiative.

Figure II-1: Simplified *NY Fit WIC* logic model



In addition to an outcome assessment, a process evaluation was necessary to determine the extent to which the initiative was implemented as intended. An analysis of retention rates among children was conducted to determine whether the *NY Fit WIC* initiative had an impact on retention among WIC children one to two years old.

DESCRIPTION OF THE NY FIT WIC INITIATIVE

Training for the *NY Fit WIC* initiative consisted of two-phases, and was conducted for all NYS WIC local agencies (n=101). WIC local agency trainings began in January 2005 and were completed by June 2007.

I. Phase One Training

The first step of the training involved hiring a physical activity consultant from California, Patty Kimbrell, M.A., to provide a workshop on *California Fit WIC: Active Play for Families*.²² In June 2004, ten NYS Department of Health (NYS DOH) staff participated in a workshop conducted for 15 WIC local agency staff as a demonstration of the *California Fit WIC* model.²² This workshop set the stage by which NYS DOH staff used California resources and the training as a foundation for the development of the *NY Fit WIC* training.

Two *NY Fit WIC* train-the-trainer sessions were conducted. At the peak, there were 30 trainers from across the state with a *NY Fit WIC* coordinator covering the western, central, and capital regions of the state, and a secondary *NY Fit WIC* coordinator covering the metropolitan regional area. All trainers were provided with the *NY Fit WIC* Trainer Handbook ([Appendix II-C](#)) that contained PowerPoint slides with speakers' notes, and worksheets for group and individual activities with detailed instructions. This handbook was updated as new statistics were released.

Mini-trainings were conducted at the NYS WIC Association annual conference in October 2004. Interested agency coordinators then signed up at the conference to request training. A core group of NYS DOH staff conducted trainings at WIC local agencies in January 2005. The goals of the first phase training were to:

- Provide local WIC agencies with practical information on how to promote physical activity with an emphasis on good health and being active rather than weight;
- Focus on how to implement new ideas and activities at WIC local agency clinics, and improving interactions with WIC families; and
- Forge close relationships with trainers, staff from regional offices, and local agencies.

The following topics were discussed at Phase One Train-the-Trainer sessions and WIC local agency trainings:

- The role of *NY Fit WIC* and the conclusions of the Five-State Fit WIC Pilot study;
- The role of the “Stages of Change” model in client-centered nutrition education to engage participants in an interactive dialogue to help promote healthy lifestyle choices;
- The importance of physical activity in childhood motor development; and
- The role of physical activity and WIC local agencies in curbing the statewide obesity epidemic.

Local WIC agencies staff attended a one day interactive workshop, where they learned how to incorporate physical activity concepts into their educational efforts. The *NY Fit WIC* activities were simple, age-appropriate movements that were designed to support a life-long habit of physical activity. The training offered the opportunity for all WIC staff to interact in a fun, hands-on workshop that demonstrated how all staff could contribute to the implementation of the *NY Fit WIC* initiative in their respective clinics. Local WIC agencies' staff learned how to effectively interact with WIC parents who had children with weight issues. Staff also developed action plans to get movement started in their WIC clinics.

During the training, each local agency received a *NY Fit WIC* Resource book ([Appendix II-D](#)) that included the following topics:

- The *NY Fit WIC* initiative and its role in curbing the rise of obesity within NYS WIC children and nationally;
- The importance of physical activity in curbing childhood obesity, and examples of activities to support physical activity in WIC families;
- Background knowledge on feeding relationships, the “Stages of Change” model concepts incorporated in nutrition education, and the stages of child development;
- Tips and encouragements for the creation of employee or worksite wellness programs focused on promoting physical activity and healthy behaviors in WIC staff; and
- Resources and referrals for the implementation of the *NY Fit WIC* initiative.

II. Phase Two Training

The second phase of the *NY Fit WIC* initiative included an updated train-the-trainer session for the NYS DOH trainers. NYS regional office staff determined the amount of trainings that would be conducted for new WIC local agency staff due to WIC staff turnover that occurred since the completion of Phase One Trainings in June 2007. During 2009, NYS regional staff trainers conducted new staff trainings in their respective regions. The updated trainings focus on improving client-centered nutrition education and counseling practices along with incorporating physical activity by providing:

- Basic *NY Fit WIC* training for new staff with a focus on facilitated group discussion principles;
- Resources on physical activity/healthy lifestyles for local agencies;
- Regional technical assistance for local agencies, as needed, in implementing and sustaining *NY Fit WIC* in their clinics; and
- Healthy lifestyle funding awarded to all NYS WIC local agencies as part of their budgets to continue the promotion of healthy eating and physical activity.

INITIATIVE IMPLEMENTATION

Following the trainings, WIC local agency coordinators began implementing *NY Fit WIC* concepts and activities in their clinics. There were no set of standards activities that all agencies had to use. Local agency staff were encouraged to tailor the program to meet their needs and to select activities that were appropriate for their WIC population. Some activities originated from the *NY Fit WIC* Resource book, while other activities were designed by the agencies. Activities reflected *NY Fit WIC* concepts and Best Practices outlined during the *NY Fit WIC* training sessions: Healthy lifestyles for all children; education for WIC families; support for WIC staff; and community efforts.

The NYS WIC Program developed the Healthy Lifestyles initiative in Federal Fiscal Year (FFY) 2006 in an effort to improve the health of WIC participants while supporting the mission of the New York State Strategic Plan for Overweight and Obesity Prevention. WIC local agencies were provided with funding from this initiative to support the development of innovative programs that encouraged increased physical activity in conjunction with healthier food choices, and made positive, nutritional changes in participant lifestyles. During the first three years, WIC local agencies submitted applications and corresponding budgets for their planned *NY Fit WIC* activities. By FFY 2009, funding was provided statewide to support the *NY Fit WIC* initiative without a formal application process. Funding supported activities such as purchasing *NY Fit WIC* supplies, i.e., pedometers, balls, materials for food demonstrations with taste testing, and cooking utensils to take home. See [Appendix II-E](#) for a complete list of items purchased by WIC local agencies.

At the community level, agencies promoted activities that increased access to community resources and support. Agencies formed partnerships with community leaders (religious, political, business, etc.) and organizations to provide WIC participants with a variety of resources. These undertakings informed WIC local agencies of community concerns and ongoing activities that promote healthy lifestyles. [Appendix II-F](#) provides a resource guide developed by one agency highlighting local and online resources in the surrounding neighborhood. Several agencies received media (video and newspaper) recognition in their community during the implementation of the *NY Fit WIC* initiative. Two examples are featured in [Appendix II-G](#).

At the clinic level, *NY Fit WIC* was emphasized by establishing environmental changes that promoted healthy lifestyles and behaviors. In some instances, WIC staff worked with their sponsoring agency or building management to consider moving vending machines away from the clinic, or offer healthier choices for staff, participants and their families. Some agencies modified their waiting rooms by providing children with a safe place to be active under caregivers' supervision. In addition, waiting rooms were stocked with a variety of age-appropriate toys that promoted physical activity. Agencies also painted murals or added *NY Fit WIC* posters to their walls that made waiting rooms more inviting.

Activities that targeted staff were designed to encourage role modeling of positive healthy lifestyle behaviors. Some local agencies discouraged staff from having food and drink at

their desks, while others encouraged only healthy foods and beverages such as fruits, nuts, and water. Other healthy behaviors that were encouraged included:

- ◆ Consuming healthy foods, especially vegetables, fruits, whole grains, low fat dairy products and water; and
- ◆ Being physically active, such as joining walking groups during lunch, taking the stairs, and parking farther away from clinic entrances.

Activities that targeted caregivers and children were more varied, ranging from activities done at home by individuals or families, with direction provided by local agency staff, to group activities done in the clinic. Examples of activities that targeted participants included:

- ◆ Providing *NY Fit WIC* activity kits to children with tools that promoted healthy lifestyle habits. See [Appendix II-H](#) for a list of contents included in a Fit WIC bag supplied by one agency. One agency did an evaluation of their Fit WIC kit to determine whether families found their kit useful. See the evaluation form in [Appendix II-I](#).
- ◆ Family activity calendars, where families tracked their activities as a means to promote family bonding and increase physical activity. Families were told to record their activities and return the documentation at their next visit for follow-up discussions or potential rewards. See [Appendix II-J](#) for an example of an activity calendar submitted by one agency.
- ◆ Food demonstrations provided opportunities for WIC families to try new foods and recipes.

The following section of the report will describe the evaluation design and results of the implementation process for the *NY Fit WIC* initiative.

A. PROCESS EVALUATION OF *NY FIT WIC* INITIATIVE

Process evaluations help researchers tell the difference between implementation failure and program theory failure. They are especially important during the evaluation of multisite interventions with variations in program implementation.²³ *NY Fit WIC* was executed with little restrictions on how the program was to be adopted within each clinic setting. The diversity of the implementation at WIC local agencies could have had an impact on the positive and negative outcomes for staff as well as participants.²⁴ Furthermore, a process evaluation of the *NY Fit WIC* implementation could take advantage of variations in the program's implementation to assess the success of the different facets of the initiative.²⁵

EVALUATION OF AGENCY ACTIVITIES

The process evaluation of the *NY Fit WIC* initiative was conducted during the second year of the grant by NY State WIC program administrators, and utilized a follow-up telephone survey ([Appendix II-K](#)) as the primary data source. The survey was administered to all WIC local agencies coordinators six months to one year after their training to solicit information about the implementation of the initiative at their respective clinics. By answering open-ended questions, respondents provided information on the *NY Fit WIC*-related activities that were conducted at four levels (participants, staff, the agency environment, and surrounding communities) in their respective clinics. By definition, a *NY Fit WIC*-related activity had to promote either physical activity or nutrition behavior. A total of 101 surveys were collected. Each survey detailed the range of unique types of activities (n=116) implemented across all agencies. A unique activity was defined as the product of combining similarly worded activities from an original list of 528 reported activities.

Coding Activities

The coding plan was driven by the ecological model of health behavior theory, and took place in three steps.

Step 1: Grouping according to the level of implementation within an agency

The 528 activities were first grouped according to the level at which they were implemented within an agency (agency, staff, participant, and community). This process enabled the frequency of activities within each of the four levels to be calculated. The final product was a database of specific *NY Fit WIC* activities implemented by WIC agencies across the state.

Step 2: Activity coding exercise and inter-coder agreement

Using theories of behavior change,^{26, 27, 28} four behavioral change constructs (role modeling; skill building and self-efficacy; increased access, decreased barriers and social support; and knowledge) were established using the various activities reported. Eight independent coders, who were either state nutritionists or nutrition education coordinators, coded activities according to the four behavioral constructs. The coders were selected because they had participated in staff trainings, had administrative experience with the *NY Fit WIC* initiative, and were familiar with the concepts and goals of *NY Fit WIC*. Activities were classified into

individual behavioral constructs using a card sorting exercise, a modified Affinity Diagram method.^{29, 30} The results of one coder were eliminated because he or she placed more than one-third of the activities in two self-created categories. Therefore, the results of the coding exercise reflect responses from seven coders (Figure II-2).

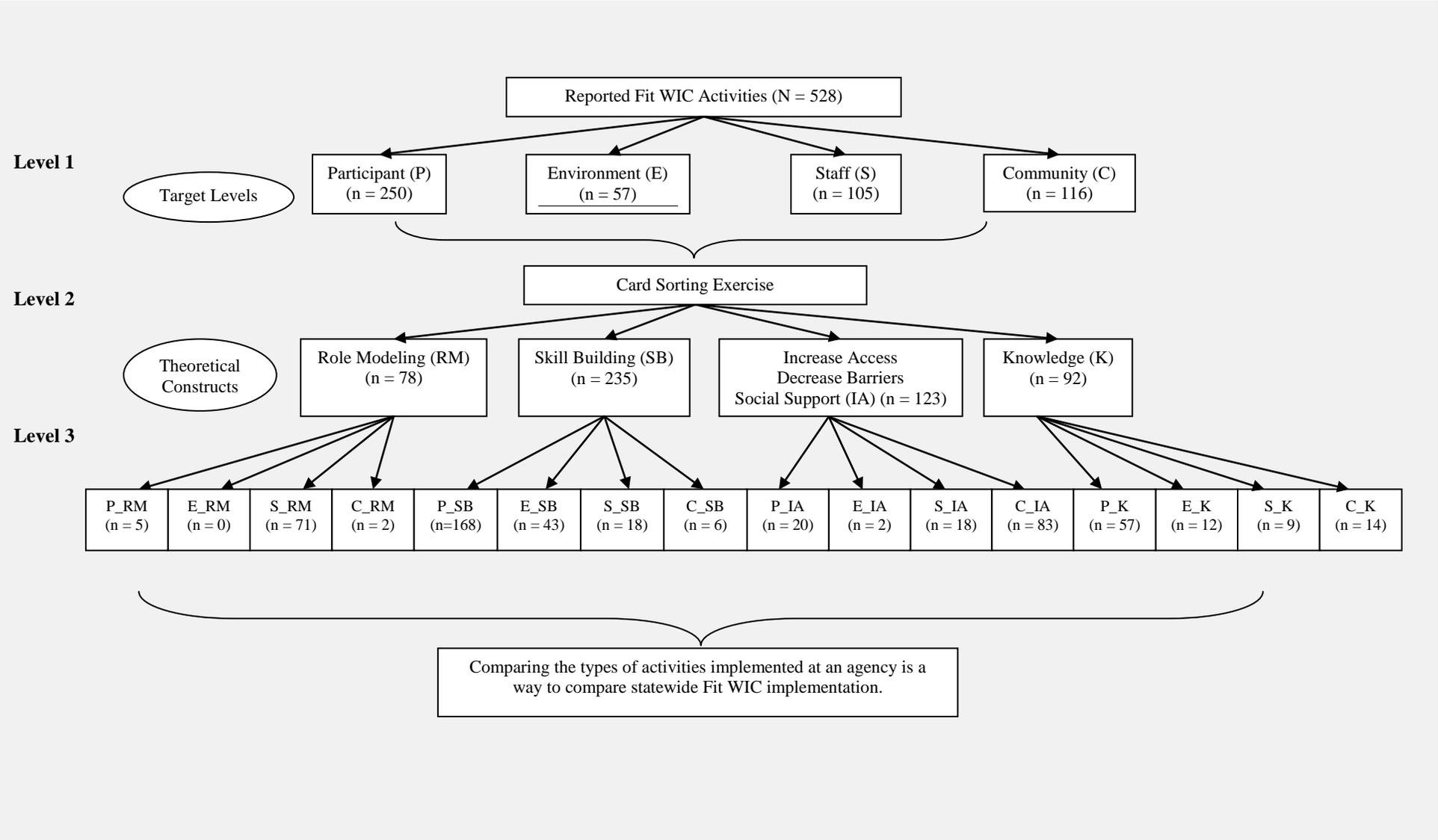
Inter-coder agreement was assessed by examining how often three of the seven coders agreed on each activity's category.²⁹ There is no universally established standard in defining inter-coder reliability.^{31 32} In this study, three of the seven coders had to agree upon the category in which an activity was placed before this activity could be assigned to a category. During the coding exercise, at least three coders agreed on 101 of the 116 unique types of *NY Fit WIC*-related activities.

Step 3: Data preparation

Activities from each agency were cross-tabulated by behavioral constructs and target levels, which resulted in a 16 cell table displaying total activities. These cells represent the 16 possible combinations of target level and theoretical construct variables. The information is displayed at the third level in Figure II-2.

Revitalizing WIC Nutrition Services: *NY Fit WIC*

Figure II-2: Theoretical framework for the *NY Fit WIC* process evaluation



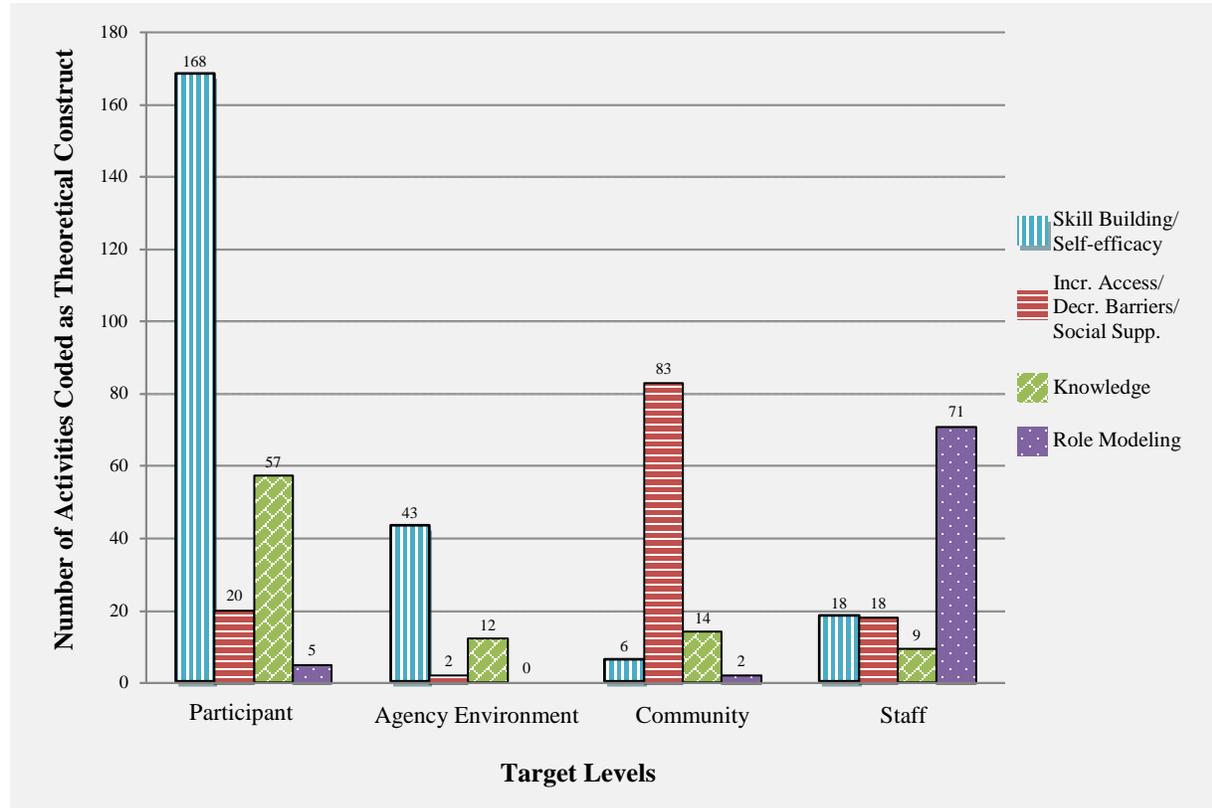
PROCESS EVALUATION RESULTS

A total of 528 *NY Fit WIC* activities were implemented across all agencies. The most common category of activities were those that targeted parents/caregivers and children (n=250), followed by those that targeted WIC staff (n = 116), and lastly, the surrounding community (n = 105). The least common category consisted of activities that targeted the agency environment (n=57).

In terms of behavioral constructs, “skill building/self-efficacy” activities were the most commonly implemented activities (n = 235), followed by activities related to “increasing access, decreasing barriers, or social support” (n = 123). “Role-modeling” activities were the least popular (n=78) (Figure II-3). A classification of activities into the two broad categories (physical activity and nutrition) showed that, overall, agencies tended to implement two physical activity-related activities for every one nutrition-related activity.

Among activities that targeted parents/caregivers and/or children (n=250), the majority (90%) were related to either “skill-building/self-efficacy” (n=168) or “knowledge” (n=57). Among those activities that targeted WIC staff, the majority (61%) were related to “role modeling.” Lastly, 79 percent of activities were related to “increasing access/decreasing barriers/social support among activities targeting the community” (Figure II-3).

Figure II-3: *NY Fit WIC* activities by theoretical construct and target level



INTERPRETATION OF THE PROCESS EVALUATION RESULTS

The large number of total activities implemented across all agencies (n=528) suggested a high level of implementation of *NY Fit WIC*-related activities. On average, over five activities were implemented at each local WIC agency. The total number of unique activities suggested that diverse activities were implemented as part of the *NY Fit WIC* initiative. The diversity of implemented activities confirmed that the *NY Fit WIC* initiative allowed local agencies to tailor the initiative to match their individual clinic needs and resources.

The observed distributions of activities in Figure II-3, related to the individual behavioral constructs within the four target levels (staff, participants, agency environment and the community) were consistent with our expectations under the conceptual analytical framework. Specifically, the high proportion of activities related to “skill-building/self-efficacy” and “knowledge” tailored to caregivers suggested that WIC participants were exposed to *NY Fit WIC* activities aimed at improving their understanding of and confidence in their ability to engage in healthy lifestyle behaviors. Similarly, the high proportion of “role modeling” activities performed by WIC staff was consistent with the idea that staff were expected to be positive role models of healthy lifestyle behaviors for WIC parents/caregiver and children.

Limitation

The activities reported by agencies, may not accurately represent what actually occurred in WIC local agencies. Each activity was counted in the analysis, as “1” or “0” - agencies did or did not conduct a specific activity. There was no information on the scope or reach of the activities (e.g., the number of individuals involved, the length of the activity, nor the number of times a specific activity was conducted). Therefore, showing a video once in a clinic’s waiting room was, in this study, equivalent in scope and reach to a set of five community-wide health fairs. This study, however, can be viewed as an indicator of the types of activities utilized by agencies, as well as, how different types of activities were combined.

Conclusion

The results of this process evaluation suggested that the activities implemented by WIC coordinators created a potential for observing meaningful staff and caregiver/participant outcomes as a result of the *NY Fit WIC* initiative. Findings from the *California Fit WIC* pilot intervention indicated that the *Fit WIC* initiative has the capacity to enhance healthy behaviors among WIC staff as well as improve their self-efficacy for counseling parents/caregivers on maintaining a healthy lifestyle and weight status.⁴ Since healthy habits begin at childhood and are greatly influenced by the family,³³ *NY Fit WIC* initiative activities that targeted “skill building/self-efficacy skills” among participants and “role modeling” among staff, could create positive influences on parents/caregivers, who in turn, serve as role models to promote healthy behaviors in their children.

The next section of the report presents the design, results, and discussion of the staff evaluation outcomes.

B. IMPACT ON STAFF OUTCOMES

The evaluation of WIC staff outcomes was conducted over a two-year period and used before and after comparisons to assess the effects of the *NY Fit WIC* training in WIC agencies. A staff survey was administered to all NYS WIC staff at two points in time about two years apart, October-November 2005 and October-December 2007. In October 2005, surveys were distributed statewide to 1,494 staff, about one-third of WIC staff had attended trainings at that time. The follow-up survey was distributed in October 2007 to 1,458 staff, and at that time, staff from all agencies had attended training. See [Appendix II-L](#) and [II-M](#) for both baseline and follow-up surveys, respectively.

For the purposes of studying the impact of *NY Fit WIC*, agencies were divided into two groups. Group One consisted of agencies that had received *NY Fit WIC* training prior to the 2005 baseline survey; Group Two consisted of agencies that had not received training by the time of the baseline survey. The analysis explored changes between surveys within both groups and compared the changes between the two groups.

Measures of Staff Outcomes

All measures were based on a literature review, findings from the Five-State Fit WIC Pilot project, and input from the evaluation panel. Four research questions from the WIC staff survey were analyzed for this report. The analysis of several questions (self-efficacy) was limited to Competent Professional Authorities (CPAs) and nutrition assistants, because they provided nutrition education to participants. The staff research questions and outcome measures were:

- Did *NY Fit WIC* training reduce barriers to adopting *NY Fit WIC* strategies among WIC staff by improving attitudes towards *NY Fit WIC* concepts? This question was measured by how staff felt about including *NY Fit WIC* concepts in their agencies.
- Did *NY Fit WIC* training increase job satisfaction among all WIC staff? This question was measured by asking staff about their level of satisfaction with their jobs.
- Did *NY Fit WIC* training increase self-efficacy among WIC educators? Self-efficacy was measured by asking staff how confident they felt in their abilities to educate and influence WIC parents/caregivers in achieving and maintaining healthy lifestyles, and to help WIC children achieve/maintain healthy weight. Staff were also asked how often and how comfortable they felt discussing physical activity with parents/caregivers.
- Did *NY Fit WIC* training result in healthier lifestyles among WIC staff? Staff were asked how often they engaged in at least ten minutes of moderate or greater physical activity.

Background variables included the demographic characteristics of the staff, how long they worked for WIC, and their highest education level attained. Additional questions measured whether staff believed they had enough resources to effectively educate their clients about adopting healthy lifestyles; and, if they held the belief that integrating messages about physical activity into nutrition counseling could help children achieve or maintain a healthy weight.

Data Collection

In 2005, 1,041 of 1,494 baseline surveys were received, a response rate of 70 percent. The follow-up survey yielded a 76 percent response rate, with 1,103 of 1,458 surveys returned. Though the surveys were offered to all staff members, the main interest was in the responses from staff who provided nutrition education to parents/caregivers: CPAs and nutrition assistants.

Analysis Plan

Outcomes for the staff surveys were classified as binary (yes/no); ordinal (ordered categories); or count data (e.g. number of activities per week). Response categories were re-coded to represent a scale from less desirable to more desirable; therefore, an increase in mean response represents an improvement. Job satisfaction was dichotomized as “satisfied or very satisfied” vs. “neutral, unsatisfied, or very unsatisfied.” The appropriate summary statistic (percentage, mean score, mean) was computed for each agency group and survey year. The change in the summary statistic from baseline to follow-up was subsequently computed for each group. Lastly, the difference in changes between the two groups was computed and referred to here as “group difference.” This was a “difference of differences” estimator, a standard one-number summary of comparison in before/after changes in means between two groups.³⁴ Standard errors were estimated by the SAS procedure SURVEYREG, which accounted for possible clustering by agency and for non-constant standard deviations within an agency.

STAFF SURVEY RESULTS

DESCRIPTIVE RESULTS

Table II-1 presents descriptive data for the 2005 baseline and 2007 follow-up staff survey responses by training group and year. Of the total surveys returned both years, 33 were excluded from the data set because their *NY Fit WIC* training status was unknown. This resulted in a total of 1,012 baseline surveys and 1,099 follow-up surveys analyzed.

WIC staff were predominately female (>90%), had a mean age of more than 40 years, and on average, were employed by WIC for approximately 10 years. Nearly two-thirds of staff who responded were CPAs or nutrition assistants and consequently directly involved in providing WIC nutrition services to participants. Most had a bachelors degree or higher, and were Non-Hispanic white. Two-thirds of staff worked in WIC clinics in the NYC metropolitan area, “Downstate.”

OUTCOME EVALUATION RESULTS

Impact of training on attitude towards *NY Fit WIC* strategies

Table II-2 represents data showing staff’s attitudes toward the *NY Fit WIC* initiative at the 2005 baseline and 2007 follow-up staff survey. Staff who were “enthusiastic” about implementing *NY Fit WIC* increased by 7.6 percentage points in the group trained at baseline and by 5.4 percentage points in the group trained after the baseline survey. Though the increase in reported enthusiasm among the earlier trained group was significant, the difference between the groups was not. Correspondingly, the percentage of staff who reported being “interested” in *NY Fit WIC* increased significantly in the group trained at baseline but not in the group trained after. There was no difference between the groups.

No more than three percent of staff reported that they were “indifferent” about implementing *NY Fit WIC* in groups that received training both before and after the baseline survey. There was, however, an increase in staff who reported indifference to *NY Fit WIC* among those trained after the baseline survey, which resulted in a significant group difference (2.1%) compared to the group trained earlier.

An interesting pattern emerged for the percentages of staff who thought that implementing *NY Fit WIC* would be “too much additional work for staff.” In the agencies that received training prior to baseline, this percentage decreased from 11.6 percent to 8.2 percent, albeit non-significantly. In the agencies that were trained after the baseline survey, the percentage increased from 7.2 percent to 12.4 percent, a significant 5.2 percentage point increase. Noticeably, the 2007 figure for this group (12.4%) was similar to the 2005 figure for the early training group (11.6%). The percentage of staff in agencies with *NY Fit WIC* training prior to the baseline survey who believed there was a “lack of resources” for implementing *NY Fit WIC* dropped from 18.5 percent to 7.4 percent, a significant change, the percentage did not change in agencies that were trained after the baseline survey was administered. Findings related to “too much work” and “lack of resources”, suggested that perceptions of excess work load and

inadequate resources required to implement *NY Fit WIC* abated after longer exposure to the initiative.

Table II-1: Descriptive data for the WIC staff surveys by agency training status and survey year

Demographic variables	Group 1: All trained by 2005		Group 2: All trained after 2005	
	2005 (n=362)	2007 (n=392)	2005 (n=650)	2007 (n=707)
Age (years; mean (SD))	44.3 (10.1)	43.2 (10.7)	42.2 (10.7)	43.2 (11.0)
Years worked at WIC (mean (SD))	10.1 (7.3)	10.8 (7.3)	9.5 (6.9)	10.6 (7.2)
	-----Percent-----			
Gender ¹ (female)	92.3	92.1	93.4	93.5
Position ¹				
Coordinator/Manager	11.7	9.1	9.9	8.7
CPA	40.8	47.1	43.7	44.6
Nutrition Assistant	16.3	15.8	10.2	9.2
Support Staff	25.1	22.5	29.0	29.9
Other	0.0	0.0	0.2	0.0
Race/Ethnicity ¹				
White	43.9	42.1	47.2	45.3
Black	16.6	12.5	19.4	19.0
Hispanic	24.9	25.5	19.7	20.7
Other	8.2	8.2	10.8	11.0
Education ¹				
HS graduate/GED/certification	14.1	16.6	14.8	13.9
Some College	15.8	14.5	13.9	13.9
Associate's degree	12.7	12.8	11.7	14.4
Bachelor's degree or higher	54.1	51.5	55.2	55.2
Other	0.0	0.5	0.2	0.7
Region ¹				
Upstate	30.1	32.1	37.8	34.9
Downstate	69.9	67.9	62.2	65.1

¹Percents will not add up to 100 due to missing survey response values

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Table II-2: Attitudes towards the *NY Fit WIC* initiative by agency training status and survey year

	Group 1: All Trained by 2005			Group 2: All Trained after 2005			Group Difference
	2005 Trained n=346	2007 Trained n=392	Change	2005 Untrained n=594	2007 Trained n=668	Change	Group 2 Change minus Group 1 Change
Attitude towards NY Fit WIC (Percent (SE))							
Enthusiastic	37.9 (4.6)	45.4 (3.0)	7.6*(2.7)	33.5 (2.8)	38.9 (2.9)	5.4 (2.8)	-2.1 (3.9)
Interested	64.7 (2.7)	56.1 (3.6)	-8.6* (2.4)	62.3 (2.2)	56.4 (2.4)	-5.9 (3.2)	2.8 (4.0)
Indifferent	2.0 (0.7)	1.3 (0.7)	-0.7 (1.0)	1.7 (0.5)	3.0 (0.7)	1.3 (1.0)	2.1* (1.0)
Too Much Additional Work for Staff	11.6 (1.9)	8.2 (0.4)	-3.4(2.5)	7.2 (1.3)	12.4 (1.4)	5.2* (1.5)	8.6* (2.9)
Lack of Resources	18.5 (2.7)	7.4 (1.6)	-11.1* (3.0)	14.0 (1.5)	12.9 (1.4)	-1.1 (1.7)	10.0* (3.5)

*p < 0.05

SE = Standard Error

Impact on WIC educators' self-efficacy regarding the promotion of healthy lifestyles habits

There were negligible changes in the mean scores between survey years in both groups, for all questions about WIC staff's confidence in their ability to educate and influence parents/caregivers (Table II-3). Generally, WIC staff reported relatively high levels of self-efficacy with respect to counseling parents/caregivers on healthy lifestyles and physical activity. On average, staff reported at follow-up that they were slightly more "comfortable discussing physical activity with parents/caregivers" compared to staff who responded to this question at baseline. The groups did not differ in the mean changes in self-efficacy scores between surveys.

Impact on job satisfaction and healthy lifestyles habits among all WIC staff

Job satisfaction levels were above 86 percent for both agencies that were trained at baseline and agencies that did not received training. Although the levels of job satisfaction increased in both agency groups, the increase in job satisfaction was significant only among those agencies trained following the baseline survey (3.0%). The group difference, on the other hand, was not statistically significant (Table II-4).

With regard to physical activity, there was a statistically significant increase of about 0.47 times per week in the agency group with earlier *NY Fit WIC* training and a smaller, non-significant, increase in agencies without training at the time of the baseline survey. The group difference was not statistically significant.

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Table II-3: Staff's self-efficacy (CPA and Nutrition Assistants only) according to agency training status and survey year

	Group 1: All Trained by 2005			Group 2: All Trained after 2005			Group Difference
	2005 Trained Mean (SE) (n=186)	2007 Trained Mean (SE) (n=204)	Change Mean (SE)	2005 Untrained Mean (SE) (n=326)	2007 Trained Mean (SE) (n=394)	Change Mean (SE)	Group 2 Change Minus Group 1 Change Mean (SE)
Confident in abilities to educate participants about healthy lifestyles**	3.41 (0.03)	3.43 (0.04)	0.02 (0.03)	3.38 (0.04)	3.37 (0.04)	-0.01 (0.04)	-0.03 (0.05)
Confident in abilities to influence participants to change to a healthier lifestyle**	3.09 (0.05)	3.13 (0.07)	0.03 (0.05)	3.04 (0.04)	3.08 (0.04)	0.04 (0.04)	0.01 (0.07)
Confident in abilities to educate participants on helping their child achieve or maintain a healthy weight**	3.34 (0.03)	3.36 (0.03)	0.02 (0.03)	3.25 (0.04)	3.30 (0.04)	0.05 (0.04)	0.03 (0.06)
Confident in abilities to influence participants on helping their child achieve or maintain a healthy weight**	3.12 (0.05)	3.15 (0.05)	0.03 (0.03)	3.05 (0.04)	3.07 (0.04)	0.01 (0.04)	-0.02 (0.05)
Comfort discussing physical activity with WIC parents/caregivers†	3.57 (0.04)	3.58 (0.05)	0.01 (0.05)	3.44 (0.04)	3.54 (0.03)	0.1* (0.04)	0.09 (0.06)

* p < 0.05

** Represents the mean score of caregiver's response on the following scale: 1=Strongly disagree, 2=Disagree, 3=Agree, 4=Strongly Agree

† Represents the mean score of caregiver's response on the following scale: 1=Very Uncomfortable, 2=Uncomfortable, 3=Comfortable, 4=Very Comfortable

SE = Standard Error

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Table II-4: Job satisfaction and healthy lifestyles habits according to agency training status and survey year

Group 1: All Trained by 2005			Group 2: All Trained after 2005			Group Difference Group 2 Change Minus Group 1 Change
2005 Trained (n=354)	2007 Trained (n=382)	Change	2005 Untrained (n=604)	2007 Trained (n=651)	Change	
Satisfied or Very Satisfied with Job (Percent (SE))						
86.4 (2.3)	86.7 (2.4)	0.2 (2.9)	86.4 (1.5)	89.4 (1.2)	3.0* (1.5)	2.8 (3.2)
Number of times per week did physical activity (Mean (SE))						
4.06 (0.14)	4.53(0.17)	0.47* (0.17)	4.29 (0.13)	4.47 (0.12)	0.18 (0.14)	-0.29 (0.22)

* p < 0.05

SE = Standard Error

INTERPRETATION OF STAFF RESULTS

Our evaluation logic model had posited that the *NY Fit WIC* initiative would impact the NYS WIC program as follows: in phase 1, the initiative was expected to lead to widespread adoption of *NY Fit WIC* concepts which would be reflected by the implementation of *NY Fit WIC*-related activities at trained agencies; In phase 2, the adoption of *NY Fit WIC* concepts would lead to improvements in several staff outcomes including job satisfaction, self-efficacy, and adoption of healthy lifestyles; in phase 3, the improved staff outcomes were expected to lead to improved parent/caregiver self-efficacy and parenting and lifestyle practices; finally, in phase four, the improved parent/caregiver outcomes were expected to positively influence physical activity and eating behavior among children enrolled in the NYS WIC program.

The evaluation of the staff outcomes through the administration of the baseline and follow-up staff surveys was aimed at assessing the effects of the *NY Fit WIC* initiative during the first two phases of the logic framework as described above. Accordingly, the results of this pre-test/post-test comparison suggested that among the agencies that were not trained at baseline (Group 2 Agencies), the *NY Fit WIC* initiative increased the proportion of WIC staff who were “satisfied with their job” as well as the proportion of staff who were “comfortable discussing physical activity with parents/caregivers” between baseline and follow-up, but did not lead to any improved lifestyle practices. In contrast, among agencies that were trained at baseline (Group 1 Agencies), the evaluation results suggested that the *NY Fit WIC* initiative improved the physical activity behavior (i.e., number of times per week staff engaged in physical activity) of WIC staff between baseline and follow-up.

The findings observed among the agencies that were untrained at baseline (Group 2 Agencies) supported the overall conceptual framework for the evaluation of staff outcomes as they suggested that improved adoption of *NY Fit WIC* concepts within WIC clinics improved the ability of staff to discuss physical activity with parents/caregivers. Physical activity increased only among staff who worked in agencies that were trained at the time of the baseline survey. This could be viewed as evidence that the longer agencies incorporated *NY Fit WIC* concepts into their services, the more likely staff were to adapt healthier lifestyles. It is worth noting that, improved physical activity behavior occurred despite a lack of improvements in this group in self-efficacy related to influencing participant behavior. This finding was contrary to the hypothesized sequence of potential intervention effects in our logic framework.

In the *California Fit WIC* pilot project, Fit WIC staff members were more likely than control site staff members to report that they were “comfortable” encouraging parents to do physical activities with their children.” *California Fit WIC* staff members were also more likely than control site staff members to say that they were physically active on a regular basis.³⁵ The *California Fit WIC* results were consistent with findings from the *NY Fit WIC* initiative, with regard to staff physical activity behavior and staff “comfort” in discussing physical activity with parents/caregivers. This finding was consistent with previous evidence that showed that instructors who practiced positive health behaviors they encouraged in their clients showed better counseling outcomes than instructors that did not practice positive health behaviors they encouraged.^{36, 37, 38} In addition to direct role modeling, it had been found that personal health

habits of counselors were associated with the perceived importance of these behaviors in others^{39, 40} and counseling self-efficacy.⁴¹

The goal of *NY Fit WIC* was to concentrate on healthy lifestyle habits, such as increasing physical activity and reducing TV viewing time, not on overweight and obesity. Since these behaviors are known to contribute to overweight and obesity, their adaptation may impact WIC children's weight status over time. It would not have been feasible to expect additional impact on staff's comfort and confidence in discussing overweight issues.

Limitation

A possible explanation for the difference seen between those trained in *NY Fit WIC* concepts at the time of the baseline survey and those agencies not trained was the non-random assignment of the design of the study. In fact, many of the WIC agencies that volunteered early for *NY Fit WIC* training were those that could be considered "model agencies." Therefore, it is equally, if not more likely that the positive outcomes seen among agencies trained at baseline are due to those agencies being more motivated than agencies that were trained following the baseline survey.

Conclusion

The results of this study showed that an initiative like *NY Fit WIC* can positively influence staff counseling behavior and their own lifestyle with regard to physical activity. Future interventions should incorporate new evidence pertaining specifically to effective strategies for improving staff comfort in talking to parents/caregivers about weight issues as well as improving their own weight status.

The next section of the report presents the design and results from the evaluation of participant outcomes.

C. IMPACT ON PARTICIPANT OUTCOMES

A Participant Survey was distributed to parents/caregivers of children enrolled at sampled WIC study sites at two points in time about two years apart. The surveys were designed and piloted in-house, printed in English, and translated into Spanish and Chinese. WIC regional offices and local agencies were notified by letter prior to the distribution of the surveys. Baseline surveys were circulated at local agency sites and were self-administered by parents/caregivers from September 20, 2006 to December 29, 2006 ([Appendix II-N](#)).

Follow-up Participant Surveys were administered at the same sites and used the same protocol as the baseline surveys. The survey was scheduled to be administered September/October 2007, but the timing coincided with the introduction of major changes to the WIC program. Notably, the introduction of checks for fruits and vegetables, available to women and 2-5 year old children, and changing low-fat milk as the default milk-option in WICSIS for children over the age of two. There were concerns that overlapping the survey administration with the implementation of the changes would overburden WIC staff. The follow-up survey was therefore administered during the months of April through May, 2008 ([Appendix II-O](#)). Institutional Review Board (IRB) approval was obtained for the baseline and follow-up Participant Surveys, sampling design, and data collection protocols.

Measures

Both surveys assessed demographics information, healthy lifestyle habits, nutrition knowledge and awareness, satisfaction with nutrition education, and self-efficacy. All measures were based on a literature review, findings from the Five-State Fit WIC Pilot project, and input from the evaluation panel. Four main research questions were analyzed for this report. The Participant Survey measured the following constructs:

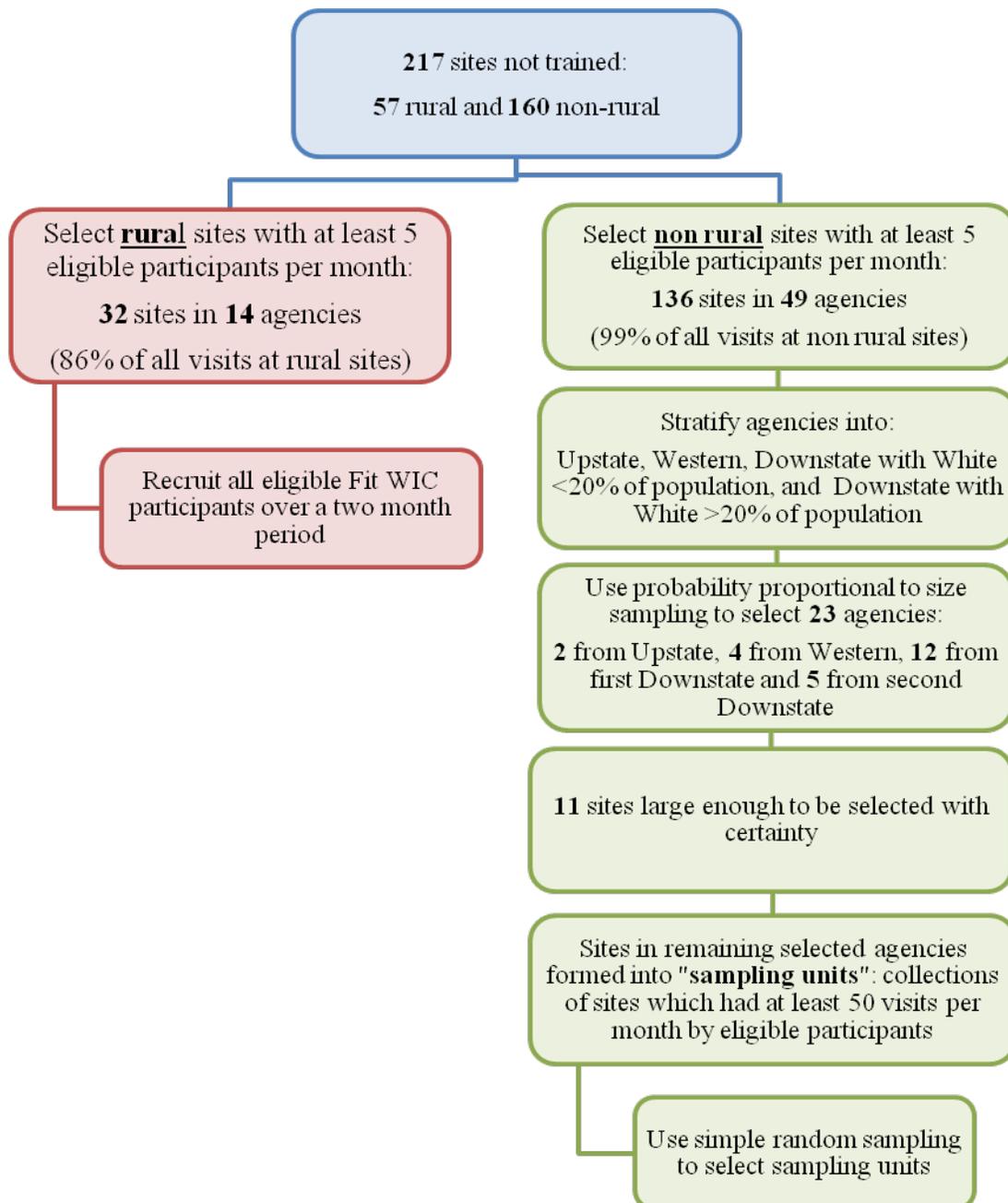
- Did *NY Fit WIC* training increase the level of satisfaction with WIC nutrition education among caregivers of 2-5 year old WIC children? This question was measured by asking caregiver's to rate their level of satisfaction with WIC nutrition education.
- Did *NY Fit WIC* training increase knowledge and self-efficacy among caregivers in establishing an active lifestyle within their families? This question asked caregivers about their level of confidence in promoting active lifestyles for their children.
- Did *NY Fit WIC* training result in an increase of healthy lifestyle behaviors among 2-5 year old WIC children and their caregivers? Caregivers were assessed on TV viewing, which was measured by the length of time children and their caregivers spent watching TV, and whether the child had a TV in his/her bedroom. Caregivers were also asked about physical activity, which was measured by the amount of time spent playing outdoors.
- Did the above listed effects of *NY Fit WIC* training on participant outcomes differ by participant characteristics (e.g., race/ethnicity and urban vs. rural residence)?

Sampling

The original *NY Fit WIC* evaluation sample frame consisted of agencies not yet trained in *NY Fit WIC* concepts at the time of the baseline survey. Based on the training schedule known in early 2006, it was expected that only half the agencies would have received training a year later. Thus, the original comparison was to be between a group of agencies trained at the follow-up survey and group not yet trained. Unexpectedly, the *NY Fit WIC* training schedule was advanced so that all agencies untrained in fall 2006 were trained by the fall of 2007. This meant that there could be no pure “untrained” group at the follow-up survey. To facilitate a comparison, the investigators used a state-funded survey that was not originally intended to be part of the *NY Fit WIC* evaluation. A smaller sample of agencies that had already been trained in *NY Fit WIC* were surveyed at the same time as the evaluation sample. Detailed descriptions of both sampling plans are presented in [Appendix II-P](#).

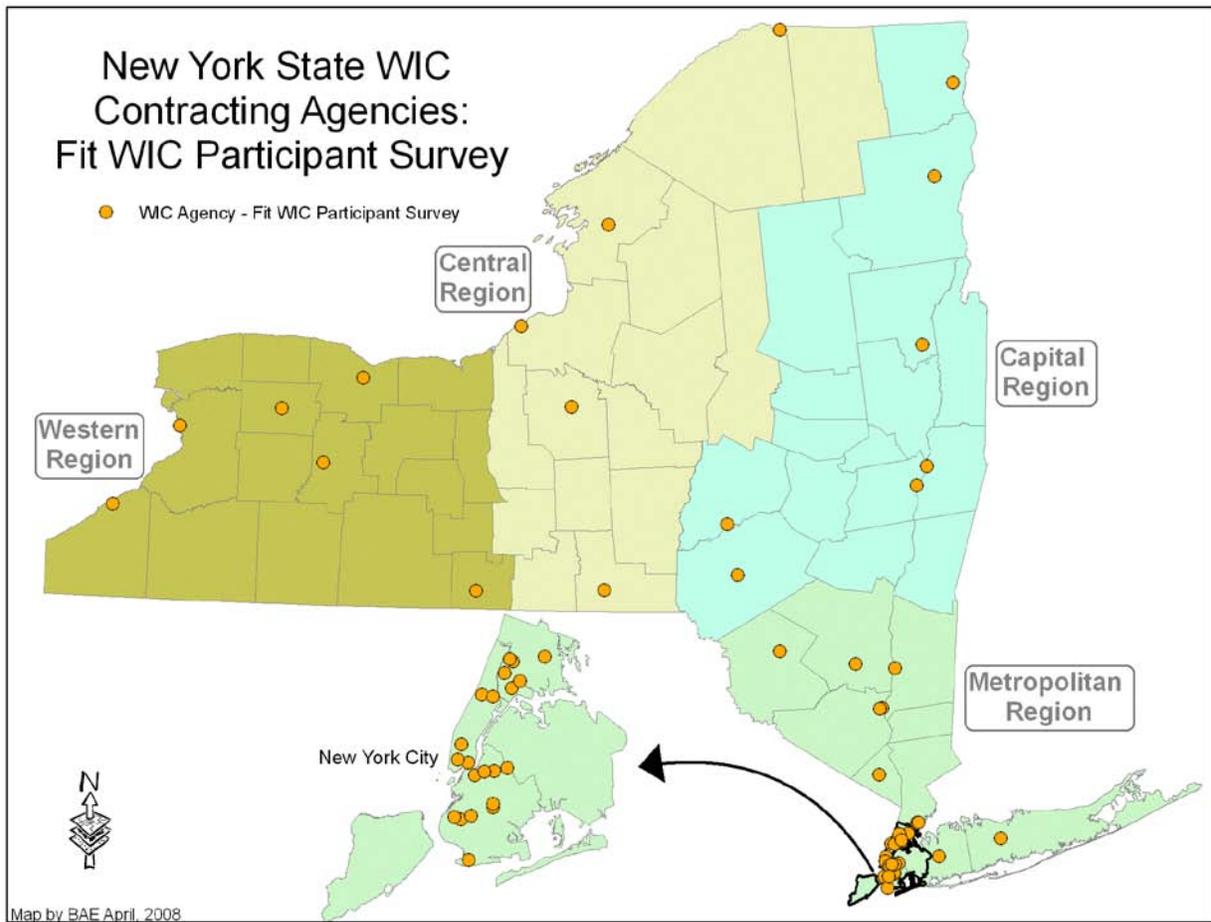
In the sample of agencies, the initial *NY Fit WIC* evaluation of untrained agencies was to include all rural sites with visits by five or more eligible children (2-5 years old) monthly. Classification of sites as urban and rural for the initial evaluation sample was done in two steps. First, the address of each site was geocoded using ArcGIS v9.1 (ESRI Redlands, CA). Once located, the WIC sites were classified as urban or rural according to the USDA’s year 2000 Rural-Urban Commuting Area (RUCA) Codes for NYS.⁴² Sites with RUCA primary codes one through six were classified as “urban” and sites with primary codes seven through ten were classified as “rural.” Note that “urban” sites could be located in rural-appearing areas if a substantial number of their residents commuted to metropolitan areas. Figure II-4 outlines the steps used to obtain the sample for the Participant Survey.

Figure II-4: Sampling frame for *NY Fit WIC* participant survey



The map below highlights the location of sampled agencies.

Figure II-5: Agencies sampled for *NY Fit WIC* participant surveys by region



Data Collection

Selected agencies returned 5,102 baseline surveys and 5,060 follow-up surveys. The return rates could not be calculated because agencies did not record how many parents/caregivers were offered the survey, nor how many refused.

Analysis Plan

The analysis plan reflects changes in the evaluation design of the *NY Fit WIC* initiative. The original plan was to compare responses from parents/caregivers at agencies before they had received *NY Fit WIC* training, to responses from parents/caregivers at those same agencies after they had been trained. The changes in parents’/caregivers’ responses would be compared to changes in responses from parents/caregivers at agencies untrained during the evaluation period (control group). The intended analysis structure is shown in Table II-5.

Due to early agency training, all agencies were trained before the administration of the follow-up survey. As a result, an alternate control group was composed. Agencies that were trained before the baseline survey served as one approximation of a control group, since their training status had not changed during the evaluation. The final analysis structure is also shown in Table II-5 below. The change in the summary statistic from 2006 to 2008 was computed for each group. The difference in changes between the two groups was computed and referred to here as “group difference.” This is a “difference of differences” estimator, a standard one-number summary of before/after means in two groups.³⁴ The results were analyzed overall, by geographic location, and by racial/ethnic difference both within as well as across categories.

Table II-5: Change in the analysis structure

Analysis Group	Intended Analysis Structure		Final Analysis Structure	
	Agency Training Status at Time of Survey		Agency Training Status at Time of Survey	
	Survey 1	Survey 2	Survey 1	Survey 2
Agency Group 1	No	No	Yes	Yes
Agency Group 2	No	Yes	No	Yes

As in the analysis of staff surveys, outcomes for the participants surveys were classified as binary (yes/no), ordinal (ordered categories), or count data (e.g., number of activities per week). Appropriate statistical analysis (Logistic, Ordinal, and Mean Multiple Regression) was then used for each classification. Response categories for several “agree/disagree” questions were re-coded to represent a scale from less desirable to more desirable; thus, an increase in mean response represented an improvement. Standard errors were estimated by the SAS procedure SURVEYREG, which accounted for possible clustering by agency and for non-constant standard deviations within an agency.

Data Cleaning

The preliminary analysis of the Participant Surveys identified major issues, including the mistranslation of parts of the Spanish language survey, and the presence of individual survey forms with many missing values. These issues were resolved as described in [Appendix II-Q](#).

PARTICIPANT SURVEY RESULTS

DESCRIPTIVE RESULTS

Sampled agencies returned 5,102 baseline and 5,060 follow-up questionnaires. After the exclusion of 228 surveys due to missing data described in Appendix II-Q, the analysis consisted of information from 5,009 baseline and 4,925 follow-up surveys.

Demographic characteristics of parents/caregivers who responded to the baseline (2006) and follow-up (2008) Participant Surveys are presented according to agency training status in Table II-6. The characteristics of the respondents were generally similar at baseline and at follow-up, except for geographic location, race/ethnicity, education, and language spoken at home. More surveys were received from respondents located in the metropolitan region at follow-up for both training groups, with more being returned from agencies trained after the baseline survey was administered. The proportion of respondents at agencies trained prior to the baseline survey who identified as non-Hispanic whites remained constant at follow-up, however, among those from agencies trained after the baseline surveys, the percentage who identified as non-Hispanic whites decreased from 41 percent to 32 percent. In contrast, respondents from agencies trained after the baseline survey who reported being Hispanics at follow-up increased from 30 percent to 36 percent.

The proportion of parents/caregivers in agencies trained before the baseline survey who reported being a high school graduate increased at follow-up (74.1%), however, the proportion of respondents at agencies trained after the baseline who reported being high school graduates remained constant at follow-up. Consistent with the changes observed in the proportion of Hispanic respondents, the proportions of respondents for whom “Spanish was the language spoken at home” increased at follow-up within both training groups.

Table II-6: Descriptive data for the WIC participants by agency training status and survey year

Demographic variables	Group 1: Agencies trained before 2006 survey		Group 2: Agencies trained after 2006 survey	
	2006 Baseline n=1632	2008 Follow-up n=1493	2006 Baseline n=3377	2008 Follow-up n=3432
Child's Age (Years; Mean (SD))	3.4 (0.86)	3.4 (0.86)	3.4 (0.85)	3.4 (0.85)
Caregiver's Age (Years; Mean (SD))	31.3 (8.4)	30.8 (7.1)	30.7 (8.4)	30.7 (7.3)
	-----Percent-----			
Metropolitan Region	61.8	63.3	56.6	67.7
Child's Gender (Male)	50.1	48.4	50.1	47.6
Caregiver's Race/Ethnicity ¹				
White non Hispanic	37.8	37.7	41.4	32.2
Black non Hispanic	17.5	18.5	18.7	21.0
Hispanic	32.8	35.3	30.2	36.4
Other non Hispanic	9.3	5.7	7.2	7.4
Education				
Some HS or less	28.9	21.8	27.9	25.4
HS graduate/GED/Some College or more	66.9	74.1	69.1	69.4
Language Spoken at Home ¹				
English	68.8	70.2	76.1	67.4
Spanish	22.7	24.3	16.9	24.4
Other	8.5	5.5	7.0	8.1

¹ Percentages do not add up to 100 because values for missing responses are not shown

OUTCOME EVALUATION RESULTS

Impact on Satisfaction, Perceptions of Nutrition Education, and Self-Efficacy among Caregivers

Table II-7 displays results of the comparison of parents'/caregivers' perceptions of WIC nutrition education at baseline and at follow-up among the agencies that were trained in *NY Fit WIC* concepts before and after the 2006 baseline survey. In both groups of agencies, satisfaction with nutrition education was generally high at both baseline and follow-up, with proportions of parents/caregivers who reported satisfaction with nutrition education ranging from 91 percent to 95 percent.

Among agencies trained at baseline, there was a small decrease between surveys (2.8 percentage points) in the proportion of parents/caregivers who reported that they had "learned something new from WIC staff about physical activity." In contrast, there was a small increase (3.7 percentage points) among parents/caregivers from agencies trained after the baseline survey. Neither change was statistically significant by itself, but the difference (6.6 percentage points) was statistically significant. There were no significant changes reported in either group about "learning something new about TV viewing."

Table II-7 also details outcome results related to parents'/caregivers' self-efficacy in their ability to help their child lead healthy lifestyles. There were no significant changes in either group with regard to parents'/caregivers' who reported feeling "comfortable talking to WIC staff about any health-related issues," or "confident in their ability to help their child reach/maintain a healthy body weight."

While there were no statistically significant differences with regard to parents'/caregivers' responses to the TV viewing and physical activity-related self-efficacy questions, on average, parents/caregivers reported agreeing or strongly agreeing that they were "confident in their ability to reduce their children's TV viewing" and that they were "confident in their ability to encourage their children to be physically active" at both baseline and follow-up and in both agencies with and without training at baseline.

Impact on Healthy Lifestyle Behaviors and Parenting Practices among Caregivers

Table II-8 compares baseline and follow-up responses of parents/caregivers to questions assessing their lifestyle habits and parenting practices. There were no statistically significant changes in either group with regard to the "amount of hours parents/caregivers spend watching TV daily," or the frequency of "watching TV during meals." However, among agencies that were trained after the baseline survey, the frequency of parents/caregivers who reported "limiting their child's TV viewing to less than two hours per day" significantly improved between baseline and follow-up.

In both agency groups, the proportions of parents/caregivers who reported "doing as much physical activity with their children as they would like" significantly increased between baseline and follow-up. However, in both groups, the proportions of parents/caregivers who reported that they "offer or encourage their children to reduce TV viewing time" and those who reported that they "offered or encouraged their children to be physically active" declined statistically at follow-up. Among agencies that were trained at baseline, the decrease was statistically significant in both instances.

Impact on Healthy Lifestyle Habits among WIC Children

The average "amount of time children spend watching TV daily" decreased in both agency groups between baseline and follow-up. However, but the pretest-posttest differences were only statistical significant among the agencies that were trained after the baseline survey (Table II-9). There were no significant changes in either group in the proportion that reported that there was a "TV in the child's bedroom." Both groups showed statistically significant increases in the "amount of time children spend playing outdoors daily" between baseline and follow-up. The greatest improvement occurred among children who were served by agencies that had been trained at baseline, because they played on average of 23 minutes more outdoors at follow-up than at baseline. For the group that had not received training at the administration of the baseline survey, the increase was approximately 14 minutes. However, the difference between these two groups was not significant.

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Table II-7: Impact on caregivers' satisfaction, perception of nutrition education and self-efficacy towards healthy lifestyle behaviors

	Group 1: Agencies trained before 2006 survey			Group 2: Agencies trained after 2006 survey			Between-Group Difference
	2006 Trained (n= 1,632)	2008 Trained (n= 1,493)	Posttest-Pretest Difference	2006 Untrained (n= 3,377)	2008 Trained (n= 3,432)	Posttest-Pretest Difference	
Satisfied or Very Satisfied with Nutrition Education (Percent (SE))	90.8 (1.2)	91.9 (1.0)	1.1 (1.2)	93.1 (0.7)	94.6 (0.7)	1.6* (0.4)	0.5 (1.3)
Staff Discussed the Following with Caregiver: (Percent (SE))							
TV Viewing	60.0 (4.3)	62.1 (4.7)	2.1 (1.6)	63.3 (2.8)	64.7 (2.9)	1.4 (1.9)	-0.7 (2.5)
Physical Activity	70.2 (3.6)	72.0 (3.6)	1.8 (1.6)	73.9 (2.1)	76.3 (2.1)	2.4 (1.6)	0.6 (2.2)
Caregiver Learned Something New about: (Percent (SE))							
TV Viewing	44.2 (2.8)	43.3 (2.1)	-0.9 (1.9)	45.8 (2.3)	47.1 (2.7)	1.3 (2.3)	2.2 (3.0)
Physical Activity	51.8 (3.0)	49.0 (1.9)	-2.8 (2.1)	52.0 (2.2)	55.8 (2.5)	3.7 (1.9)	6.6* (2.8)
Comfort Talking to WIC Staff about any Health-related Issues (Mean (SE))†	4.36 (0.03)	4.40 (0.02)	0.04 (0.04)	4.39 (0.03)	4.42 (0.02)	0.03 (0.02)	-0.01 (0.04)
Confident in Ability to Help Child Reach and/or Maintain Healthy Body Weight (Mean (SE))†	4.51 (0.04)	4.54 (0.02)	0.03 (0.04)	4.52 (0.02)	4.52 (0.02)	-0.00 (0.02)	-0.03 (0.05)
Confident in Ability to: (Mean (SE))†							
Reduce Child TV Viewing Time	4.16 (0.03)	4.09 (0.02)	-0.07 (0.04)	4.12 (0.02)	4.11 (0.02)	-0.02 (0.02)	0.05 (0.04)
Encourage Child to be Physically Active	4.47 (0.04)	4.54 (0.03)	0.07 (0.04)	4.50 (0.02)	4.47 (0.03)	-0.03 (0.03)	-0.10* (0.05)

* p<0.05

† the mean score of parent's/caregivers' response on the following scale: 1= Strongly Disagree, 2= Disagree, 3= No Opinion, 4= Agree, 5= Strongly Agree

Revitalizing WIC Nutrition Services: *NY Fit WIC*

Table II-8: Impact on healthy lifestyle behaviors and parenting practices among caregivers

	Group 1: Agencies trained before 2006 survey			Group 2: Agencies trained after 2006 survey			Between-Group Difference
	Trained 2006 (n= 1,632)	Trained 2008 (n= 1,493)	Posttest- Pretest Difference	Untrained 2006 (n= 3,377)	Trained 2008 (n= 3,432)	Posttest- Pretest Difference	
Time Caregiver Spends Watching TV Daily (Hours, Mean (SE))	2.34 (0.08)	2.29 (0.08)	-0.05 (0.10)	2.44 (0.08)	2.37 (0.08)	-0.08 (0.05)	-0.02 (0.11)
Caregiver Watches TV During Meals (Mean (SE))†	3.69 (0.08)	3.68 (0.08)	-0.02 (0.05)	3.72 (0.06)	3.72 (0.05)	0.00 (0.04)	0.02 (0.06)
Caregiver Limit Child’s TV Viewing to Less Than Two Hours/day (Mean (SE))††	3.6 (0.04)	3.5 (0.05)	-0.01(0.06)	3.6 (0.02)	3.6 (0.04)	0.08*(0.03)	0.09(0.07)
Caregiver does as much PA with child as he/ she would like (Percent (SE))	54.1 (1.5)	62.0 (1.6)	7.9* (2.2)	58.2 (1.3)	64.5 (1.1)	6.4* (1.2)	-1.5 (2.6)
Caregiver Offers or Encourages Child to: (Percent (SE))							
Reduce TV Viewing Time	73.7 (3.7)	68.5 (2.6)	-5.2 (3.0)	75.2 (2.2)	69.4 (2.5)	-5.8* (1.6)	-0.6 (3.4)
Encourage Child to be Physically Active	84.5 (2.8)	82.2 (2.2)	-2.3 (2.3)	86.4 (1.6)	83.0 (1.4)	-3.5* (1.5)	-1.1 (2.8)

* p<0.05

† 1=Always, 2= Usually, 3=Sometimes, 4= Rarely, 5=Never

†† 1=Never, 2=Rarely, 3=Sometimes, 4=Usually, 5=Always

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Table II-9: Impact on healthy lifestyle habits among WIC children

	Group 1: Agencies trained before 2006 survey			Group 2: Agencies trained after 2006 survey			Between-Group Difference
	Trained 2006 (n= 1,632)	Trained 2008 (n= 1,493)	Posttest-Pretest Difference	Untrained 2006 (n=3,377)	Trained 2008 (n=3,432)	Posttest-Pretest Difference	
Time Child Spends Watching TV Daily (Hours, Mean (SE))†	2.18 (0.09)	2.09 (0.06)	-0.09 (0.08)	2.17 (0.06)	2.06 (0.06)	-0.11* (0.04)	-0.01 (0.09)
Child Has TV in His/ Her Bedroom (Percent, (SE))	39.6 (2.5)	40.1 (2.1)	0.5 (1.7)	38.8 (2.1)	37.8 (1.9)	-0.9 (1.2)	-1.4 (2.1)
Time Child Spends Playing Outdoors Daily (Minutes, Mean (SE))†	61.24 (3.34)	83.88 (5.79)	22.64* (3.79)	66.10 (2.32)	80.10 (3.43)	14.00* (1.94)	-8.64 (4.26)

*p<0.05

† represents the mean score of parent's/caregivers' response on a scale of 1-5

Differences in Outcomes by Urban/Rural Classification of Agencies

Statistically significant baseline (2006 survey) and follow-up (2008 survey) differences were observed in rural and urban groups for the participant research questions. This section is limited to presenting only statistically significant results for rural-urban differences by training group.

Impact on Satisfaction, Perception of Nutrition Education and Self-Efficacy among Caregivers by Urban/Rural Classification of Agencies

Parents/caregivers in both rural and urban agencies were highly satisfied with WIC nutrition education; the mean proportion of satisfied participants in all training groups exceeded 90 percent (Table II-10). Nonetheless, statistically significant increases in satisfaction were not observed in urban and rural agencies. Differences between rural and urban agencies also were not significant.

For urban agencies without *NY Fit WIC* training prior to the baseline survey, 58 percent of respondents reported that they “learned something new about physical activity,” a significant five percent increase from baseline. The urban group with *NY Fit WIC* training prior to the first survey exhibited a non-significant two percent decrease in the proportion of respondents who reported that they “learned something new from WIC staff about physical activity.” Among rural agencies, there were significant decreases observed among both training groups. However, the larger decrease was detected among agencies that received *NY Fit WIC* training prior to the baseline survey (17.4 vs. 4.0 percentage points). Overall, within both training groups, statistical significant changes were observed (15.2 and 8.8 percentage points); with parents/caregivers from rural areas being less likely to report that they “learned something new about physical activity.”

Parents/caregivers in rural agencies without *NY Fit WIC* training prior to the baseline survey exhibited a significant increase (albeit 0.04 points) in their response with regards to being “confident in their ability to encourage their child to be more physically active.” The difference between urban and rural regions was not statistically significant in either training groups.

Impact on Healthy Lifestyle Behaviors and Parenting Practices among Caregivers by Urban/Rural Classification of Agencies

Among agencies that had not yet received *NY Fit WIC* training at the time of the baseline survey, there were slight increases in the mean response of those who reported “limiting their child’s TV viewing to less than two hours daily” (Table II-11). Statistical significance was observed among parents/caregivers who resided in rural areas, and the difference between responses from these parents/caregivers was also statistically significant when compared to responses from parents/caregivers in urban locations. Parents/caregivers in rural areas were more likely (0.18) report that they sometimes “limit their child’s TV viewing to less than two hours daily” compared to urban parents/caregivers.

There was an increase in the number of parents/caregivers, in both geographic locations as well as training agencies, who reported “doing as much physical activity with their child as they would like.” Within agencies that were not trained at the time of the baseline survey,

statistically significant increases were observed from parents/caregivers in both geographic locations. However, statistically significant increases were only observed among parents/caregivers in urban agencies that were trained at the time of the baseline survey. No statistical significance was observed between responses from rural and urban parents/caregivers.

Parents/caregivers in agencies that did not receive *NY Fit WIC* training at the time of the baseline survey showed a significant decrease in the proportions who “encouraged their child to reduce his/her TV viewing time” at rural (6 percentage points) and urban agencies (5 percentage points). Furthermore, among agencies that were not trained at the time of the baseline survey, there was a significant decrease (4 percentage points) in parents/caregivers at rural sites who reported that “encouraging their child to be physically active.”

Impact on Healthy Lifestyle Behaviors among WIC Children by Urban/Rural Classification of Agencies

There was a significant decrease (0.23) in the amount of hours that parents/caregivers at rural agencies that were not trained at the time of the baseline survey reported regarding the amount of “time (in hours) their child spend watching TV” on an average day. There also was a significant regional difference observed in this training group, with parents/caregivers in rural areas more likely to report that their child watch less hours of TV daily, compared to parents/caregivers in urban areas (Table II-12).

For agencies located in an urban setting who did not receive *NY Fit WIC* training prior to the first survey, there was a significant increase of five percentage points between the pre- and post-survey in the percent of parents/caregivers who said that their child “watched less than two hours of TV” on an average day. Within the same training group, a significant increase of 12 percentage points was observed among parents/caregivers at rural sites who said that their child “watched less than two hours of TV” daily. Statistically significant regional differences were observed for this training group, with parents from rural sites being more likely (7.7 percentage points) to report that their child “watched less than two hours of TV” daily. While the percentage of parents/caregivers who reported that their child “watched less than two hours of TV” on an average day, at agencies that were trained at the time of the baseline survey increased from pre- to post-survey, only responses from parents/caregivers in rural areas were statistically significant (9.6 percentage points).

Although the pre-test and post-test surveys were administered during the autumn and spring, respectively, both urban and rural exhibit statistically significant changes in the total amount of time (calculated in minutes) “spent playing outdoors on a typical day.” In both training groups in the urban agencies, the mean change from pre- to post-test survey significantly increased. For the urban agencies who received *NY Fit WIC* training prior to the first survey, the increase was approximately 21 minutes while the increase in the urban agencies who did not receive training prior to the first survey was just over 12 minutes. More dramatic statistically significant increases are observed in both training groups in the rural agencies. For rural agencies without training prior to the first survey, the increase in time was over 31 minutes; for the rural agencies with training, the increase was nearly 44 minutes. Both training groups exhibited inter-regional significant increases, with parents/caregivers in rural areas were more

likely to report that their “child spent more time playing outdoors” compared to urban parents/caregivers.

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Table II-10: Caregivers' satisfaction, perceptions and self-efficacy: by urban/rural classification of agencies

	Group 1: Agencies trained before 2006 survey				Group 2: Agencies trained after 2006 survey			
	Trained 2006 (n=1,632)	Trained 2008 (n=1,493)	Posttest- Pretest Difference	Between- Region Difference	Untrained 2006 (n=3,377)	Trained 2008 (n=3,432)	Posttest- Pretest Difference	Between- Region Difference
Satisfied with WIC Nutrition Education (Percent (SE))								
Urban	90.8 (1.3)	91.8 (1.1)	1.1 (1.3)	0.3 (4.5)	92.9 (0.9)	94.4 (0.8)	1.5 (0.5)	-0.8 (0.9)
Rural	92.1 (2.7)	92.9 (1.3)	0.8 (4.0)		93.6 (0.7)	95.9 (0.8)	2.3 (0.7)	
Caregiver Learned Something New about Physical Activity (Percent (SE))								
Urban	51.4 (3.1)	49.2 (1.9)	-2.1 (2.1)	15.2*(5.8)	53.1 (2.8)	57.9 (2.8)	4.9* (2.3)	8.8* (2.6)
Rural	61.2 (3.8)	43.8 (1.6)	-17.4* (5.4)		49.0 (2.2)	45.0 (2.6)	-4.0* (1.6)	
Confident in Ability to Encourage Child to Reduce TV Viewing (Mean (SE))†								
Urban	4.16 (0.04)	4.09 (0.02)	-0.07 (0.04)	-0.14 (0.07)	4.12 (0.03)	4.10 (0.03)	-0.02 (0.03)	-0.02 (0.05)
Rural	4.02 (0.04)	4.08 (0.02)	0.07 (0.05)		4.13 (0.02)	4.13 (0.04)	-0.00 (0.05)	
Confident in Ability to Encourage Child to be Physically Active (Mean (SE))†								
Urban	4.47 (0.04)	4.54 (0.03)	0.07 (0.04)	0.01 (0.08)	4.47 (0.03)	4.44 (0.03)	-0.03 (0.04)	-0.07 (0.04)
Rural	4.55 (0.04)	4.62 (0.04)	0.06 (0.08)		4.58 (0.02)	4.62 (0.02)	0.04* (0.02)	

*p <0.05

† represents the mean score of parents'/caregivers' response on the following scale: 1= Strongly Disagree, 2= Disagree, 3= No Opinion, 4= Agree, 5= Strongly Agree

Revitalizing WIC Nutrition Services: *NY Fit WIC*

Table II-11: Healthy lifestyle behaviors and practices of caregivers: by urban/rural classification of agencies

		Group 1: Agencies trained before 2006 survey				Group 2: Agencies trained after 2006 survey			
		Trained 2006	Trained 2008	Posttest- Pretest Difference	Between- Region Difference	Untrained 2006	Trained 2008	Posttest- Pretest Difference	Between- Region Difference
		(n=1,632)	(n=1,493)			(n=3,377)	(n=3,432)		
Caregiver Limits Child's TV Viewing To Less Than Two Hours Daily (Mean (SE))†									
	Urban	3.55 (0.05)	3.54 (0.05)	-0.01 (0.06)	-0.00 (0.06)	3.55 (0.03)	3.60 (0.04)	0.05 (0.04)	-0.18* (0.07)
	Rural	3.58 (0.02)	3.57 (0.02)	-0.01 (0.00)		3.57 (0.04)	3.81 (0.05)	0.24* (0.05)	
Caregiver Does as Much Physical Activity with Child as he/she Would Like (Percent (SE))									
	Urban	54.4 (1.5)	62.2 (1.7)	7.8* (2.4)	-2.0 (6.1)	59.1 (1.6)	64.5 (1.2)	5.4* (1.4)	-3.8 (2.8)
	Rural	48.5 (1.6)	58.3 (3.5)	9.8 (5.1)		55.7 (1.2)	64.9 (2.3)	9.2* (2.3)	
Caregivers Offers or Encourages Child to: (Percent (SE))									
Reduce TV Viewing Time	Urban	73.3 (3.7)	68.0 (2.7)	-5.3 (3.1)	-1.2 (7.5)	72.9 (2.6)	68.2 (2.8)	-4.7* (1.9)	1.6 (2.8)
	Rural	83.6 (3.5)	79.5 (3.3)	-4.1(6.8)		81.7 (1.6)	75.3 (3.4)	-6.4* (2.1)	
Encourage Child to be Physically Active	Urban	84.3 (2.9)	81.8 (2.2)	-2.5 (2.4)	-3.5 (3.7)	84.2 (1.9)	81.8 (1.5)	-2.5 (1.9)	1.5 (2.6)
	Rural	88.1 (1.9)	89.0 (1.4)	1.0 (3.3)		92.6 (0.8)	88.7 (2.0)	-3.9* (1.8)	

*p<0.05

† 1= Never, 2= Rarely, 3=Sometimes, 4= Usually, 5= Always

Revitalizing WIC Nutrition Services: *NY Fit WIC*

Table II-12: Healthy lifestyle behaviors of WIC children: by urban/rural classification of agencies

	Group 1: Agencies trained before 2006 survey				Group 2: Agencies trained after 2006 survey			
	Trained 2006 (n=1,632)	Trained 2008 (n=1,493)	Posttest- Pretest Difference	Between- Region Difference	Untrained 2006 (n=3,377)	Trained 2008 (n=3,432)	Posttest- Pretest Difference	Between- Region Difference
Time Child Spends Watching TV Daily (Hours, Mean (SE))								
Urban	2.18 (0.10)	2.09 (0.06)	-0.09 (0.09)	0.09 (0.31)	2.20 (0.08)	2.12 (0.07)	-0.08 (0.05)	0.23* (0.07)
Rural	2.18 (0.07)	2.00 (0.22)	-0.18 (0.29)		2.07 (0.05)	1.76 (0.05)	-0.31* (0.05)	
Child Watches Less Than Two Hours of TV Daily (Percent (SE))								
Urban	38.7 (3.8)	41.7 (2.0)	3.0 (2.8)	-6.6 (3.7)	37.9 (2.8)	42.4 (2.5)	4.5* (1.6)	-7.7* (2.7)
Rural	32.8 (0.5)	42.5 (3.8)	9.6* (3.2)		37.4 (1.6)	49.6 (2.4)	12.2* (2.1)	
Total Time Child Spends Playing Outdoors (Minutes, Mean (SE))								
Urban	60.8 (3.35)	82.2 (5.47)	21.4* (3.61)	-22.0* (10.16)	62.2 (2.45)	74.3 (2.81)	12.1* (1.91)	-19.2* (2.85)
Rural	71.5 (2.11)	115.0 (10.81)	43.5* (8.70)		77.4 (1.70)	108.8 (2.98)	31.3* (2.15)	

*p<0.05

Differences in Outcomes by Race/Ethnicity

Statistically significant baseline (2006 survey) and follow-up (2008 survey) differences were observed in racial/ethnic groups for the participant research questions.

Impact on Caregivers' Satisfaction with Nutrition Education and Self-Efficacy by Race/Ethnicity

Parents/caregivers in all racial/ethnic groups had a slight increase, most non-significant, in satisfaction with WIC nutrition education. (Table II-13). Statistically significant increases were only observed among the “Other” racial/ethnic category for those agencies that were trained in *NY Fit WIC* following the baseline survey. There was a statistically significant decrease in the percentage of African Americans at agencies that received training before the baseline survey, who reported being satisfied with nutrition education (-4.8 percentage points). Consequently, the pre-post decline in satisfaction among African Americans was significantly different from the pre-post increase in satisfaction among whites.

Only one racial/ethnic group exhibited a significant change regarding “confidence in their ability to limit their child’s TV viewing to two hours daily.” African Americans in agencies that received training before the baseline survey showed a significant decrease in their self-efficacy to limit their child’s TV viewing to less than two hours daily, and consequently the pre-post decline among African Americans was significantly different from the pre-post increase observed among whites.

Most parents/caregivers in each racial/ethnic group exhibited a small non-significant increase in their “confidence in their ability to encourage their child to be more physically active.” There was a significant increase among white parents/caregivers from agencies that were trained prior to the baseline survey. There were also significant increases for both training groups among the “Other” category.

Among agencies that were trained at baseline, the pre-post decline in African American parents’/caregivers’ “confidence in their ability to encourage their child to be physically active” was significantly different from the pre-post increase seen among white parents/caregivers. On the other hand, pre-post increases observed among “Other” parents/caregivers at both agencies that received training before and after the baseline survey were significantly better than the pre-post increase seen among white parents/caregivers.

Impact on Caregivers' Parenting Practices by Race/Ethnicity

All groups exhibited a decrease in the percentage of parents/caregivers who reported “encouraging their children to reduce TV viewing time” (Table II-14). African Americans saw a significant decrease (-10.5 and -4.8 percentage points) in both agencies that received training before and after the baseline survey, respectively. Whites who attended agencies that had not received *NY Fit WIC* training at the time of the baseline survey also experienced a significant decrease (-11.8 percentage points). When changes seen among white respondents were compared to changes within other racial/ethnic categories, only Hispanic parents/caregivers fared

significantly better than white parents/caregivers, and only among those agencies that were trained after the baseline survey.

All races/ethnicities in agencies that were trained before the baseline survey, except for those classified as “Other” demonstrated significant increases in their response regarding to “doing as many physical activities as they would like with their child.” Likewise, among the races in agencies that were trained following the administration of the baseline survey, all race/ethnic categories, but African Americans, experienced a significant increase in performing as “many physical activities with their child as they would like.” The pre-post decline among African Americans was significantly different from the pre-post increase seen among white parents/caregivers.

Impact on Healthy Lifestyle Behaviors among WIC Children by Race/Ethnicity

At follow-up, there were no significant increases in the percentage of parents/caregivers at agencies that received training prior to the baseline survey who reported that their “child watched less than two hours of TV daily” (Table II-15). Among parents/caregivers at agencies that were trained following the baseline survey, there was a ten percent increase in the percentage of white caregivers, a seven percent increase in the percentage of African American parents/caregivers, and a nine percent increase in the percentage of parents/caregivers in the “Other” race/ethnic category who reported that their “child watched less than two hours of TV daily” at follow-up. Additionally, the pre-post increase among white parents/caregivers was significantly more than the pre-post increase observed among Hispanic parents/caregivers who reported that their “child watched less than two hours of TV daily.”

All but one racial/ethnic category exhibited statistically significant increases in the total amount of time (calculated in minutes) spent playing outdoors on a typical day. In both training groups, the mean change from pre- to post-test surveys significantly increased except among the “Other” category. Among agencies trained prior to the baseline survey, the statistically significant changes ranged from about 15 minutes among Hispanics, 16 among African Americans, to 35 minutes among whites. Meanwhile, among agencies that received training after the baseline survey, the statistically significant changes were approximately 13 minutes among Hispanics, 14 among African Americans, and about 22 minutes among whites. Additionally, in both training groups, the pre-post increases reported by white parents/caregivers were significantly better than the pre-post increases reported by all other race/ethnic categories.

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Table II-13: Satisfaction with nutrition education and self-efficacy: changes within race/ethnicity over time, and difference of differences between specific race/ethnicity group and reference group (White)

	Group 1: Agencies trained before 2006 survey				Group 2: Agencies trained after 2006 survey			
	Trained 2006 (n=1,632)	Trained 2008 (n=1,493)	Posttest- Pretest Difference within Race/ Ethnicity	Difference of Difference: White Compared to Race/Ethnic Group	Untrained 2006 (n=3,377)	Trained 2008 (n=3,432)	Posttest- Pretest Difference within Race/ Ethnicity	Difference of Difference: White Compared to Race/Ethnic Group
Satisfied with WIC Nutrition Education (Percent (SE))								
White	90.7 (1.2)	93.2 (1.0)	2.5 (1.2)	(ref)	93.5 (1.0)	94.0 (0.9)	0.5 (0.8)	(ref)
Black	95.3 (0.9)	90.5 (2.0)	-4.8* (2.1)	7.3* (2.8)	92.9 (1.1)	93.9 (0.9)	1.0 (1.4)	-0.5 (1.6)
Hispanic	91.7 (2.0)	92.7 (1.6)	0.9 (2.4)	1.6 (2.6)	93.7 (1.3)	95.9 (0.6)	2.1 (1.4)	-1.6 (1.7)
Other	80.6 (4.3)	82.9 (3.5)	2.4 (5.8)	0.1 (6.3)	89.7 (3.1)	93.8 (3.0)	4.2* (1.8)	-3.7 (2.1)
Confident in Ability to Limit Child's TV Viewing to Less Than 2 Hours Daily (Mean (SE))†								
White	4.12 (0.04)	4.15(0.02)	0.03	(ref)	4.13(0.03)	4.13(0.03)	-0.00	(ref)
Black	4.19 (0.06)	4.02(0.04)	-0.18*	0.21*	4.09(0.03)	4.03(0.04)	-0.06	0.05
Hispanic	4.21(0.03)	4.09(0.06)	-0.13	0.16	4.20 (0.04)	4.14(0.03)	-0.05	0.05
Other	3.99(0.08)	4.08(0.10)	0.09	-0.06	3.86(0.09)	4.04(0.06)	0.18	-0.19
Confident in Ability to Encourage Child to be Physically Active (Mean (SE))†								
White	4.51(0.04)	4.62(0.03)	0.11*	(ref)	4.54(0.02)	4.55(0.03)	0.01	(ref)
Black	4.54(0.04)	4.51(0.03)	-0.03	0.14*	4.53(0.02)	4.48(0.04)	-0.05	0.05
Hispanic	4.48(0.05)	4.50(0.04)	0.03	0.08	4.49(0.02)	4.44(0.04)	-0.05	0.06
Other	4.15(0.09)	4.38(0.10)	0.23*	-0.12	4.21(0.12)	4.38(0.07)	0.17*	-0.16*

*p<0.05

† represents the mean score of parents'/caregivers' response on the following scale: 1= Strongly disagree, 2= Disagree, 3= No opinion, 4= Agree, 5= Strongly agree

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Table II-14: Practices among caregivers: changes within race/ethnicity over time, and difference of difference between specific race/ethnicity group and reference group (White)

	Group 1: Agencies trained before 2006 survey				Group 2: Agencies trained after 2006 survey			
	Trained 2006 (n=1,632)	Trained 2008 (n=1,493)	Posttest- Pretest Difference within Race/ Ethnicity	Difference of Difference: Race/Ethnic Group compared to White	Untrained 2006 (n=3,377)	Trained 2008 (n=3,432)	Posttest- Pretest Difference within Race/ Ethnicity	Difference of Difference: Race/Ethnic Group compared to White
Caregiver Offer and Encourage Child to Reduce TV Viewing Time (Percent (SE))								
White	76.0 (6.6)	71.9 (4.6)	-4.0 (3.5)	(ref)	77.1 (3.9)	65.3 (6.3)	-11.8* (3.1)	(ref)
Black	78.6 (2.9)	68.1 (3.8)	-10.5* (4.8)	6.4 (5.0)	77.1 (1.7)	72.3 (1.4)	-4.8* (2.2)	-7.0 (4.1)
Hispanic	70.1 (4.1)	67.0 (2.7)	-3.1 (5.2)	-0.9 (6.0)	71.6 (1.9)	71.3 (2.6)	-0.2 (2.9)	-11.5* (4.3)
Other	72.2 (5.1)	60.0 (5.4)	-12.2 (7.2)	8.1 (8.6)	80.2 (6.0)	73.1 (5.8)	-7.1 (3.7)	-4.6 (5.5)
Caregiver does as much Physical Activity with child as he/she would like (Percent (SE))								
White	53.8 (2.3)	61.0 (2.5)	7.2* (3.0)	(ref)	54.9 (1.2)	64.8 (2.5)	9.9* (2.1)	(ref)
Black	56.0 (1.7)	63.9 (3.1)	7.9* (3.8)	-0.7 (4.2)	63.7 (2.3)	60.5 (2.0)	-3.1 (3.1)	13.0* (3.5)
Hispanic	49.5 (1.9)	61.2 (3.0)	11.7* (3.5)	-4.5 (4.6)	58.9 (1.9)	65.5 (1.8)	6.6* (2.3)	3.3 (3.2)
Other	67.9 (2.4)	59.2 (5.8)	-8.7 (5.8)	15.9* (6.4)	62.1 (3.7)	70.4 (2.5)	8.3* (3.8)	1.6 (4.0)

*p<0.05

Revitalizing WIC Nutrition Services: *NY Fit WIC*

Table II-15: Healthy lifestyle behaviors among WIC children: changes within race/ethnicity over time, and difference of difference between specific race/ethnicity group and reference group (White)

	Group 1: Agencies trained before 2006 survey				Group 2: Agencies trained after 2006 survey			
	Trained 2006 (n=1,632)	Trained 2008 (n=1,493)	Posttest-Pretest Difference within Race/ Ethnicity	Difference of Difference: Race/Ethnic Group compared to White	Untrained 2006 (n=3,377)	Trained 2008 (n=3,432)	Posttest- Pretest Difference within Race/ Ethnicity	Difference of Difference: Race/Ethnic Group compared to White
Child Watches Less Than 2 Hours of TV Daily (Percent (SE))								
White	44.3 (8.2)	47.2 (4.2)	2.9 (5.2)	(ref)	43.3 (4.1)	53.3 (5.0)	10.0* (2.1)	(ref)
Black	29.1 (3.1)	34.1 (2.5)	4.9 (3.7)	-2.0 (6.8)	26.2 (2.1)	33.7 (1.6)	7.4* (2.5)	2.6 (3.1)
Hispanic	36.4 (3.6)	39.5 (1.3)	3.0 (4.5)	-0.1 (7.3)	37.4 (1.4)	39.2 (1.9)	1.8 (2.4)	8.2* (3.3)
Other	36.4 (6.1)	36.5 (6.0)	0.0 (5.6)	2.9 (5.3)	36.6 (2.8)	45.8 (3.6)	9.2* (3.2)	0.8 (3.6)
Time Child Spends Playing Outdoors Daily (Minutes (SE))								
White	68.33 (4.2)	103.28 (6.9)	34.95* (3.3)	(ref)	75.46 (3.0)	97.8 (6.1)	22.34* (3.8)	(ref)
Black	53.87 (3.8)	69.69 (4.5)	15.82* (3.9)	19.13* (5.2)	57.09 (1.7)	70.84 (2.0)	13.75* (2.3)	8.59* (4.2)
Hispanic	57.59 (4.4)	72.48 (1.9)	14.89* (4.2)	20.06* (5.1)	60.50 (2.3)	73.63 (3.0)	13.14* (2.3)	9.21* (4.1)
Other	61.05 (4.3)	74.34 (8.4)	13.28 (7.5)	21.67* (6.2)	62.10 (4.1)	68.19 (4.4)	6.10 (4.0)	16.25* (4.8)

*p<0.05

INTERPRETATION OF RESULTS

As in the case of the staff outcomes, our logic model had hypothesized that the *NY Fit WIC* initiative would positively influence participant outcomes through several phases. In phase one, the initiative was expected to lead to improved satisfaction with WIC nutrition education; in phase two, the key messages received by parents/caregivers during nutrition education sessions were expected to improve parents'/caregivers' self-efficacy; in phase three, the improved self-efficacy among parents/caregivers was expected to lead to improved parenting practices and adoption of healthy lifestyles among the parents/caregivers; finally, in phase four, the improved parent/caregiver parenting practices and adoption of healthier lifestyles were expected to positively influence physical activity and eating behavior among children enrolled in the NYS WIC program.

Altogether, the results presented above suggest that the *NY Fit WIC* initiative was indeed effective in positively influencing the primary outcome of this evaluation project, namely, physical activity behavior among children whose parents/caregivers participated in the study. Specifically, the results suggest that “the amount of time children spend playing outdoors daily” increased in both groups of agencies between baseline and follow-up, with the greatest improvement occurring among agencies that were trained before the baseline survey. In addition, the average “amount of time children spend watching TV daily” decreased over the course of the study, with a notable difference occurring only among agencies that were trained after the baseline survey.

Additional results from this study suggest that the observed positive influence on the reported physical activity indicators among children resulted from the ability of the initiative to positively influence outcomes during the earlier phases of our evaluation logic model, especially among the agencies that were trained after the baseline survey. First, there is evidence that certain parenting practices did improve during the intervention. There were statistically significant improvements in the proportions of parents/caregivers who reported “doing as much physical activity with their children as they would like” in both agency groups. Among agencies that were trained after the baseline survey, the mean frequency of parents/caregivers “limiting their children’s TV viewing to less than two hours daily” also improved between baseline and follow-up.

Consistent with the outlined phases of impact in the evaluation logic model, it would appear that the observed improvements in parenting practices were a result of high levels of self-efficacy among parents/caregivers. While pretest-posttest differences failed to reach statistical significance in both agency groups, on average, parents/caregivers “agreed or strongly agreed” that they were “confident in their ability to reduce their children’s TV viewing” and that they were “confident in their ability to encourage their children to be physically active” at both baseline and follow-up. In turn, the generally high levels of confidence among parents/caregivers were likely a result of improved nutrition education as evidenced by results showing that parents/caregivers heard and learned slightly more about physical activity from WIC staff after the initiative, particularly among the agencies that were trained after the baseline survey.

The contention that improved nutrition education may have resulted in parents/caregivers learning more about physical activity from WIC staff was supported by results from the evaluation of staff outcomes and the evaluation of agency activities. First, there were marked improvements in the proportion of staff who reported that they “were already including *NY Fit WIC* concepts in their agency” between baseline and follow-up, especially among staff from the agencies that were trained after the baseline survey. Second, among the same set of agencies that were trained after the baseline survey, the proportion of WIC staff who were “comfortable discussing physical activity with parents/caregivers” increased significantly between baseline and follow-up, even though there was no improvement in lifestyle practices. Third, the consistency of the *NY Fit WIC* staff outcome results with findings from the *California Fit WIC* confirmed that the intervention was indeed effective in improving the “comfort” of WIC staff in discussing physical activity with parents/caregivers and encouraging them to do physical activities with their children. Finally, the classification of implemented *NY Fit WIC* activities into the two broad categories of “physical activity” and “nutrition” showed that agencies tended to favor the implementation of “physical activity-related” activities over “nutrition-related” activities by a ratio of two to one; this finding further confirmed that parents/caregivers were exposed to physical activity concepts as a result of the *NY Fit WIC* initiative.

As in the case of staff outcomes, where positive physical activity behavior changes were only observed among staff from agencies that had been trained at baseline, the greatest improvement in the mean “amount of time children spend playing outdoors daily” occurred among agencies that were trained before the baseline survey. From a theoretical perspective, the staff and participant findings suggested that the more time agencies have to adopt and apply *NY Fit WIC* concepts, the greater the likelihood of observing positive behavior changes among both WIC staff and WIC participants. Therefore, “successful” agencies would generally have had to keep the intensity of the initiative at more or less the same level between baseline and follow-up to ensure sustained improvements in staff and participant outcomes over time. Conversely, “unsuccessful” agencies would generally be agencies that failed to sustain or maintain the intensity of the initiative between baseline and follow-up, thus resulting in a failure to observe meaningful improvements during the evaluation period. However, it must be noted that agencies that maintained the initiative at the same intensity or fidelity level throughout the study period could fail to show meaningful improvements if the outcome levels among staff or participants were already high at baseline. Such agencies would not necessarily be “unsuccessful” particularly if their staff and participant outcome levels are comparable to those of “successful” agencies at follow-up.

Impact of Urban/Rural Agency Classification on Participant Outcomes

The results of this study suggested that the impact of the *NY Fit WIC* initiative differed by urban/rural location. Specifically, the greatest improvements in the proportions of “children who watch TV less than two hours per day” and in the “amount of time children spend playing outside” occurred among rural agencies, regardless of when they were trained in *NY Fit WIC* concepts. Similarly, parents/caregivers from rural WIC agencies were more likely to report that they “do as much physical activity with their children as they would like” compared to parents/caregivers from urban WIC agencies.

The relatively greater impact of the initiative among rural agencies occurred despite the fact that: 1) The proportions of rural parents/caregivers who reported that they were “offering or encouraging their child to reduce TV viewing” decreased and there were no improvements in the proportions of rural parents/caregivers who were “offering or encouraging child to be physically active” between baseline and follow-up; and 2) There were statistically significant declines in proportions of rural parents/caregivers who reported that they “had learned something new about physical activity.” As in the case of the staff outcomes, the incompatible results for “parents’/caregivers’ parenting practices and perceptions of WIC nutrition education”, and the “indicators of children’s physical activity” may point to alternative ways through which the initiative could have influenced WIC children’s physical activity behavior without influencing certain parents’/caregivers’ outcomes. Alternatively, these incompatible results could be a result of the failure of the evaluation design to detect statistically significant differences for parents’/caregivers’ outcomes.

While the implementation of *NY Fit WIC* concepts varied from agency to agency, the *NY Fit WIC* trainings were conducted in the same manner in both urban and rural regions of the state. Thus, the observed urban/rural differences could not reflect differential impact as a result of rural and urban agencies having been exposed to different *NY Fit WIC* trainings. Both baseline and follow-up surveys were administered during similar time periods (spring and fall), thus eliminating the possibility of measurement bias in any region of the state.

There are several possible explanations for the observed rural/urban differences in the impact of the *NY Fit WIC* initiative. First, children in rural areas have more opportunities to play outside, because there are relatively more safe places for outdoor play than there are in urban areas. This contention is supported by the results showing that at each measurement point, the average number of minutes children spent playing outside was higher among rural children than among urban children. Accordingly, the lack of improvement in proportions of rural parents/caregivers who reported “offering or encouraging their children to reduce TV viewing or be physically active” would suggest that rural parents/caregivers already perceive their children to be spending enough time playing outside. Interestingly, the relatively lower proportions of rural parents/caregivers who reported that they “do as much physical activity with their children as they would like” could further suggest that rural children engage in more unsupervised outdoor play because rural parents/caregivers may not be as concerned about safety as urban parents/caregivers.

Impact of Race/Ethnicity on Participant Outcomes

The results of this study provided evidence of differential impact of the *NY Fit WIC* initiative according to race/ethnicity. Specifically, the greatest improvements in the mean “amount of time children spend playing outside” occurred among white children, with an average increase of 35 minutes among white children from agencies that were trained at baseline and an average increase of 22 minutes among white children from agencies that were trained after the baseline survey. As in the case of rural children, at each measurement point the “average number of minutes children spent playing outside” was consistently higher among white children than among African American and Hispanic children, or children from other racial/ethnic categories.

A critical review of the results pertaining to parents'/caregivers' perceptions of WIC nutrition education and parenting practices (e.g., "offering or encouraging child to reduce TV viewing or be physically active") does not provide a clear pathway to, or plausible explanation for, what may have led to the much greater improvements in outdoor play among white children. A plausible explanation relates to the known distribution of the NYS population by race/ethnicity and location. A significant segment of the white population resides outside of the greater New York City metropolitan area, which is also home to the majority of the state's racial/ethnic minority populations. Throughout the rest of the state, racial/ethnic minority populations also tend to reside within urban centers. This means that, the majority of rural areas are predominantly inhabited by white populations. Therefore, the same factors that were likely operating in the observed rural/urban differences are also likely responsible for the observed racial/ethnic differences in the physical activity-related outcome measures.

Limitations

A possible explanation for the observed differences between agencies trained in *NY Fit WIC* concepts at the time of the baseline survey and agencies trained after the baseline survey could be a result of the non-random assignment of the design of the study. Many of the WIC agencies that volunteered early for *NY Fit WIC* training were those that could be considered "model agencies", those that tended to volunteer first for events and activities and that seem to be more willing to try new things. Therefore, any differences between the untrained-trained group and the trained-trained group could easily be due to self selection, that some agencies volunteered first and these were different from the other agencies. Although a control group was built-in, trained-trained, since we did not assign who received training early, the self selection problem remained.

Additionally, the surveys were self-administered with no information on the response rates. Agencies did not record how many parents/caregivers were offered the survey, or how many refused, thus, it could not be determined if the sample of respondents could have been biased.

The two issues discussed above were addressed by checking to see whether the results conformed to the predicted outcomes (those made during the proposal and described in the first paragraph of this section), whether the results created a coherent picture, and whether the results were consistent with previous literature. To the extent that the predicted outcomes are confirmed and all of the results were internally and externally consistent, it can be estimated that both the self-selection and bias issues were reduced.

Conclusion

All together, results suggested that the observed impact of the *NY Fit WIC* initiative on physical activity-related outcomes among NYS WIC participants may not have been due to chance or systematic error conducted during the study. All observed results were consistent with the hypothesized effects of the initiative in the *NY Fit WIC* evaluation logic model. The main finding from this study was that the proportions of parents/caregivers who reported "doing as much physical activity with their children as they would like" significantly increased between baseline and follow-up among both agencies that were trained at baseline and those that were not

trained at baseline. The mean “number of minutes children spent playing outdoor daily” also increased significantly between baseline and follow-up, with the greatest improvement occurring among children who were served by agencies that had been trained at baseline.

The next section of the report presents the design and results from the evaluation of retention rates among participants.

D. IMPACT ON RETENTION RATES

In addition to improving physical activity-related outcomes among staff, parents/caregivers, and children, another important goal of the *NY Fit WIC* initiative was the improvement of retention (or recertification) rates among eligible WIC children. Accordingly, retention analyses were conducted to determine whether the *NY Fit WIC* initiative was associated with an increase in retention among WIC infants and children. Although the *NY Fit WIC* initiative focused on children two years and older, this study followed children who initially enrolled in the NYS WIC program as infants in the first six months of their life for the following three reasons:

- First, limiting the analysis to infants who enrolled around the time of birth yielded a more uniform group. Those who delayed their enrollment were excluded, and the reasons for the delays were not considered.
- Second, outcomes could be better attributed to the *NY Fit WIC* initiative, thus eliminating the need to consider unrelated factors that may have occurred during the first two years of enrollment.
- Third, historically, the certification of children around the first year anniversary was the time when the largest proportions of children dropped out of the WIC program.⁴³ More specifically, a previous study of NYS WIC children estimated that 64 percent of infants continued to participate as children, and only 50 percent remained in the program until the age of two.¹⁴

Therefore, if the *NY Fit WIC* initiative succeeded in revitalizing WIC nutrition services through better trained staff and more targeted healthy lifestyle messages, parents/caregivers would be more likely to remain in the WIC program past their child's one year mark.

EVALUATION OF RETENTION RATES

This component of the grant was based on information from the NY State Pediatric Nutrition Surveillance System (PedNSS) which contains data on all infants and children participating in WIC through age four. The retention analyses were conducted at the agency level, because *NY Fit WIC* concepts were implemented independently in each agency. Two cohorts were defined such that the retention among infants, followed over a two year period, could be observed before and after each agency received *NY Fit WIC* training. This design facilitated the comparison of pre- and post-*NY Fit WIC* retention rates within each of the eligible agencies. A higher retention rate after the *NY Fit WIC* implementation would indicate a positive influence on retention by the *NY Fit WIC* initiative.

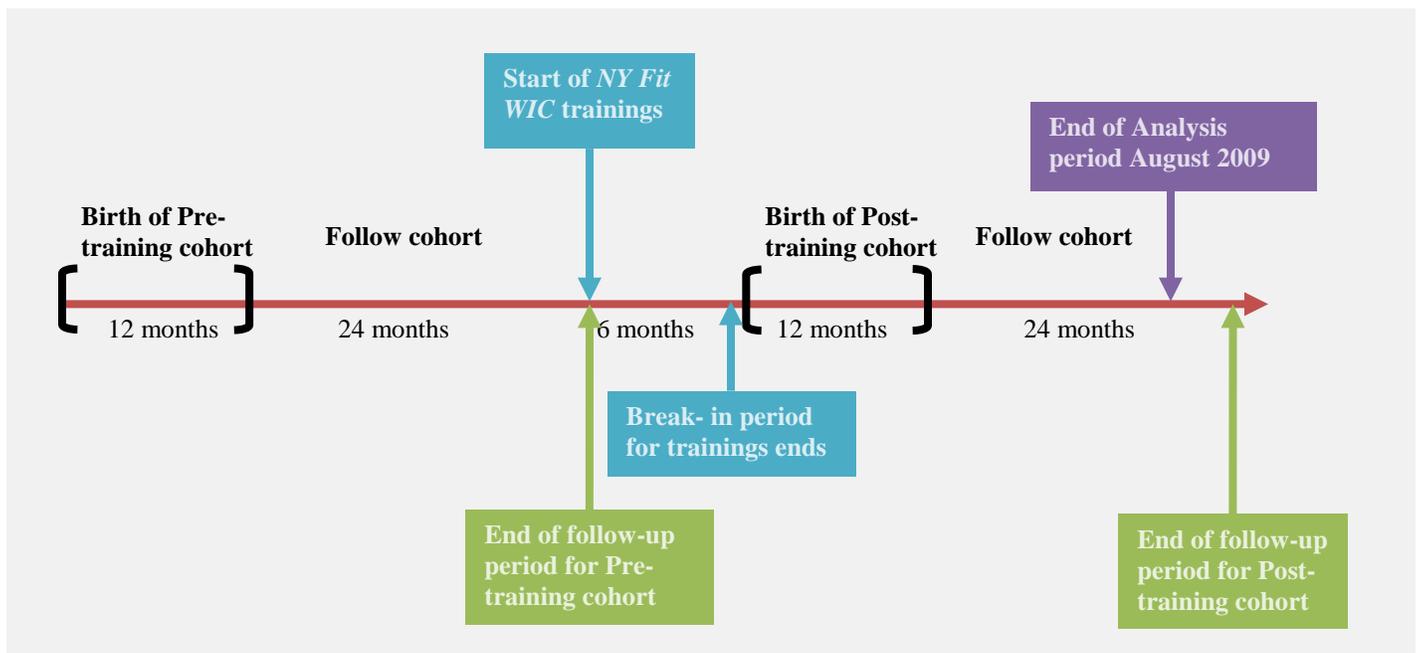
Cohort Definition

Cohorts of children were defined based on agency-specific *NY Fit WIC* training dates, with the assumption that there was a six-month “break-in” period in implementing *NY Fit WIC* concepts at agencies after trainings were completed. To avoid any influence of caseload

seasonality, each cohort was defined to select all children born within a period of 12 months before and after *NY Fit WIC* trainings.

Cohorts were developed to only include children whose visits were within three months of their expected visit date. Therefore, if an infant or child was scheduled for a subsequent certification visit six months after their first visit, they were included in the study if they actually visited between three and nine months of their expected visit date. Infants or children that went back to WIC agencies earlier than three months or later than nine months were excluded. The design of the study is illustrated below in Figure II-6.

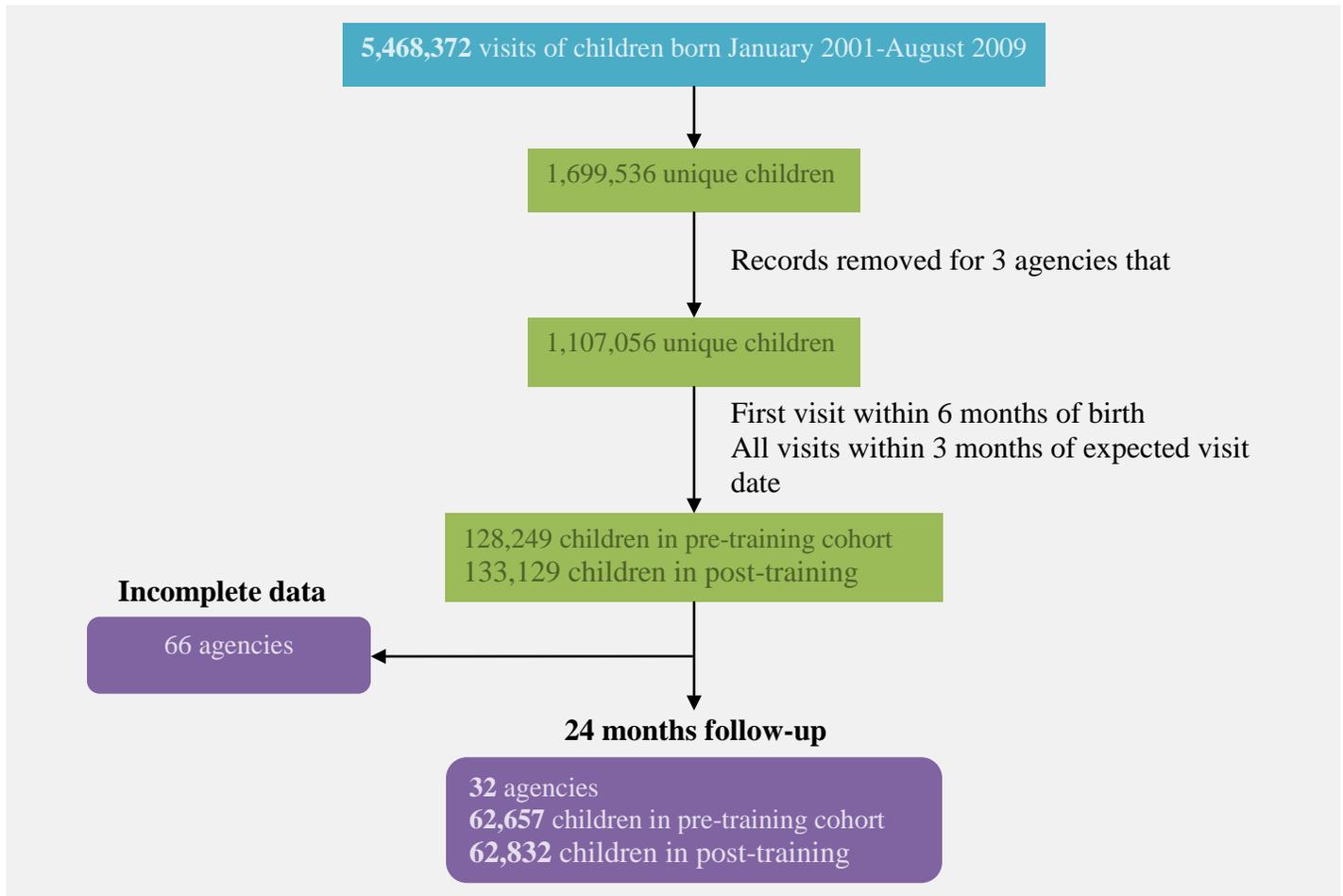
Figure II-6: Planned study design



Database Development

Study cohorts were developed from the NYS PedNSS. The steps in the selection of visit records for the two cohorts from each agency are displayed in Figure II-7.

Figure II-7: Flow chart of data reduction



Analysis Plan

Retention rates were defined as the proportion of children still enrolled in the program at each six-month time period over the 24-month follow-up period. Graphical displays of retention curves were used to compare overall and agency recertification patterns. Retention rates at two years of age in the post-*NY Fit WIC* cohorts were compared to retention rates from the pre-*NY Fit WIC* cohorts.

Recertification patterns were displayed graphically in retention curves for each agency. Confidence limits at the 95 percent level were used to determine if estimates of retention were statistically different. A L’Abbe plot was used to display all agency-specific pre- and posttest retention patterns. Data were analyzed with SAS software (version 9.2, SAS Institute Inc., Cary, NC) using the FREQ and LIFETEST procedures.

RESULTS OF RETENTION STUDY

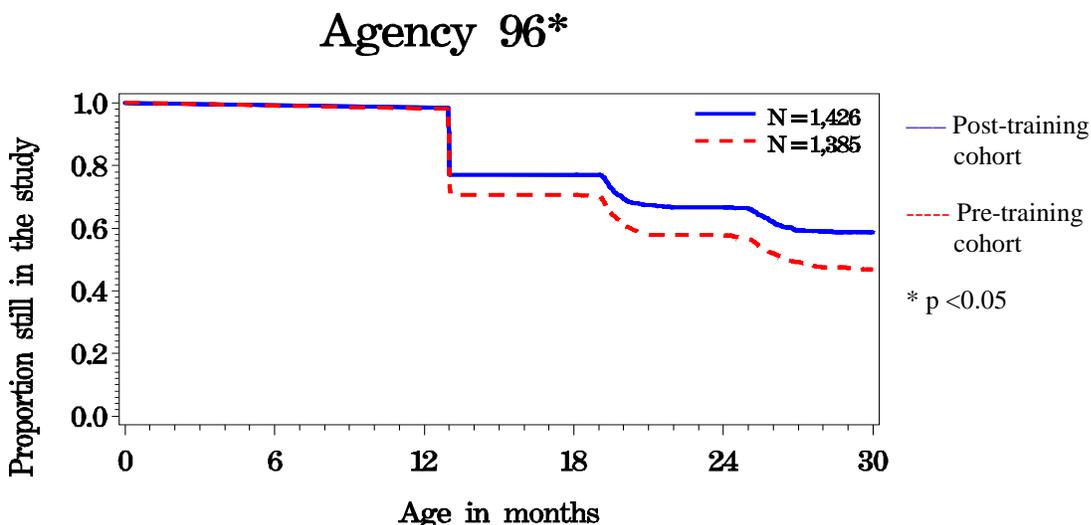
Of the 101 agencies, three agencies closed during the study period and their records were not included in the database. When data for the 98 agencies were examined, only 32 had an actual follow-up period of 24 months for both pre- and post-cohorts. Due to later training dates and limited available data after training, the follow-up time for post-cohorts from some agencies was shorter than the 24 months planned in the design of the study ([Appendix II-R](#)). For this reason, the analyses presented in this report were limited to the 32 agencies; which represented all four administrative regions of NYS (10 from the Capital Region, 4 from the Central Region, 2 from the Western Region and 16 from the Metropolitan Region). A complete analysis including all NYS WIC agencies will be presented in a future manuscript.

The specific definitions of cohorts and actual length of follow-up for all agencies are also shown in [Appendix II-R](#), and differences between the post- and pre-training retention rates are displayed in [Appendix II-S](#). Estimates of retention rates and 95 percent confidence limits are presented in [Appendix II-T](#).

The differences between pre- and post-*NY Fit WIC* estimated retention rates differed by a wide range of values across agencies. In some cases, the retention rate at an agency post-*NY Fit WIC* was nine percentage points higher than the retention rate at that same agency before the *NY Fit WIC* initiative. In other cases, a seven percentage point decrease was observed within another agency. Differences between the post- and pre-training retention rates were positive for 16 of the 32 agencies (Refer to Figure II-8 for one example). However, only four agencies had significant changes in retention rates, three of which were positive. All four agencies were in the Metropolitan region and received *NY Fit WIC* training early in 2005.

The retention curves for all agencies were also tested for homogeneity using Log-Rank and Wilcoxon tests. The tests supported the increased retention rates at all ages for the three agencies with significant positive changes (p-values <.0001).

Figure II-8: Retention curve for a selected agency



INTERPRETATION OF RETENTION RESULTS

These preliminary analyses provided insight into retention patterns of NYS WIC children before and after the implementation of the *NY Fit WIC* initiative. The estimated retention rates varied across agencies, perhaps mimicking the variation in the implementation of the *NY Fit WIC* initiative. Knowledge of the specific aspects of *NY Fit WIC* that were implemented in each of the “successful” agencies could inform what was effective in convincing WIC parents/caregivers to keep their toddlers enrolled in the program. Additionally, in several retention curves the post-training curve crossed the pre-training curve slightly after 24 months, suggesting that time may have intensified the *NY Fit WIC* effect at the agency level, as staff became more experienced and knowledgeable about the *NY Fit WIC* initiative.

Limitations

In the analyses presented here, all trainings were treated the same and it was assumed that all agencies had the same “break-in period” of six months after training. The analyses did not factor in how trainings were administered over time (as instructors gain more experience with the initiative), and the number of trainings that each agency received. In addition, agencies in this analysis were generally the ones that volunteered for training early, and may be different from the agencies that volunteered for at a later time. A follow-up analysis, including all agencies, may show different retention results for the state.

Conclusion

This study confirmed the results of earlier internal studies that the largest drop in retention among NYS WIC infants occurs at the first recertification period.

The following section of the report will discuss the evaluation of the *Families on the Go (FOTG)* intervention, a physical activity enhancement pilot project.

III. EVALUATION OF THE FAMILIES ON THE GO PILOT INTERVENTION

Families on the Go (FOTG) was a program developed as an enhancement to *NY Fit WIC* and was implemented as a pilot program in one WIC clinic in central New York. FOTG enhanced the *NY Fit WIC* model by addressing the gaps, weaknesses, results and “lessons learned,” as reported by the Five-State Fit WIC Pilot project. Specifically, FOTG built directly on the *Insights learned from WIC participants*, as outlined in the USDA’s Fit WIC final report, which indicated that parents were eager to receive in-depth, how-to information on healthy lifestyle choices, in particular, activities that could involve the whole family.²

The specific evidence-based goals of *FOTG* were to increase the time children spend playing outdoors, and reduce the time children spend watching television. Physical inactivity was identified as a key risk factor for obesity and its associated co-morbidities.⁴⁴ Experts recommend that children and adolescents be physically active for at least 60 minutes each day.⁴⁵ Some studies, however, showed that as few as 10 percent of preschoolers meet the recommended amount of daily physical activity.⁴⁶ Outdoor play was identified as one of the best predictors of young children’s physical activity and tended to influence children’s active play the most.⁴⁷ The first goal of *FOTG* was to increase the amount of time that WIC children spent playing outdoors as a direct effort to increase their physical activity levels.

Time spent watching television was another predictor of childhood obesity.⁴⁸ Experts recommend that children ages 2-18 years watch no more than one to two hours of quality programming each day.⁴⁹ The percentage of preschool aged children that exceeds these recommendations varies from 17- 48 percent.^{49, 50} Consequently, the second goal of the program was to decrease the amount of time WIC children spent watching television.

DESCRIPTION OF THE FOTG INTERVENTION

Families on the Go was an intensive parent-based intervention that enhanced *NY Fit WIC* by providing WIC educators with additional resources and training to assist parents/caregivers in increasing their child’s physical activity. The intervention was built on results from previous research and draws on key health behavior theories including Social Cognitive Theory⁵¹ and Ecological Systems Theory.⁵² Key components of the intervention included:

1. Incorporating a community resource guide into WIC counseling sessions which outlined safe places for active recreation in the community, strategies to increase children’s physical activity and reduce their TV viewing, and a calendar of local events;
2. Training WIC counselors how to use the guide during counseling sessions to discuss physical activity with parents;
3. Promoting the goals of *FOTG* through the Nutrition Spotlight newsletter which was active at the clinic during the implementation period.

The *community guide* highlighted the important role that parents play in promoting active lifestyles among their children, outlined evidence-based approaches for encouraging children to be physically active and to reduce their TV viewing time, and highlighted strategies to overcome barriers experienced by families. The central feature of the community guide was a series of maps that outlined the location of recreation venues in the local area (e.g., local activity centers, hiking trails, swimming pools, the zoo etc.). A winter and summer version of the guide was developed to accommodate differences in recreational venues by season (Copies available in [Appendix III-A](#)).

Prior to the start of the intervention, the WIC educators and all administrative staff attended a training session. During the training session, the design, rationale and timeline for the program were outlined. In addition, educators were provided with suggestions on ways to incorporate the guide into their counseling sessions, and how to use the guide to initiate conversations with parents/caregivers on the need for children to be active for at least one hour per day and to watch TV no more than two hours per day. Refer to [Appendix III-B](#) for training materials.

Nutrition Spotlight was part of a periodic newsletter that the Onondaga County WIC program made available to WIC participants in the clinic's waiting room. Each newsletter provided a brief summary of particular topics that were relevant to promoting healthy lifestyles. The Nutrition Spotlight theme changed quarterly. As part of *FOTG*, the Nutrition Spotlight focused on increasing children's physical activity and decreasing their TV viewing for two quarterly cycles during the intervention period. A sample copy of the Newsletter Spotlight, as well as the *FOTG* message added to the newsletter is available in [Appendix III-C](#).

Setting

The Onondaga WIC program was selected as the intervention site because: 1) Its large caseload (average monthly caseload of approximately 3,000 children) meant that the intervention could be implemented and evaluated at a single site, thus conserving resources, 2) It had previously received *NY Fit WIC* training, 3) The clinic was very enthusiastic about the intervention, and 4) it was convenient to the project research team.

The Onondaga WIC program received *NY Fit WIC* training in March 2005, and subsequently implemented the initiative throughout the clinic environment, focusing on WIC staff role-modeling healthy behaviors. Some activities included the removal of vending machines from the staff break room, and replacing them with healthful snacks brought in by staff on a rotating basis; as well as, encouraging the formation of and participation in sports teams outside the office. However, *NY Fit WIC* concepts were directly incorporated into nutrition education sessions.

Located in downtown Syracuse, the Onondaga WIC clinic is in an urban setting. The city of Syracuse is a major metropolitan area situated in the center of NYS. Though it has a four-season climate, Syracuse is renowned for cold, snowy winters, receiving on average 115 inches of snow annually, more than any other major U.S. city. The large average snowfall could impact outdoor activities; therefore, an intervention focused on physical activity could be especially useful.

INTERVENTION DEVELOPMENT

NY Fit WIC Training for New Staff

The Onondaga WIC clinic experienced some staff turnover since the initial *NY Fit WIC* training. At the start of *FOTG* there were 25 staff members at the clinic, including 11 nutritionists. Of the 25 staff members, 18 (72%) had received *NY Fit WIC* training and seven (28%) had not. Of the seven that had not received *NY Fit WIC* training, four were nutritionists. A *NY Fit WIC* training session was conducted at the WIC clinic in June 2007 for the seven staff who were not previously trained. Consequently, at the *FOTG* training, all staff had received basic *NY Fit WIC* training.

Community Guide

The community guide was tailored to the Syracuse, NY area. In order to determine the areas of the community to focus on, the addresses of WIC clients at the target site were mapped using ArcGIS v9.1 (ESRI Redlands, CA). Four sections of the city, where client addresses tended to cluster, were chosen as the focal areas for the guide. A list of recreational sites including parks, playgrounds, schools and community centers was compiled through internet searches that included the Syracuse Department of Parks and Recreation, the Onondaga County Park System, and local school district websites. Team members visited all listed sites to assess their safety (e.g., the perceived safety of the area, and the presence of hazards such as broken glass) and the appropriateness of the site for physical activity (e.g., a small stretch of grass that was too small to play on). Sites deemed unsafe or inappropriate were removed from the list. The addresses of each remaining sites were plotted onto one of the four mapped areas, along with information on available amenities, associated costs, address, phone number and hours of operation.

Ideas for other information contained in the guide such as “the benefits of increasing outdoor time and decreasing TV time” and “winter safety tips” were gained through literature review and Activity Booklets developed by *Fit WIC* programs in other states (e.g., Vermont).

A monthly calendar of affordable activities in the Syracuse area (including fairs, festivals, library story times, and local sporting events) was included at the back of each guide. The events were chosen based on their affordability, accessibility by WIC participants and the extent to which the events were family-friendly. Each event was listed with the location, contact information, associated costs, and a brief description of the planned event. Refer to [Appendix III-D](#) for copies of the calendar.

Focus Groups

The summer and winter versions of the community guide were pilot tested in two focus groups of parents currently enrolled at the clinic. Caregivers, at least 18 years of age with a child between the ages of two and five enrolled in WIC, were recruited by clinic staff to participate in the focus groups. Two focus groups were conducted, one for each version of the guide, with approximately six adult caregivers in each group. Each focus group was conducted by a public health nutritionist experienced in moderating focus groups. A research assistant recorded

responses which were subsequently analyzed by research staff for similarity of content and responses were grouped by common themes. Parents were asked to provide feedback on the utility of the guide, other places in their community for outdoor activity, and ideas on important topics to be included in the guide. Refer to [Appendix III-E](#) for a copy of the focus group protocol.

Parents recommended a number of key changes and additions that included: 1) Increasing the size of the maps, 2) Including information on recreational sites outside of the immediate Syracuse area (this was recommended by a parent who was a student at Syracuse University), and 3) Addressing key barriers that parents experience. Many suggestions were incorporated into the final versions of the guides. For example, issues raised during focus groups led to the inclusion of a “parents’ frequently asked questions” section to the guide.

Counselor and Staff Training in FOTG

The clinic was closed for one morning so that all staff members could attend the training session, which lasted approximately two hours. A PowerPoint presentation provided all clinic employees with an overview of childhood obesity, and detailed information on the program and its implementation (Appendix III-B). The training session learning objectives were to:

- Understand the goals of the program and the process by which it was developed;
- Be ready to incorporate the community guide into all counseling sessions;
- Know how to help the clients to achieve the two goals of the program; and
- Become enthusiastic about the program.

Specific topics that were covered during the training session included:

- Program goals and components (i.e., intervention methods) and the rationale behind each;
- The proposed timeline of the intervention;
- The role of the staff and counselors in implementing the program;
- Tips on how to incorporate the materials into the counseling sessions; and
- Determining the “success” of the program.

All attendees were given copies of the guide to review during the session and were encouraged to ask questions. In addition, counselors were encouraged to brainstorm possible barriers that they might experience when introducing the program to parents, or that parents might experience. Then, possible strategies to overcome those barriers were identified.

At the conclusion of the training session, all attendees were asked to complete a brief survey to determine if they understood the goals of the program, whether they understood their role in implementing the program, whether they felt confident that they could perform their role, and whether they were excited about the program. Responses were coded on a five point scale.

All nutritionists reported that they understood the goals of the intervention (N=24). Eighty-eight percent reported being confident about their role in the program, 74 percent were excited, and 92 percent felt that the training was helpful.

Nutrition Spotlight Newsletter

Two Nutrition Spotlight newsletters were developed and implemented (September-November 2007 and March-May 2008), specifically to reflect the goals of the *FOTG* intervention. The material focused on expert recommendations and tips about physical activity and television viewing for preschool aged children, and the benefits of being active and watching less TV. On a brief survey that accompanied the spotlight information, parents were asked to indicate whether their child had a TV in his/her bedroom and how frequently the child played outdoors.

INTERVENTION IMPLEMENTATION

The community guides were distributed to parents of children aged 18 months and older during their WIC counseling session. Parents, who generally visited the clinic on a three-month cycle, received up to four copies of the guide over the duration of the intervention (August 2007-September 2008). The guides were displayed prominently in each counseling booth and on the desk at the front reception. If parents had not already taken a guide, counselors were instructed to hand the parent a guide at the beginning of the counseling session and use the guide as a tool to begin a conversation about outdoor play and decreasing television viewing time. Parents also brought with them the completed survey from the Nutrition Spotlight, which was also used as a tool or prompt to discuss their children's physical activity and TV viewing behaviors.

During the counseling sessions, counselors were encouraged to use a "cheat sheet" that was provided during the training session ([Appendix III-F](#)). This sheet listed the types of prompts to use during parents' first exposure to the program, the guide, and any subsequent visits. On the first visit, counselors were encouraged to go through the various sections of the guide with parents and point out the goals of the program, and the benefits of increasing physical activity. Counselors were also instructed to show parents the maps, help them locate their home, and bring their attention to the calendar of local events at the back of the guide. On any subsequent visit, the counselors were trained to ask parents if they needed another copy of the guide, if they had used the guide, how they used it, and what parts of the guide were most helpful to them.

The implementation of the intervention was monitored on an ongoing basis. During the first week of implementation, a graduate student research assistant from the University at Albany School of Public Health was present at the clinic to facilitate the start-up of the project and to answer questions. In addition, the research assistant shadowed the counselors and gave feedback on their interaction with parents around the guide. This process first took place in August 2007 when the study was initiated, and then again in January 2008. Due to staff turnover and reduced enthusiasm for physical activity during winter, the January 2008 review revealed that a refresher course was necessary. This review session was timed for the implementation of the winter version of the community resource guide. Rather than conducting a second group training session, the research assistant met with small groups (i.e., 2-3 at a time) of nutrition counselors to

introduce the winter version of the guide, highlight the major changes from the summer version of the guide, and reviewed the process of discussing the guide with parents.

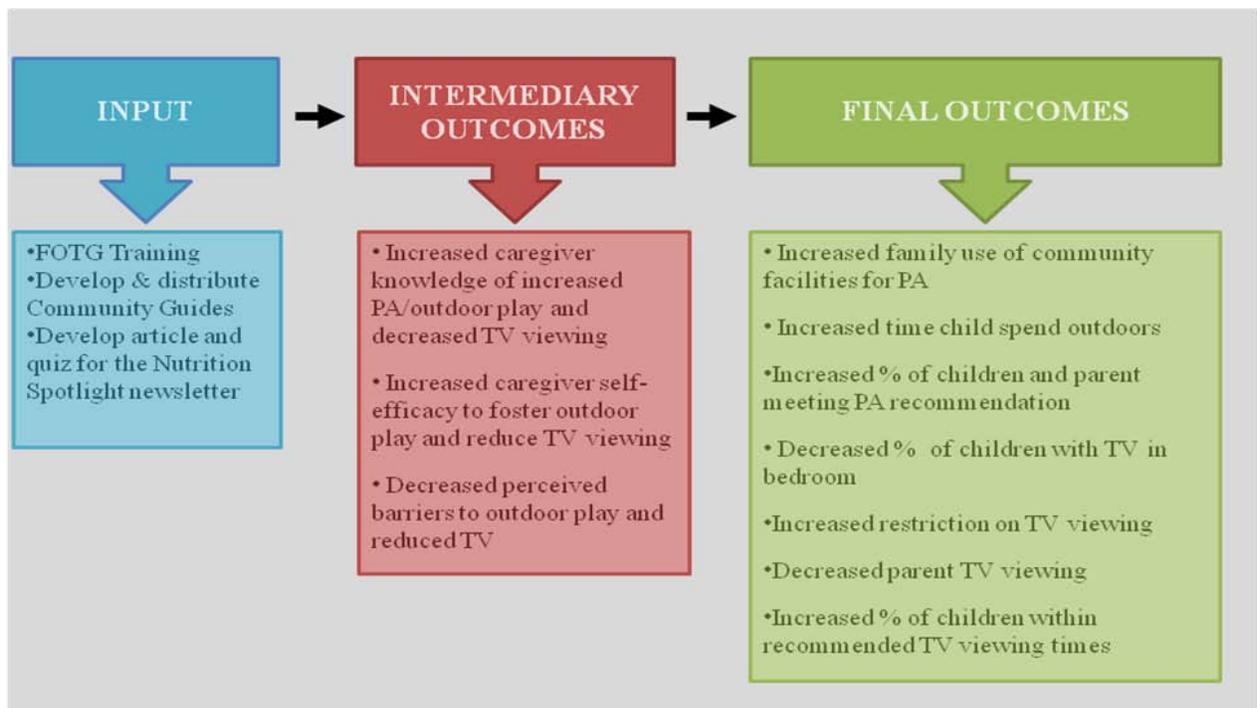
EVALUATION TOOLS FOR FOTG

The intervention adopted a pre-post quasi-experimental design without a control group. Pre-intervention data were collected at the intervention site between June-August 2007. The intervention was implemented between August 2007 and September 2008. The post-intervention data were collected during the last three months of the program. For logistical reasons (including high turnover of families at the site), parents were not tracked across time; rather, two samples of parents that attended the clinic during the data collection periods, at baseline and at follow-up, were obtained.

At the pre-test and post-test, the key outcomes of interest and the anticipated intermediary factors were measured. These factors are represented as long and short term outcomes respectively in the logic model appearing in [Appendix III-G](#). Figure III-1 displays a simplified logic model for the FOTG intervention. The post-test assessment also included process-related measures (e.g., whether parents read the guide, and which parts of the guide they used), which were listed as outputs in the logic model.

An additional comparison was planned between the *FOTG* intervention agency and comparable agencies from the statewide *NY Fit WIC* initiative study. These comparable WIC agencies were similar to the Onondaga clinic, in terms of client demographics and geographic location, as well as similar *NY Fit WIC* implementation dates.

Figure III-1: Simplified FOTG logic model



Data Collection

A self-administered anonymous survey was used for the *FOTG* pre- and post-test assessment. Copies of the pre- and post-test surveys are provided in [Appendix III-H](#) and [III-I](#) respectively. Parents completed the surveys in the waiting room of the clinic during the specified data collection periods. A trained interviewer was present in the waiting room for all clinic hours during this time. Parents had the option of completing the survey independently or with the assistance of the interviewer. The vast majority of parents completed the survey independently. English and Spanish versions of the survey were available. Data collection for the comparison WIC sites coincided with the *FOTG* post-test data collection, which controlled the effect of the season on physical activity and TV viewing.

Interviewers

During each data collection period, two to three Syracuse University students were hired to assist with data collection. All interviewers participated in a half-day training session before the start of each data collection period. The training session introduced the interviewers to the WIC and the *FOTG* programs. Interviewers' were responsible for prescreening parents for eligibility, explaining the purpose of the survey, distributing surveys and informed consent information, and being available to assist in completing the surveys. All interviewers were provided with an approved interview script, a checklist to facilitate the survey administration process, and information on conducting ethical human subject research. In addition, the interviewers were observed for the first week of data collection to ensure that they followed the protocol and that any unforeseen circumstances that needed to be addressed by researchers were dealt with.

Measures

The pre- and post-intervention surveys administered at the *FOTG* clinic, and at the comparison sites measured the primary outcomes of interest; child outdoor play and TV viewing, and theory-based mechanisms^{51,52} expected to explain the intervention effects, including parents'/caregivers' self-efficacy, physical activity and TV viewing behaviors, and parenting behaviors. All surveys assessed the following constructs:

- “Demographic factors” including child and caregiver age, child and caregiver gender, caregiver race/ethnicity, and caregiver education;
- “Child TV viewing” including hours/day the child watched TV on a typical day and the presence of a TV in the child’s bedroom;
- “Child outdoor play” or the time the child spent playing outdoors on a typical day;⁵³
- Parents/caregiver “behaviors and parenting practices” including hours/day the parent/caregiver watched TV, days per week the parent/caregiver participated in at least 30 minutes of moderate physical activity or 20 minutes of vigorous physical activity, and whether parents/caregivers limited their child’s TV viewing to less than two hours per day; and

- Caregiver “self-efficacy” to reduce their child’s TV viewing time and encourage their child to be physically active.

Survey questions were modeled after previous statewide WIC surveys and validated surveys.⁵³ The post-intervention survey also included process-related questions that examined whether parents/caregivers received the guide, how many copies they received, if they read the guide, and how they used the guide.

Analysis Plan

In the absence of a randomized control group, a series of analyses were planned to test program impact (within- and between-sample comparisons) including:

- Pre- and post-intervention differences in outcome variables;
- Post-intervention differences in the outcome variables for parents/caregivers who did and did not recall receiving the guide;
- Post-test differences in outcome variables for the intervention site versus comparison sites, in order to assess whether *FOTG* was associated with TV viewing and physical activity over and above the effects of the *NY Fit WIC* initiative;
- Examination of the process variables (e.g., whether or not read guide, how they used the guide) for parents who reported that they received the guide – process evaluation.

All analyses controlled for between-group differences in demographic factors (child age, parent age, education and race/ethnicity). Differences in the demographic characteristics for the comparison groups were examined using chi-square analysis (categorical variables) and t-tests (continuous variables). Group differences in the outcome variables were tested in a series of logistic regression models, controlling for group differences in demographic factors that were previously identified.

FOTG PARTICIPANT SURVEY RESULTS

PROCESS EVALUATION RESULTS

Examination of the process variables for parents who reported that they received the guide

As shown in Table III-1, approximately one in five parents/caregivers recalled receiving the guide, and the majority of these parents/caregivers (76%) reported reading the guide. The most frequently used component of the guide was the list of community events, with more than 50 percent of parents/caregivers indicating that they used this section. In addition, at least one in three parents/caregivers reported that they used the guide to be more active themselves, help their child to be active, or reduce their child’s TV viewing time. Parents/caregivers also reported that they used the maps in the guide to find places to take their children (35%) and to find winter clothing for their child (10%). In terms of specific venues visited, 60-80 percent of parents/caregivers who used the guide indicated that they visited parks or playgrounds, swimming pools, and fairs and festivals listed in the guide.

Table III-1: Process Evaluation -Examination of the process variables (e.g., whether or not read guide, how they used the guide) for parents who reported that they received the guide

Process Evaluation of Community Guide Post-Intervention	
	n
Do you recall receiving a community guide?	
Yes	211
No	784
	Percent
If yes, how many copies of the guide did you receive? (N=211)	
1	62
2	19
3	12
4	7
Did you read the guide? (N=164)	
Yes	76
No	24
How did you use the guide? (N=141)	
To help child be active	37
To reduce child TV	34
Used maps to find places to take child	35
Help family get out in winter	21
Find winter clothing	10
Used list of events	56
Helped me be more active	41
If used list of events/places, which ones? (N=88)	
Library	30
Basketball games	1
Parks and playgrounds	78
Swimming pool	79
Fairs and festivals	63

DESCRIPTIVE RESULTS

The mean age of children of parents/caregivers who completed the surveys was 40 months (Table III-2). Approximately 50 percent of children were female. The percentage of children in each racial ethnic category ranged between 27 percent to 43 percent non-Hispanic white, 38 percent to 50 percent African American, six percent to 15 percent Hispanic and four percent to 13 percent other or multiracial. For parent/caregiver education, approximately 23 percent to 37 percent reported completing some high school or less, 27 percent to 45 percent reported high school completion or GED, and 28 percent to 34 percent reported some college or higher. The majority of respondents were female (91% to 95%) and were on average 28-29 years old.

Pre- and post-test differences in sample characteristics

Pre (n=442) and post (n=995) group differences in child (age and gender) and parent (race/ethnicity, education, and age) demographics were initially explored (Table III-2). Significant group differences were observed for race/ethnicity and parent/caregiver education. The post-test sample had a higher percentage of African American parents/caregivers (48.8%) than the pre-test sample (48.8% vs. 38.3%) and the pre-test sample consisted of a greater percentage of parents/caregivers who reported their highest level of education as some college or higher (34.7 vs. 29.2%).

Differences in sample characteristics for the intervention site versus comparison sites

Significant differences in race/ethnicity, parent/caregiver education, and parent/caregiver age were observed for families at the Onondaga site at post-intervention compared to families from the comparison WIC sites at follow-up; the comparison sample was more likely to be White, and had a higher percentage of parents/caregivers with a high school diploma (Table III-2).

Differences in sample characteristics for parents who did and did not recall receiving the guide

When parents/caregivers who recalled receiving the guide (n=221) were compared to those who did not recall receiving the guide (n=774), significant differences were noted both for child's age and for parents'/caregivers' age. Children whose parents/caregivers recalled receiving the guide were slightly older (mean age = 42.8 months) than children whose parents/caregivers did not recall receiving the guide (mean age= 39.7 months), similarly, parents/caregivers who recalled receiving the guide were older (mean=29.9 years) than those who did not recall receiving the guide (mean=28.4 years). No significant differences were observed for race/ethnicity or the level of education of respondents (Table III-3).

Table III-2: Descriptive data for the target and comparison sites at baseline and follow-up

	Target site		Comparison sites (n=11)	
	Baseline (n=442)	Follow-up (n=995)	Baseline (n=494)	Follow-up (n=458)
Demographic variables				
Child age (months; mean (SD))	40.9 (10.5)	40.4 (10.9)	45.3 (9.3)	40.5 (10.2)
Caregiver age (years; mean (SD))	28.8 (8.0)	28.8 (7.9)	31.3 (8.7)	29.8 (7.3)
-----Percent-----				
Child gender (female)	50.4	50.7	48.1	49.8
Caregiver race/ethnicity				
White	33.3	27.9	49.7	28.6
Black	38.3	48.8	34.8	50.5
Hispanic	15.4	14.9	8.4	13.8
Other/multiracial	13.0	8.5	7.1	7.1
Caregiver education				
Some high school or less	38.6	36.4	24.5	23.8
HS graduate/GED	27.0	34.5	35.0	45.7
Some college/college graduate	34.7	29.2	40.5	30.5
TV viewing				
Child watches less than two hours/day	59	66	60	67
Caregiver watches less than two hours/day	25	43	23	30
Caregiver self-efficacy to limit child TV	70	92	81	78
Child does not have TV in bedroom	52	49	64	59
Caregiver limits TV less than two hours/day	20	39	22	26
Physical Activity (PA)				
Child play outdoors 60 minutes or more/day	74	81	51	67
Caregiver meets PA recommendations	50	61	61	57
Caregiver self efficacy to encourage PA	92	96	96	95

Table III-3: Post-intervention - Descriptive statistics for parents who recall and do not recall receiving the guide

Demographic variables	Caregiver recalls receiving the guide?	
	Yes (n=211)	No (n=784)
Child age (months; mean (SD))	42.8 (10.7)	39.7(10.8)
Caregiver age (years; mean (SD))	29.9 (8.5)	28.4 (7.5)
	-----Percent-----	
Child gender (female)	51.4	50.4
Caregiver race/ethnicity		
White	28.6	27.9
Black	50.5	48.2
Hispanic	13.8	14.9
Other/multiracial	7.1	9.0
Caregiver education		
Some high school or less	36.5	36.4
HS graduate/GED	32.7	34.8
Some college/college graduate	30.8	28.8
TV viewing		
Child watches less than two hours/day	73	64
Caregiver watches less than two hours/day	42	43
Caregiver self-efficacy to limit child TV	95	91
Child does not have TV in bedroom	49	49
Caregiver limits TV to less than two hours/day	41	38
Physical Activity (PA)		
Child play outdoors 60 minutes or more/day	85	80
Caregiver meets PA recommendations	62	61
Caregiver self-efficacy to encourage child PA	96	96

OUTCOME EVALUATION RESULTS

Pre-Post differences in outcome variable at intervention site (comparison 1)

As outlined in Table III-2, approximately 59 percent (pre-test) and 66 percent (post-test) of children and 25 percent (pre) to 43 percent (post) of caregivers watched less than two hours of TV per day, thus meeting recommendations. While 70 percent (pre) to 92 percent (post) of parents/caregivers reported high self-efficacy to limit child TV viewing, only 20 percent (pre) to 39 percent (post) reported limiting their child’s TV viewing to less than two hours. Additionally, approximately 50 percent of children had a TV in their bedroom. With regard to physical activity, 74 percent (pre) to 81 percent (post) of parents/caregivers reported that their child played outdoors for at least 60 minutes per day, 50 percent (pre) to 61 percent (post) of parents/caregivers met physical activity recommendations, and the vast majority (>90%) of parents reported high self-efficacy in their ability to increase their child’s outdoor play.

A significant main effect of intervention exposure was identified for all outcome variables with the exception of “TV in the child’s bedroom” (Table III-4). After adjusting for

group differences in race/ethnicity, education, child and parents'/caregivers' age, children at post-intervention were 1.5 times as likely as children at pre-intervention to watch TV for two fewer hours per day and 1.5 times as likely to play outdoors for at least 60 minutes per day. Compared to pre-intervention, parents/caregivers at post-intervention were 2.7 times as likely to report watching less than two hours of TV per day, five times as likely to report high self-efficacy to limit their child's TV viewing, and 2.8 times as likely to limit their child's TV viewing to less than two hours per day. Furthermore, at post-intervention parents/caregivers were approximately 1.6 times as likely to meet physical activity recommendations and twice as likely to report high self-efficacy to encourage their child to be active as were parents/caregivers at pre-intervention.

Table III-4: Results from logistic regression models examining differences in outcome variables for pre-intervention vs. post-intervention at the target site

Outcome variables	Pre-intervention (ref) vs. post-intervention target site	
	OR (95% CI)	p-value
TV viewing		
Child watches less than two hours/day	1.50 (1.08,2.10)	0.01
Caregiver watches less than two hours/day	2.73 (2.04,3.64)	<0.0001
Caregiver self-efficacy to limit child TV	5.33 (1.10,4.57)	<0.0001
Child does not have TV in bedroom	0.92 (0.72,1.18)	0.51
Caregiver limits TV to less than two hours/day	2.75 (2.05,3.69)	<0.001
Physical Activity (PA)		
Child play outdoors 60 minutes or more/day	1.45 (1.08,1.95)	0.01
Caregiver meets PA recommendations	1.61 (1.26,2.06)	0.0001
Caregiver self-efficacy to encourage child PA	1.97 (1.19,3.24)	<0.0001

Post-test differences in outcome variables for parents who did and did not report using the guide

Table III-3 describes outcomes for the group of parents/caregivers who recalled receiving the community resource guide (n=211) compared to those who did not recall receiving the guide (n=784). Approximately 73 percent of those who recalled receiving the guide and 64 percent of those who did not recall the guide reported that their children watched TV fewer than two hours per day. About 40 percent of parents/caregivers in each group watched TV less than two hours per day. In both groups, more than 90 percent of parents/caregivers reported high self-efficacy to limit child TV viewing, yet only 41 percent (recalled guide) and 38 percent (did not recall guide) of parents/caregivers reported actually limiting child TV viewing to less than two hours. Additionally, roughly 50 percent of children had a TV in their bedroom. With regard to physical activity, 85 percent (recalled guide) vs. 80 percent (did not recall guide) of parents/caregivers reported that their child played outdoors for at least 60 minutes per day, while approximately 60

percent of parents/caregivers in both groups met the physical activity recommendations. Nearly all parents/caregivers (96%) reported high self-efficacy to increase their child’s outdoor play.

Post-intervention differences in the outcome variables for parents/caregivers who recalled receiving the guide and those who did not recall receiving the guide were examined to further validate intervention effects observed in comparison one (Table III-5). After adjusting for differences in race/ethnicity, education, child and parents’/caregivers’ age, children whose parents/caregivers recalled receiving the guide were 1.7 times as likely to meet TV viewing recommendations and 1.5 times as likely to meet physical activity recommendations through outdoor play as children whose parents/caregivers did not recall receiving the guide; the effect for outdoor play was marginally significant. In addition, parents/caregivers who recalled receiving the guide were 2.2 times more likely to report high self-efficacy to limit their child’s TV viewing compared to parents/caregivers who did not recall receiving the guide.

Table III-5: Results from logistic regression models examining differences in outcome variables for caregivers who did and did not recall receiving the guide (target site, post-intervention)

Outcome variables	Caregiver recalls receiving the guide (yes vs. no)	
	OR (95% CI)	p-value
TV viewing		
Child watches less than two hours/day	1.70 (1.2, 2.41)	0.003
Caregiver watches less than two hours/day	0.94 (0.68,1.30)	0.71
Caregiver confident can limit child TV	2.21 (1.08,4.56)	0.03
Child does not have TV in bedroom	1.04 (0.76,1.43)	0.80
Caregiver limits TV to less than two hours/day	1.12 (0.81,1.54)	0.49
Someone at WIC discussed limiting TV		
Physical Activity (PA)		
Child play outdoors 60 minutes or more/day	1.51 (0.98,2.33)	0.06
Caregiver meets PA recommendations	1.03 (0.75,1.43)	0.84
Caregiver confident can encourage child PA	1.35 (0.60,3.02)	0.47

Differences in the outcome variables for the intervention site versus comparison sites across the state

Descriptive statistics for the outcome variables at baseline (n=494) and follow-up (n=458) for the comparison sites are presented in (Table III-2). Differences in the outcome variables were also examined for families from the target site at post-intervention and families from the comparison WIC sites (Table III-6). This analysis determined whether scores on the outcome variables at the target site differed from those observed in comparable WIC clinics in upstate NY that were exposed to the *NY Fit WIC* efforts to increase physical activity, but not *FOTG*. Parents/caregivers from the target site were approximately twice as likely to report that they watched TV fewer than two hours per day, 4.5 times as likely to report that they were confident that they could limit their child’s TV viewing, and twice as likely to limit child TV viewing to less than two hours compared to parents/caregivers from WIC sites that did not

implement *FOTG*. Furthermore, children and parents/caregivers from the target site were 2.4 and 1.4 times as likely respectively to meet physical activity recommendations.

Table III-6: Results from logistic regression models examining differences in outcome variables for target site (post-invention) vs. comparison sites (post-test)

Outcome variables	Target vs. Comparison sites (post-test)	
	OR (95% CI)	p-value
TV viewing		
Child watches less than two hours/day	1.20 (0.91,1.57)	0.19
Caregiver watches less than two hours/day	2.18 (1.63,2.92)	<0.0001
Caregiver confident can limit child TV	4.59 (3.19,6.60)	<0.0001
Child does not have TV in bedroom	0.82 (0.63,1.06)	0.13
Caregiver limits TV to less than two hours/day	2.03 (1.52,2.70)	<0.0001
Physical Activity (PA)		
Child play outdoors 60 minutes or more/day	2.35 (1.76,3.16)	<0.0001
Caregiver meets PA recommendations	1.39 (1.07,1.79)	0.04
Caregiver confident can encourage child PA	1.76 (1.00,3.10)	0.05

INTERPRETATION OF RESULTS

Results from the *Families on the Go* intervention showed that incorporating a community resource guide into WIC counseling sessions, has the potential to improve children's television and physical activity behaviors. Consistent with the underlying logic framework for the intervention,^{51, 52} the higher proportions, at post-intervention, of children watching TV for less than two hours per day or playing outdoors 60 minutes or more per day, corresponded to similarly higher proportions of WIC parents/caregivers who reported "confidence in their ability to limit their children's TV viewing time" and to "increase their children's physical activity" after the intervention.

This pilot study demonstrated the feasibility of using a community resource guide incorporated into WIC counseling sessions to improve, simultaneously, WIC parents'/caregivers' practices and self-efficacy and children's physical activity and TV viewing behaviors. The results of this study, however, are consistent with previous evidence that suggests that prevention efforts that focus exclusively on parents as agents of change may be linked with improved child outcomes compared to programs that have a dual focus on parents and children and those with an exclusive focus on children.^{54, 55} The WIC program provided a natural opportunity to work with parents/caregivers as exclusive agents of change and to build on current nutrition services. Results from this study are consistent with two prior studies implemented in a WIC setting.^{56, 57} For example, McGarvey found that a Fit WIC initiative incorporating specific messages into WIC counseling sessions in Virginia was effective at increasing the frequency that parents offered their child water for thirst and the frequency with which they engaged in active play with the child.⁵⁶ Johnson found that a WIC initiative designed to reduce television viewing among WIC clients and staff was successful at increasing the proportion of WIC clients watching TV fewer than two hours per day and increasing the proportion who did not watch TV during meals.⁵⁷ Collectively, these studies provide evidence of the feasibility of a WIC setting for obesity prevention efforts.

By incorporating a community-tailored resource guide into WIC counseling and nutrition education sessions, the *FOTG* intervention functioned as both a family-based and an environment-based determinant of physical activity behavior among WIC children enrolled at the study site.⁵⁸ In addition to the need to develop more programs that are parent-focused rather than child-focused, there is also a need to directly involve parents/caregivers in program development efforts to ensure that programs address caregivers' needs, are feasible to execute, facilitate parents/caregiver buy-in and compliance, and are sustainable.⁵⁹ Although many parents/caregivers did not recall receiving the guide, suggesting the need to improve program exposure, the majority of parents who did recall receiving it, reported that they read the guide (76%). This finding is encouraging given the number of take home materials WIC caregivers generally receive and suggests that they were interested in the guide and valued the information provided. Similarly, the proportions of parents/caregivers who reported that they used components of the guide or thought that the guide helped them to be more active or to get out during the winter, suggests that the intervention was able to prompt a good number of parents/caregivers to identify and utilize the environmental resources in their community. The potential for such an effect is supported by a large body of evidence that shows that enhanced

access to places for physical activity combined with informational activities is effective in increasing levels of physical activity.⁵⁸

Beyond the theoretical feasibility of the effectiveness of the *FOTG* intervention, the integrity of the observed intervention effects is supported by the consistency of the direction of the effects across all comparisons. Specifically, the use of multiple within- and between-group comparisons meant that many alternative explanations for observed intervention effects could be ruled out. For example, since there were no differences in the educational status of parents/caregivers who recalled and that of caregivers who did not recall receiving the guide, we can infer that those who recalled receiving the guide were not a select group of more educated, information-seeking caregivers. Consequently, the additional effects associated with having read the guide, are likely to be explained by exposure to the intervention rather than by chance.

Limitations

This study had several limitations. First, a major limitation of this study is use of non-paired pre-test and post-test data; a pre-test and post-test design is particularly well-suited for testing intervention effects when data are collected from the same cohort of participants at baseline and follow-up. Second, due to the inability to assess the variability in the degree of staff involvement when parents/caregivers were initially introduced to the community guide, we cannot rule out the possibility that the observed results are explained in part by the quality of the nutrition counseling delivered by individual staff at the study site. Finally, since the pre-test and post-test surveys were administered during slightly different time periods, the possibility existed that opportunities for outdoor play differed during the baseline and follow-up survey periods. However, no differences in the outcome variables were identified for parents sampled in early versus late summer for the post-test survey. Although the demographic characteristics of participants at both baseline and follow-up reflected the demographic characteristics of families enrolled at this specific WIC site, our results cannot be generalized to the rest of the NYS WIC population due to known regional differences in factors that influence opportunities for outdoor play.

Conclusion

The results of this study showed that it is feasible to improve parents'/caregivers' ability to promote outdoor play and to limit TV viewing through the incorporation of a community resource guide into WIC nutrition education sessions. Theoretically, use of a community resource guide should be easily transferable and sustainable within WIC sites. Future research should test effects of incorporating a community guide into WIC counseling sessions using more than one WIC site to determine whether the intervention is indeed transferable and sustainable.

The following section of the report will discuss the evaluation of the *Client-Centered Nutrition Education (CCNE)* intervention, a physical activity enhancement pilot project.

IV. EVALUATION OF THE CLIENT-CENTERED NUTRITION EDUCATION PILOT INTERVENTION

The *Client-Centered Nutrition Education (CCNE)* pilot project was an enhancement of the *NY Fit WIC* initiative. The *CCNE* intervention addressed the gaps, weaknesses, results and “lessons learned,” as reported by the Five-State Fit WIC Pilot project. Specifically, WIC programs needed to develop client-centered techniques for nutrition assessment and education, WIC programs needed to expand and update staff trainings.²

CCNE utilizes the facilitated group discussions format, an approach where educators functions as facilitators to encourage clients to discuss approaches to behavioral change among themselves, thus empowering them to change their own behaviors. The facilitator manages the discussion group and corrects misinformation presented by clients.⁶⁰ While there is little research about the effectiveness of this approach, a few studies have found that client-centered nutrition education, or facilitated group discussion, was associated with the motivation to improve diet and exercise behavior⁶¹ of clients, and with increased ability to identify barriers and solutions to addressing obesity.⁶²

The objectives of the *CCNE* pilot study targeted both WIC staff and participants:

1) Primary objectives for WIC Staff:

- To increase the proportion of WIC staff satisfied with their job
- To increase WIC educators’ self-efficacy in their ability to influence parent/caregivers in adopting lifestyle habits for themselves and their families, demonstrated by increasing the proportion of WIC educators who were:
 - Confident in their ability to educate or influence WIC families about healthy lifestyles, and
 - Confident in their ability to educate or influence WIC families about helping their children achieve or maintain a healthy weight.

2) Primary objectives for WIC participants:

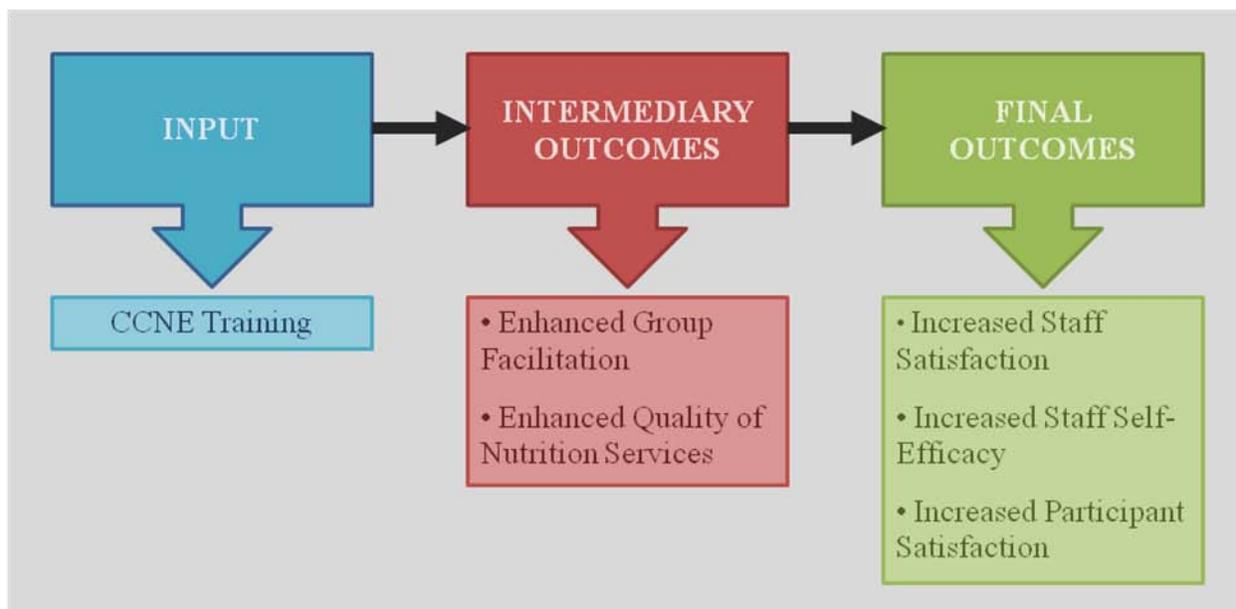
- To increase the proportion of WIC parents/caregivers satisfied with WIC nutrition education, resulting in healthier lifestyles among WIC children
- To promote positive behavioral change through nutrition education
- To improve parents’/caregivers’ self-efficacy with regard to nutrition and adopting healthy lifestyle habits.

The original logic model for the evaluation of the *CCNE* intervention included outcomes that were less likely to be influenced by the successful implementation of facilitated group discussions within the timeframe of the project ([Appendix IV-A](#)). For example, intermediate and long-term outcomes included the adoption of healthy lifestyles and increased retention rates

among WIC children and infants, while the long-term outcome was the reduction in prevalence of childhood overweight. While many of these outcomes might be attainable over time, the evaluation design was not capable of capturing these outcomes given the short study period and the inherent limitations of available survey tools.

As discussed earlier, during the course of the evaluation, the NYS WIC program implemented several interventions aimed at promoting low-fat milk consumption, fruits and vegetables consumption, and reduction of juice intake. Therefore, under these circumstances, it would be difficult, if not impossible, to isolate any potential effects of the *CCNE* intervention on the adoption of several healthy lifestyle behaviors specially pertaining to low-fat milk, fruits and vegetables, and juice consumption. Accordingly, the logic model was revised to include only variables that could be considered specific, measurable, attainable, relevant and time-bound (SMART).⁶⁴ Figure IV-1 presents a simplified version of the logic model. In addition to the anticipated SMART outcomes (e.g., caregiver satisfaction with WIC nutrition education, and self-efficacy regarding the adaptation of healthy lifestyle habits), the survey questions also included physical activity-related outcomes (e.g., frequency of TV viewing and amount of time spent playing outdoors) among participants that facilitated a comparison of effects between the *CCNE* intervention and the statewide *NY Fit WIC* initiative.

Figure IV-1: Simplified *CCNE* logic model



The *CCNE* evaluation occurred in two concurrent phases. The first phase was the evaluation of the implementation process, which sought to assess how the intervention was adopted by *CCNE* agencies. The second phase consisted of an outcome evaluation which sought to assess whether the *CCNE* intervention resulted in the predicted intermediary and final outcomes outlined in the simplified logic model (Figure IV-1).

DESCRIPTION OF THE CCNE INTERVENTION

In *CCNE* trainings, WIC educators were trained to become experts in the facilitative counseling approach. WIC educators were taught skills to facilitate behavior change through client-centered techniques that incorporate parents'/caregivers' life experiences and knowledge, leading to nutrition education sessions that are responsive to clients needs. In facilitated groups, the topics of discussion were similar to those addressed in traditional nutrition education sessions; however, parents/caregivers choose the topic they want to discuss. WIC parents/caregivers were then encouraged to formulate their own nutrition goal(s), develop their own solutions to the nutrition problems, and commit to these solutions. It was hypothesized that, by actively involving families in the learning process, and building on their own experiences, client-centered nutrition education was likely to provide a meaningful experience that promotes positive desired behavioral changes among WIC families.

The key components of the *CCNE* intervention included:

- 1) Incorporating a client-centered approach to WIC nutrition education through the use of facilitated discussions instead of lectures to promote healthy lifestyles; and
- 2) Training WIC staff how to use nutrition education to foster behavioral changes in WIC clients in a manner that is responsive to their clients' needs.

Setting

Between October 1 and December 31, 2006, five WIC agencies were selected to participate in the *CCNE* intervention. The five agencies met the following requirements: received *NY Fit WIC* training, located in diverse areas of the state, served culturally diverse or unique populations, had not yet adopted facilitated discussions or *CCNE* approaches, and volunteered to participate in the study.

Three agencies were initially selected: Jamaica Hospital WIC clinic (Queens), Anthony Jordan Health Center (Rochester), and Saratoga Springs WIC Clinic (Saratoga County). However, due to the higher than anticipated number of volunteers, the NYS Division of Nutrition funded two additional agencies through the NYS Healthy Lifestyles grant: Montefiore WIC Clinic (Bronx), and Harlem Hospital WIC Clinic (Harlem). Two of these agencies, Harlem and Saratoga, were excluded from the evaluation because they were not able to implement the intervention. Thus, three agencies remained in the evaluation study: Rochester, Jamaica, and Montefiore.

Staff Trainings in Facilitated Group Discussions

During April and May 2007, all WIC staff from each of the five selected agencies received two days of training in *CCNE*. The trainings were conducted by a nutrition education consultant. During the trainings, WIC staff were exposed to the background and philosophy of *CCNE*, as well as, skill building exercises to become familiar with communication techniques used in facilitated discussions. Additionally, staff were provided with the opportunity for hands-on practice in small-group settings.

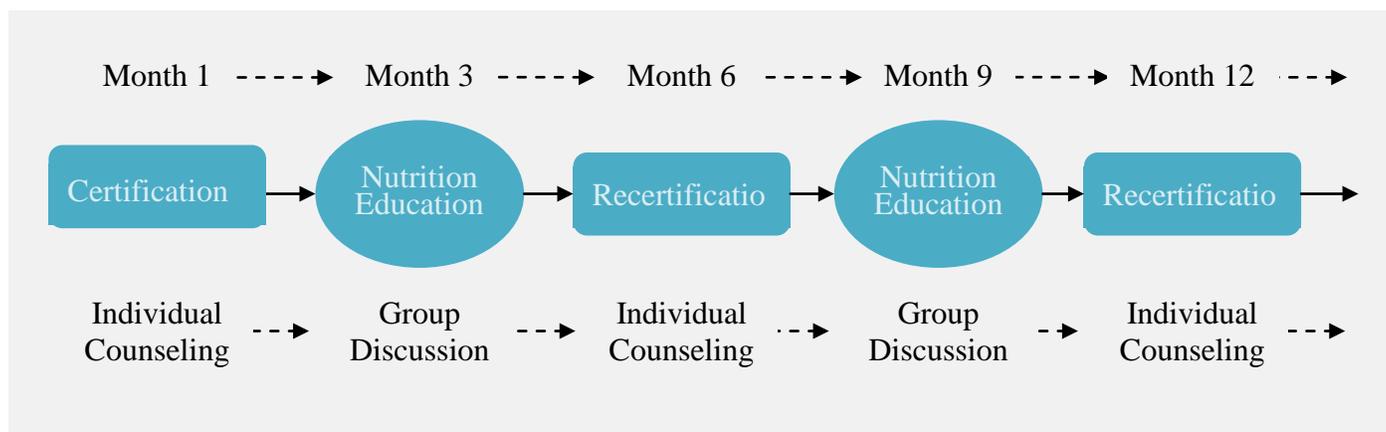
The *CCNE* trainings emphasized the use of open-ended questions by WIC educators to encourage parents/caregivers to express their concerns and share their experiences. The trainings reinforced the role of the WIC educator as a facilitator and discouraged lecturing. Additionally, the trainings highlighted the importance of focusing group discussions on a nutrition education topic chosen by the WIC parents/caregivers, not the educator.

Staff received a training manual developed for the purpose of the *CCNE* intervention: “Participant Centered Nutrition Education Manual: A Guide to Facilitated Discussion” ([Appendix IV-B](#)). The manual was adopted from the Kentucky WIC program and New Mexico WIC program’s “Facilitator’s Guide for Nutrition Education: Listen, Share, Support.”⁶³ Training topics included: Changing dietary behavior, promoting active listening, facilitating discussions, asking open-ended questions, and creating family-friendly environments at WIC clinics.

INTERVENTION IMPLEMENTATION

Facilitated discussion groups were implemented following the completion of the initial two-day training sessions. Typically parents/caregivers receive nutrition education during certification or recertification visits, and again, approximately three months later at nutrition education appointments. In some instances, some participants visit the clinic more frequently, e.g., monthly. The *CCNE* sites were instructed to conduct individual nutrition education using *CCNE* concepts during certification and recertification appointments and to conduct group discussions using *CCNE* techniques at the three-month nutrition education appointment (Figure IV-2).

Figure IV-2: Timeline of NYS WIC nutrition education visits



During the implementation phase, additional support was provided to WIC educators through monthly telephone conferences, as well as, telephone and e-mail contacts. Site visits to observe facilitated groups were also conducted to provide booster trainings (n=7) and support, and to reinforce the concepts of the original *CCNE* trainings.

The next section of the report discusses the evaluation of the facilitated group discussions.

A. EVALUATION OF FACILITATED GROUP DISCUSSIONS

The process evaluation of the *CCNE* intervention was conducted on an ongoing basis during the implementation of the grant. The purpose of the process evaluation was threefold: 1) To provide formative data back to *CCNE* agencies to aid in improving fidelity of the intervention; 2) to offer additional training where improvements were necessary; and 3) to provide summative information on the success or failure of the intervention itself, or the theories behind the intervention.

Direct observations of facilitated group discussions were utilized as the sole data source for evaluating the implementation of the *CCNE* pilot intervention. Observations were conducted from four weeks to three months following implementation. Each agency was visited on three separate occasions to observe facilitated group discussions. Teams of two to three researchers conducted the observational site visits. A maximum of two researchers sat on the edge of each group, typically behind the circle or to the side. The facilitators introduced the researchers to parents/caregivers who were informed that the researchers were observing the facilitation to assess the success of the new technique. Researchers were often ignored as they took notes on a prepared observation tool which assessed nine specific. Refer to [Appendix IV-C](#) for the Observation Tool. These skills are evidence-based and offer specific guidelines and techniques on how to conduct meaningful facilitated discussions.⁶⁰ At the completion of the group session, the researchers met with the facilitators (WIC educators) to provide constructive feedback.

CCNE IMPLEMENTATION RESULTS

A total of 32 facilitated group discussions were observed over a 30-month period. Table IV-1 shows the results of the observations, as well as the number of educators observed on each visit. Educators were evaluated on the following nine skills: Introducing themselves, allowing clients to introduce themselves, using an icebreaker or conversation starter, using open-ended questions, using probing questions, practicing active listening, avoiding the lecture style when addressing the group, limiting the percent of time educators spoke during the discussion, and summarizing the discussion at the end. During a visit, each educator at the site was observed facilitating a group discussion. Repeat observations of the same educator sometimes occurred on another visits. Of the total educators observed (n=18), three were observed three times, eight were observed twice, and seven were observed only once.

The educators were easily able to master the following skill sets:

- Facilitators always remembered to introduce themselves.
- Facilitators consistently asked respondents to introduce themselves and provide their children's names and ages.
- Educators quickly learned to avoid close-ended questions but the open-ended questions that they mastered were often questions that asked participants to report information pertaining to their child or to respond to a knowledge-based question. These types of questions, while open-ended, elicited short responses and did not prod participants to explain and share their experiences, nor did they move the conversation along.
- The observations indicated that participants did not often share misinformation during group sessions, and when they did, the educators successfully handled these instances.
- Most educators quickly learned to avoid lecturing participants. However, a few still lectured intermittently throughout the discussion, especially during the summary of key points at the end of the session.

While most educators were able to listen attentively to participants, many had difficulty using the more sophisticated skills of facilitation:

- Some facilitators experienced difficulties using their critical thinking skills to recognize concerns raised by participants and directing the group to resolve those concerns. Often, participants shared concerns that were neither attended to nor addressed by the facilitators. In some instances, when concerns were addressed, facilitators did not sufficiently pursue the conversation to resolve the issue at hand. This skill, however, improved over time, and only a few facilitators struggled with critical thinking skills during the final set of observations.
- With respect to asking open ended questions, most educators improved significantly over time. A few still experienced difficulties asking appropriate open-ended questions that

probed participants to elicit detailed responses and that helped move the discussion along. In those instances, the conversations were hesitant and characterized by long silences.

- Facilitators frequently forgot to summarize the key points of the discussion, and had to be reminded to do so.
- Facilitators were not always consistent with their use of icebreaker or a conversation starter, and also had to be reminded to do so

Improvements over time

At the time of the final visit, seven educators at the three sites had been observed on more than one occasion. There was an overall improvement in the facilitation skills of most of these educators at the *CCNE* sites. The results also indicated that the rates of progress were highly individualized as educators progressed at different paces:

- One showed excellent facilitation skills from the onset of the observational visits.
- Two educators improved tremendously over time and conducted excellent group discussions when last observed. They addressed clients' concerns, probed for more information, encouraged discussion among group members, and demonstrated a mastery of facilitation skills.
- Two educators struggled at the beginning of the intervention but showed considerable improvements over time. They, however, still had areas that needed improvement. One educator still struggled to apply critical thinking skills, and the other often reverted to lecturing for two to three minutes throughout the discussion.
- One educator exhibited certain positive facilitation skills from the onset, but failed at actively listening by always controlling the discussion, and rarely gave the group participants a chance to channel the flow of the discussions. This particular educator showed no improvements in facilitation skills over time.
- Another educator also showed promise at the start of the intervention but demonstrated no improvements over time. Observations, at the end of the intervention revealed that this educator still had difficulty probing participants. By the end of the intervention, the groups facilitated by this particular educator received poor ratings despite the presence of a second educator who also co-facilitated.

Table IV-1: Process Evaluation results from the observations of facilitated group discussions

Skills	Observations		
	First Visit (n=12)	Second Visit (n=12)	Third Visit (n=8)
Introduced themselves	12	12	8
Allowed clients to introduced themselves	12	12	8
Used an icebreaker or conversation starter	8	6	4
Used open-ended questions	2	7	8
Used probing questions	2	10	7
Practiced active listening	3	6	7
Avoided lecture style	7	10	7
Summarized the discussion	0	5	6
Percent time educator spoke (%)	68	65	43

DISCUSSION OF CCNE IMPLEMENTATION RESULTS

As evidenced by the process indicators used to summarize the results of the direct observations, the *CCNE* pilot intervention was largely focused on building client-centered group facilitation skills among WIC staff. Therefore, in addition to the assessment of the progress staff made in acquiring and applying client-centered group facilitation skills, another realistic short-term outcome of the intervention was the extent to which staff discussed, or were comfortable discussing, specific health-related topics. Under the revised evaluation logic model, “enhanced group facilitation” and “enhanced quality of nutrition services” were intermediary outcomes, and “increased staff satisfaction,” “increased staff self-efficacy” and “increased participant satisfaction” were the final outcomes. The logic model focused the evaluation on the above set of staff and participant outcomes.

WIC educators at the three sites that successfully implemented the *CCNE* intervention were able to improve their facilitation skills over time. In the original research proposal, it had been anticipated that educators would need as much as three months of support in order to master the art of facilitation. However, the progress was very individualized, happening instantly for some educators and taking much longer for others.

At the initial staff trainings, educators were very anxious about dealing with misinformation that participants sometimes share during the discussions. However, during the observed facilitated discussions, educators successfully handled instances where parents/caregivers presented misinformation.

During the first visits, facilitators struggled to get the discussion going, had difficulty asking questions, and were tense and hesitant with clients. During the last visit, many well-managed facilitated groups were observed for all but one group. The one group that was not successful was facilitated by two educators. During the group, the educators missed a number of opportunities to probe WIC parents/caregivers to further elaborate on their statements. The group’s conversation was stilted and peppered with interminable silences.

Lessons Learned

Several lessons can be learned from this pilot:

- *Facilitation can be rewarding:* Educators enjoyed many aspects of facilitation, and utilized them during their counseling sessions, as well as, in their personal lives. However, educators repeatedly mentioned the need for continuous support and training in WIC general topics and in facilitation skills. Specifically, there was a need for follow-up training in critical thinking and probing skills.
- *Good facilitation takes time:* The original plan that facilitation would be established in the clinics in within three months of training did not succeed.
- *Coordinator must have strong leadership skills,* and believe in the benefits of the facilitative approach. In addition, the coordinator needs to be a good communicator, hands-on, and available to resolve educators’ issues as they arise.

- ◆ *Transitioning the clinic's schedule* from individual contacts to group contacts varies by clinic. The results of the observations indicated that agencies that had not previously conducted group discussions or agencies that had a small caseload, experienced more difficulties transitioning to group discussions. Coordinators have to be unrelenting at trying various approaches to fit group sessions within their clinic's schedule. This change may take up to a year or more to institutionalize. In the end, facilitation can be used both during individual contacts, and during group sessions.

Limitation

The first limitation of this evaluation centered on the use of non-validated questions to measure the impact of facilitated group discussions on behavior change. This was an inevitable weakness due to the lack of literature measuring the impact of facilitated group discussions on WIC populations.

The final limitation was the absence of more data to fully assess the implementation of the intervention within each agency. A comprehensive process evaluation would have identified agency specific challenges and barriers, particularly those experienced by the two agencies that were unable to implement the *CCNE* intervention.

The next section of the report discusses evaluation of the impact of *CCNE* on relevant staff outcomes.

B. EVALUATION OF CCNE'S IMPACT ON STAFF OUTCOMES

Staff surveys were administered to all staff at the three agencies that successfully implemented the *CCNE* intervention. The pre-intervention surveys were administered to 55 staff from March to June 2007. The post-intervention survey was administered in October/November 2009 to 50 staff. See [Appendix IV-D](#) and [IV-E](#) for both pre- and post-intervention surveys respectively.

Survey data were analyzed to assess staff's perceptions of nutrition education, their comfort level with *CCNE*, and their satisfaction with *CCNE* and with the WIC program. The analyses of the baseline and follow-up staff surveys for the evaluation of the *CCNE* pilot intervention were informed by the results of the process evaluation. Specifically, the process evaluation results suggested that the only logical staff outcomes (SMART) would pertain to overall job satisfaction, satisfaction with nutrition education, and comfort and confidence in discussing health-related issues with parents/caregivers. Accordingly, the staff survey analyses were restricted to questions that would facilitate the pretest-posttest comparisons of these relevant outcomes.

Data Collection

All staff at the three *CCNE* agencies completed both the pre- and post-intervention surveys. Though the surveys were offered to all staff members, the main interest was in the responses from staff that provides nutrition education to parents/caregivers, CPAs and nutrition assistants.

Analysis Plan

Due to the small sample sizes, site-specific estimates could not be generated to assess variation in outcomes across study sites. Based on sample size calculations to detect a five percent difference with a statistical power of at least 80 percent, the required minimum samples at baseline and follow-up would each have to be 300. The following section highlights pre- and post-intervention differences in relevant outcome variables among staff that received *CCNE* training. These differences are descriptive and do not include testing for statistically significant differences.

CCNE STAFF RESULTS

DESCRIPTIVE RESULTS

Results for the 2007 baseline and the 2009 follow-up demographic outcomes are presented in Table IV-2. The staff at the *CCNE* sites identified predominantly as Hispanic and non-Hispanic African Americans, had a Bachelor’s degree or higher and had been, on average, employed by WIC for about nine years. Nearly half of the staff were CPA or Nutrition Assistants and were directly involved in delivering nutrition education.

Table IV-2: CCNE staff demographics

	CCNE Sites	
	2007 Pre-intervention	2009 Post-intervention
	(n=55) n (%)	(n=50) n (%)
Position		
Coordinator	6 (11)	4 (8)
Site Manager	3 (5)	3 (6)
CPA	20 (36)	18 (36)
Nutrition Assistant	7 (13)	9 (18)
Support Staff	18 (33)	14 (28)
Education		
High School graduate	8 (15)	5 (10)
Some College	13 (24)	10 (20)
Bachelor’s degree or higher	24 (44)	26 (52)
Other	8 (15)	7 (14)
Race/Ethnicity		
Hispanic	18 (33)	15 (30)
White Non-Hispanic	13 (24)	9 (18)
Black Non-Hispanic	18 (33)	15 (30)
Other/unknown	6 (11)	10 (20)
Years working at WIC (mean (SD))	8.3 (5.7)	9.7 (6.7)

OUTCOME RESULTS

The pre- and post-intervention staff outcomes for CPAs and Nutrition Assistants are presented in Table IV-3. There were a number of changes from the baseline to the follow-up survey. Compared to baseline, the follow-up survey results indicated a higher percent of staff who reported being satisfied with their jobs as WIC employees. On the other hand, the follow-up survey showed that a smaller percent of staff reported being “comfortable discussing physical activity,” having “enough resources” to educate parents/caregivers, and being “confident in their abilities to educate parents about healthy lifestyles and helping their child to maintain a healthy weight.” There was also a noticeable increase in the proportion of missing answers for all the questions post-intervention.

Table IV-3: CCNE staff outcomes (CPAs and Nutrition Assistants only)

	2007 Pre-intervention (n=31)	2009 Post-intervention (n=29)
	-----Percent-----	
Satisfied with work done as WIC Employee		
Very Satisfied/Satisfied	77	86
Missing/Not Applicable	10	0
Comfortable discussing physical activity		
Very comfortable/Comfortable	90	83
Missing/Not applicable	10	17
Comfortable discussing television viewing		
Very comfortable/Comfortable	84	83
Missing/Not applicable	10	17
Enough resources to educate participants		
Strongly agree/Agree	87	66
Missing/Not applicable	10	31
Confident in ability to educate parents about healthy lifestyle		
Strongly agree/Agree	81	69
Missing/Not applicable	13	31
Confident in ability to educate parents to help child maintain healthy weight		
Strongly agree/Agree	81	69
Missing/Not applicable	13	31

INTERPRETATION OF CCNE STAFF RESULTS

According to the evaluation framework, the *CCNE* intervention was to impact the NYS WIC program in three phases: First, by enhancing group facilitation techniques and nutrition education; second, improving WIC staff job satisfaction and self-efficacy in their ability to influence parent/caregivers to adopt healthy lifestyle habits; and last, by improving WIC parent/caregiver satisfaction with WIC services and their ability to adopt healthy lifestyle habits. The *CCNE* staff survey assessed the second phase of the implementation of the *CCNE* intervention by comparing staff outcomes at baseline and follow-up.

The comparison of baseline and follow-up staff outcomes highlighted an increase in satisfaction among CPAs and nutrition assistants following the implementation of the *CCNE* intervention. However, the *CCNE* intervention was not able to improve the self-efficacy of CPAs and nutrition assistants with regard to their comfort levels in “discussing physical activity and TV viewing”, and “confidence in their ability to educate WIC parents/caregivers about healthy lifestyles and maintaining their children’s healthy weight.”

The survey results corroborated one of the main findings of the *CCNE* process evaluation which highlighted that the rates of progress in attaining facilitation skills were very individualized. Since some staff took longer than others to develop facilitation skills, it is reasonable to assume that, at the time of the follow-up survey, their perceived self-efficacy in utilizing the new technique would not necessarily be at the pre-intervention levels, although observations indicated generally high skill levels. A case could be made that time and support is required for WIC educators to be fully comfortable using facilitation techniques during group discussions. Furthermore, based on the relatively high levels of job satisfaction at follow-up, WIC educators did not seem to have a negative outlook resulting from the implementation of the intervention.

Limitations

The first limitation of the staff evaluation was the very small sample size which precluded the use of any tests of significance. Although there were baseline and follow-up differences, this could have been due to factors other than the *CCNE* intervention.

The second limitation of the staff evaluation was the absence of a staff cohort, who could have been tracked to determine the possible impact of the *CCNE* intervention. However, due to the very small sample size, the identity of staff involved in the study would have been compromised.

Conclusion

The results of the staff evaluation highlight the importance of committing time and regular trainings during the implementation of the *CCNE* intervention to bolster staff self-efficacy in the use of group facilitation techniques.

The next section of the report discusses evaluation of the impact of *CCNE* on relevant the parent/caregiver outcomes.

C. EVALUATION OF CCNE'S IMPACT ON PARTICIPANT OUTCOMES

Pre- and post-intervention surveys ([Appendix IV-F](#) and [IV-G](#)) were administered by trained field interviewers to samples of parents/caregivers from May through July 2007, and from May through August 2009, respectively, at the three study sites that successfully implemented the intervention. Parent/caregiver satisfaction with WIC nutrition education, self-efficacy regarding nutrition and adopting healthy lifestyle habits, and questions related to physical activity outcomes (e.g., frequency of TV viewing and amount of time spent playing outdoors) were among the questions included on the surveys to assess the effects of the *CCNE* intervention. Demographic factors, such as child and parent's/caregiver's age, child and parent's/caregiver's gender, parent's/caregiver's race/ethnicity, and parent's/caregiver's education, were also included in the *CCNE* surveys.

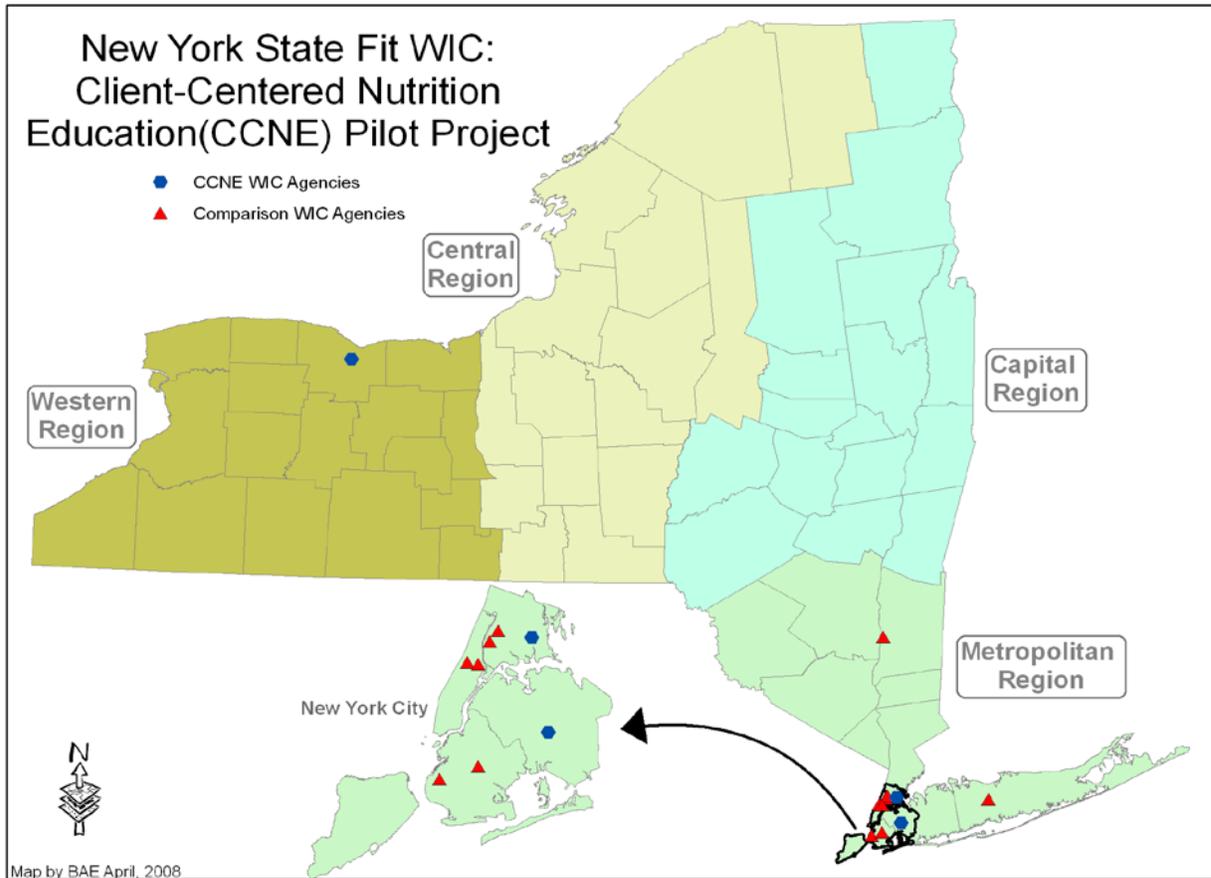
Data Collection

Field interviewers administered both the baseline and follow-up participant surveys. All interviewers attended a training session, either in person or by phone, prior to data collection, where they were introduced to the NYS WIC program and the *CCNE* project. Interviewers also provided the research team with an IRB certificate prior to interacting with parents/caregivers. The interviewers were responsible for prescreening parents for eligibility, explaining the purpose of the survey, distributing and collecting signed informed consent forms, and administering the surveys. A total of 359 and 356 surveys were collected at baseline and at follow-up, respectively.

Analysis Plan

The first step of the analysis was to determine if there were any changes at the three agencies following the implementation of the *CCNE* intervention, by comparing parents'/caregivers' outcomes at baseline to those at follow-up. The second step of analysis assessed whether the observed changes at follow-up at the *CCNE* sites could be solely attributed to the *CCNE* intervention. This was accomplished by comparing the follow-up survey results from the three *CCNE* sites to follow-up survey results from eight *NY Fit WIC* comparison sites. The comparison sites were selected on the basis of the following criteria: 1) They were located in the Metropolitan region of NYS, 2) they had received *NY Fit WIC* training around the same time as the *CCNE* sites (prior to fall, 2006); and 3) their racial/ethnic distributions in 2006 were comparable to those of the three *CCNE* sites in 2006. The map below highlights the locations of *CCNE* and sampled comparison group main agency sites.

Figure IV-3: CCNE and sampled comparison group main agency sites for participant surveys by region



SAS version 9.1 was used to conduct all data analyses. The results from these two surveys were compared using a combination of descriptive statistics (frequencies and means) and logistic regression analysis (adjusted odds ratios).

CCNE PARTICIPANT RESULTS

DESCRIPTIVE RESULTS

Table IV-4 displays demographic characteristics of parents/caregivers who responded to the pre- and post-intervention surveys. With the exception of race/ethnicity and educational attainment, the characteristics of the respondents were similar at pre- and at post-intervention. The largest proportion of respondents identified as Hispanic parents/caregivers pre- (43.2%) and post-intervention (52.8%), with the second largest racial/ethnic category representing African Americans at both pre- (33.2%) and post-intervention (25.3%). The proportion of respondents who had college education or more at post-intervention (47.5%) was higher than at pre-intervention (35.1%).

Differences in characteristics for the CCNE sites versus comparison sites

The baseline and follow-up demographic results at comparison and CCNE sites are also presented in Table IV-4. At follow-up, the characteristics of parents'/caregivers' and their children's mean age were similar in both CCNE and comparison sites. However, at the comparison sites, there were more female children, and the proportions of African Americans and white respondents were higher. In contrast, at the CCNE sites, the proportion of Hispanic respondents was higher, and the proportion of respondents who did not graduate from high school was also higher.

Table IV-4: CCNE and comparison demographic descriptive at baseline and follow-up

	CCNE		Comparison	
	Pre-Intervention (2007) n=359	Post-Intervention (2009) n=356	Baseline (2006) n=410	Follow-up (2008) n=465
Demographic variables				
Child's age (months; mean (SD))	40.6 (10.8)	41.5 (11.1)	39.8 (10.4)	40.2 (10.2)
Caregivers' age (years; mean (SD))	30.2 (8.2)	30.6 (7.8)	31.0 (7.7)	31.1 (8.0)
	-----Percent-----			
Child's gender (female)	50.8	44.1	47.3	52.0
Caregivers' race/ethnicity ¹				
White	8.1	7.9	17.6	16.8
Black	33.2	25.3	35.9	36.1
Hispanic	43.2	52.8	34.6	36.8
Other	13.7	10.1	8.8	7.3
Caregivers' education ¹				
Some HS or less	29.3	25.6	8.8	5.0
HS graduate/GED	35.4	26.7	29.8	34.2
Some College or more	35.1	47.5	40.2	41.3

¹Percent does not add to 100 due to missing data

OUTCOME RESULTS

Impact of *CCNE* on Caregivers' Perceptions of WIC Nutrition Education

Parents/caregivers reported high levels of “satisfaction with WIC nutrition education” at pre- (93.4%) and at post-intervention (93.8%), these groups were not significantly different (Table IV-5). There were statistically significant increases in the proportion of parents/caregivers who reported that they had “learned something new about TV viewing” and “about physical activity.” However, there was a statistically significant decrease in the proportion of parents/caregivers who characterized WIC nutrition education sessions as “not too long” after the sites implemented facilitated group discussions.

Impact of *CCNE* on Caregivers' Self-Efficacy and Adoption of Healthy Lifestyles

The proportion of parents/caregivers who reported being “confident in their ability to reduce their children’s TV viewing” decreased between pre- and post-intervention as did the proportion of parents/caregivers who reported they “viewed TV less than two hours per day” (Table IV-6). There were no significant differences at pre- and post-intervention in the proportion of caregivers who felt “comfortable talking to WIC staff about health-related issues.” The proportion of caregivers who reported that they “offered or encouraged their children to be physically active” increased post-intervention. Similarly, the proportion of parents/caregivers who reported that their “children played outdoors for 60 minutes or more per day” also increased between pre- and post-intervention.

Revitalizing WIC Nutrition Services: *NY Fit WIC*

Table IV-5: Caregivers' perceptions and attitudes toward WIC nutrition education at baseline and follow-up

	CCNE Sites		OR (95% CI) ³	p-value*
	Pre-Intervention (ref) ¹ 2007 (n=301) Percent	Post-Intervention ² 2009 (n=208) Percent		
Satisfied with WIC Nutrition Education ⁴	93.4	93.8	1.21 (0.52 - 2.82)	0.6592
Satisfied with WIC Group Sessions ⁵	*****	84.6	N/A	N/A
Learned Something New about Physical Activity	41.2	60.6	2.35 (1.57 - 3.53)	< 0.0001
Learned Something New about TV Viewing	33.2	51.4	1.87 (1.24 - 2.82)	0.0026
WIC Nutrition Education: Not Too Long	85.1	69.7	0.45 (0.30 - 0.80)	0.0042
WIC Nutrition Education: Not Boring	77.7	70.7	0.95 (0.60 - 1.51)	0.8215
WIC Nutrition Education: Not Repetitive	60.5	59.1	1.41 (0.94 - 2.12)	0.1006
WIC Nutrition Education: Useful	91.4	79.3	0.60 (0.31 - 1.15)	0.1235

1. Type of nutrition education offered before *CCNE* (individual nutrition education counseling)

2. Type of nutrition education offered after *CCNE* (Facilitated Group Discussions)

3. Odd ratios adjusted for caregiver education and caregiver race/ethnicity

*. Statistically significant at p <0.05

4. Analyzed only among those who said they had a nutrition education class

5. This question was not included in the baseline survey

Revitalizing WIC Nutrition Services: *NY Fit WIC*

Table IV-6: Caregiver self-efficacy and behaviors that promote healthy lifestyle habits

	CCNE Sites		OR (95% CI) ³	p-value*
	Pre-Intervention (ref) ¹ 2007 (n=359) Percent	Post-Intervention ² 2009 (n=356) Percent		
Caregiver Self-Efficacy				
Confidence In Ability to Reduce Child TV Viewing	70.2	67.7	0.69 (0.49 - 0.98)	0.0377
Confidence In Ability to Encourage Child to be Physically Active	93.3	92.7	1.12 (0.57 - 2.21)	0.746
Comfort Talking to WIC Staff about any Health-related Issues	92.8	88.5	0.62 (0.34 - 1.12)	0.1135
As Result of Nutrition Education, Started to Set Goals to Improve Health	79.4	81.2	1.14 (0.74 - 1.75)	0.5551
Behaviors that Promote Healthy Lifestyles Habits				
Offer and Encourage Child to Be Physically Active	88.9	93.5	2.45 (1.26 - 4.76)	0.0083
Offer and Encourage Child to Reduce TV Viewing Time	54.3	62.6	1.35 (0.98 - 1.85)	0.0663
Caregiver Watches Two Hours or less of TV Daily	66.3	60.1	0.72 (0.52 - 1.00)	0.0462
Caregiver Does not Watch TV During Meals	57.1	54.8	0.88 (0.65 - 1.2)	0.422
Child Watches Two Hours or less of TV Daily	61.0	54.2	0.80 (0.59 - 1.09)	0.1536
Child Plays Outdoor + 60 Minutes Daily	60.7	69.4	1.59 (1.15 - 2.20)	0.0051

1. Type of nutrition education offered before *CCNE* (individual nutrition education counseling)

2. Type of nutrition education offered after *CCNE* (Facilitated Group Discussions)

3. Odd ratios adjusted for caregiver education and caregiver race/ethnicity

*. Statistically significant at p <0.05

Difference in Post-Intervention Participant Outcomes at *CCNE* and Comparison sites

There were no significant differences in parents'/caregivers' perceptions and attitudes toward WIC nutrition education at *CCNE* sites and comparison agencies (Table IV-7). A significantly smaller percentage of parents/caregivers at the *CCNE* sites felt confident in their ability to reduce their child's TV viewing. A significantly higher percent of parents/caregivers at *CCNE* sites reported that they encourage their child to be physically active. This was corroborated by the significantly larger proportion of children at *CCNE* sites who played outdoors for more than 60 minutes a daily. Also, a higher proportion of parents/caregivers at *CCNE* sites reported that they did not "watch TV during meals" when compared to their counterparts at the comparison agencies.

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Table IV-7: Differences in outcome variables for CCNE sites (post-intervention) vs. comparison sites (post-test)

	CCNE Sites	Comparison Sites	OR ³ (95% CI)	p-value*
	Post-Intervention ¹ 2009 (n=356) Percent	Follow-up (ref) ² 2008 (n=465) Percent		
Perceptions and Attitudes Toward WIC Nutrition Education				
Satisfied with WIC Nutrition Education	93.8	91.0	1.63 (0.61 - 4.31)	p = 0.3292
Learned Something New about Physical Activity	60.6	51.9	1.35 (0.86 - 2.10)	p = 0.1896
Learned Something New about TV Viewing	51.4	46.9	1.16 (0.74 - 1.81)	p = 0.5173
Caregiver Self-Efficacy				
Confidence In Ability to Reduce Child TV Viewing	67.7	70.1	0.56 (0.38 - 0.82)	p = 0.003
Confidence In Ability to Encourage Child to be Physically Active	92.7	88.6	1.37 (0.61 - 3.11)	p = 0.446
Comfort Talking to WIC Staff about any Health-related Issues	88.5	88.6	0.99 (0.55 - 1.75)	p = 0.9607
Started to Set Goals to Improve Health	81.2	77.4	1.03 (0.68 - 1.57)	p = 0.8896
Behaviors that Promote Healthy Lifestyles				
Offer and Encourage Child to Be Physically Active	93.5	79.8	9.1 (4.52 - 18.32)	p < 0.0001
Offer and Encourage Child to Reduce TV Viewing Time	62.6	68.0	0.84 (0.60 - 1.19)	p = 0.3261
Caregiver Watches Two Hours or less of TV Daily	60.1	48.2	1.39 (0.99 - 1.94)	p = 0.0547
Caregiver <u>does not</u> Watch TV During Meals	54.8	41.9	1.94 (1.39 - 2.69)	p < 0.0001
Child Watches Two Hours or less of TV Daily	54.2	53.1	0.93 (0.67 - 1.29)	p = 0.6602
Child Plays 60 Minutes or More Daily	69.4	54.2	1.84 (1.31 - 2.60)	p = 0.0005

1. Type of nutrition education offered after CCNE (facilitated group discussions)

2. Type of nutrition education offered (individual nutrition education counseling)

3. Adjusted for child's gender, caregiver race/ethnicity, and caregiver education

*. Statistically significant at p <0.05

INTERPRETATION OF CCNE PARTICIPANT RESULTS

According to the evaluation framework, the *CCNE* intervention was to revitalize the nutrition services of the NYS WIC program in three phases. In phase one, the intervention would have resulted in an enhancement of group facilitation techniques and nutrition education services. In phase two, these agency-specific improvements would have promoted improvements in WIC staff outcomes, such as job satisfaction and self-efficacy in their ability to influence parent/caregivers to adopt healthy lifestyle habits. In phase three, the improved staff outcomes would have translated to improvements in WIC parent/caregiver outcomes, such as satisfaction with WIC services and the adoption of healthier lifestyle habits in WIC parents/caregivers and children.

The *CCNE* parent/caregiver surveys assessed the success of the third phase of the implementation of the *CCNE* intervention with the use of two separate comparisons. The pretest-posttest comparisons suggested that the *CCNE* intervention contributed significantly to the promotion and adoption of physical activity among WIC children. There was a significant increase in the proportion of children who “played 60 minutes or more daily” between the pre- and post-*CCNE* intervention surveys. In addition, the percent of children who “played for 60 minutes or more daily” was higher at the *CCNE* sites, than at the comparison sites. These results were corroborated by the pre/post-intervention comparisons which indicated that parents/caregivers had “learned something new about physical activity” during facilitated group discussions. Parents/caregivers then were empowered to encourage their children to be more physically active.

Although WIC parents/caregivers at *CCNE* sites did not have improvements in their outcomes in the pre/post-intervention comparison, their post-intervention outcomes were significantly higher when compared to their peers at the comparison sites. This was demonstrated by the significantly larger proportion of parents/caregivers at the *CCNE* sites who “did not watch TV during meals” post-intervention. This suggested a possible temporal effect in the improvement of parents’/caregivers’ outcomes. Instead of expecting a simultaneous improvement in parental and child outcomes, WIC children outcomes preceded parents’/caregivers’ outcomes. By promoting healthier habits in their own children, WIC parents/caregivers may eventually adopt these habits.

Although the pre/post-intervention and statewide comparisons did not find any significant changes in WIC parent’s/caregiver’s satisfaction with WIC nutrition education, the findings indicated that a large proportion of WIC parents/caregivers were satisfied with WIC nutrition education. In addition, a large proportion of WIC parents/caregivers, roughly 88 percent, were satisfied with the facilitated groups.

Limitations

A limitation of the study was the absence of a sizeable cohort of parents/caregivers who could be tracked from pre- to post-intervention to determine the possible impact of the *CCNE* intervention. Unfortunately, it was not logistically feasible to match WIC records of pre-intervention survey respondents to post-intervention survey respondents because of the low

retention rates in the NYS WIC program of children over a two-year period. Furthermore, it was unreasonable to expect that an intervention, which was specifically targeted to staff, would have had an immediate impact on participants. A longer term evaluation might find an impact on participants after staff have institutionalized the facilitated group discussion practices.

Another limitation of the study was the possibility that the different administration dates of the *CCNE* and *NY Fit WIC* participant surveys could have had a historical impact on the data. The follow-up *NY Fit WIC* participant survey was administered in the spring of 2008 while the post-intervention *CCNE* surveys were administered in the spring of 2009. Although the follow-up *NY Fit WIC* and post-intervention *CCNE* surveys were administered in different years, the agencies had received *NY Fit WIC* training at similar times. A related limitation is the fact that the *NY Fit WIC* surveys were self administered, while the *CCNE* surveys were administered on a one-on-one basis by hired survey administrators. This also might account for differences found between the *NY Fit WIC* and *CCNE* surveys.

Conclusion

The results of this study highlight the importance of *Client-Centered Nutrition Education* in promoting healthy lifestyle behaviors among NYS WIC participants. In particular, the *Client-Centered Nutrition Education* intervention enhanced one of the main *NY Fit WIC* outcomes, which was to increase the proportion of NYS WIC children who are physically active.

V. LESSONS LEARNED AND CONCLUSIONS

LESSONS LEARNED

The following lessons learned relate to the design and implementation of the *NY Fit WIC* initiative:

- *During the implementation phase, focus groups should be conducted within local WIC agencies, with participants, to inform the development and implementation of NY Fit WIC appropriate activities within their WIC clinic.*
- *During the implementation phase, the WIC program should clearly define specific goals and objectives of the NY Fit WIC intervention while being mindful of the need for flexibility. These goals and objectives should inform local WIC agencies as they develop and implement NY Fit WIC-appropriate activities.*
- *During the implementation phase, WIC staff benefitted from regular booster trainings. All three components of the NY Fit WIC initiative sought to teach WIC staff skills and theories that were unfamiliar and required regular practice. These booster trainings can improve staff self-efficacy and willingness to adopt NY Fit WIC concepts.*
- *Implementation of a statewide initiative to improve physical activity among WIC staff, caregivers and children is likely to succeed in an environment where there is a statewide emphasis on use of consistent physical activity messages. The long-standing statewide NYS Eat Well Play Hard (EWPH) framework for promoting healthy lifestyles among young children provided a supportive context for the adoption and implementation of the NY Fit WIC initiative. The EWPH framework has been in existence for more than a decade and one of its core strategies is the promotion of age-appropriate physical activity among all children receiving nutrition assistance and nutrition education in NYS. The NY Fit WIC initiative seemingly provided the NYS WIC program with an opportunity for implementing this long-standing statewide EWPH strategy for promoting childhood physical activity.*

The following lessons learned relate to the design of the *NY Fit WIC* evaluation:

- *A comprehensive evaluation should have both a process and an outcome evaluation. The process evaluation will assess the fidelity of the implementation, and the outcome evaluation will assess its impact.*
- *An evaluation needs to be guided by a logic model to generate realistic and targeted outcomes. The logic model should be subjected to revisions and regular updates that reflect changes in the scope of the project and/or changes in the implementation of the intervention.*
- *The evaluation team needs to coordinate with WIC program staff to ensure that the timing of both the implementation and evaluation of the intervention are appropriate.*

Involving the research team prior to the implementation of the intervention facilitates the ability to generate appropriate process measures.

- ◆ *An evaluation needs validated and targeted research instruments.* Within the context of the *NY Fit WIC* evaluation, the research tools need to be brief, easy to administer, specific to WIC populations, nutrition education and age-appropriate physical activity.
- ◆ *The NY Fit WIC initiative would have benefited from very brief and frequent surveys conducted over the life of the project.* These mini-surveys would have captured nuanced changes in staff and participant outcomes.
- ◆ *Within the context of an intervention with separate enhancements, the study design should coordinate the timing of the evaluation of the main intervention with the timing of evaluation of each enhancement.* Such a coordinated measurement plan will provide the opportunity to assess and differentiate the individual impact of each enhancement.
- ◆ *The evaluation should have incorporated measures to assess the sustainability of the NY Fit WIC initiative.*

TRANSFERABILITY

These recommendations reflect lessons learned from all three components of the *NY Fit WIC* initiative:

- ◆ *WIC agencies that would like to implement the FOTG intervention will need to invest in resources to generate comprehensive and up-to-date community guides.* The research team provided maps and regular updates on age-appropriate, local and seasonal activities, which was a time-intensive endeavor. Copies of the community guides and the *FOTG* training materials are available in [Appendix III-A](#) and [Appendix III-B](#), respectively.
- ◆ *WIC agencies that would like to implement Client-Centered Nutrition Education will need to have infrastructure in place to host facilitated group discussions.* The agencies will need to designate space and appropriate child care services to allow for comfortable groups. Additionally, these agencies will need to have the appropriate human resources to manage the change in the clinic flow that will result from the implementation of facilitated group discussions. A copy of the facilitator's manual is available in [Appendix IV-B](#).
- ◆ *WIC programs will need to provide their local agencies with mini-grants to increase interest and buy-in into the Fit WIC intervention.* The Healthy Lifestyle mini-grants encouraged WIC agencies to be actively involved in the implementation of the intervention which increased staff buy-in. Table of Contents for both the Trainer's handbook and Resource book are available in [Appendix II-C](#) and [Appendix II-D](#) respectively. The entire document is available upon request.

In addition, the *NY Fit WIC* research team will make all materials available to the general public and staff are available to answer any inquiries regarding the project.

CONCLUSIONS AND DIRECTIONS FOR FUTURE RESEARCH

This study has shown that the *NY Fit WIC* initiative, including the two enhancement projects, was able to positively influence physical activity behavior among WIC staff, WIC parents/caregivers and WIC children through the incorporation of physical activity messages into WIC nutrition services. Results from the two pilot studies have provided evidence of the feasibility of enhancing the impact of the *NY Fit WIC* intervention through the incorporation of community resource guides and use of facilitated group discussions during WIC nutrition education sessions. The observed results were not only consistent with the hypothesized effects of each intervention in the evaluation logic models, but also add to previous studies showing that it is much easier for WIC staff and other health professionals to discuss physical activity with parents of overweight children than it is for them to directly discuss overweight and obesity.^{65, 66}

The results further validated the significance of the evidence-based decision made by the NYS WIC program to focus *NY Fit WIC* messages on physical activity and other healthy lifestyles rather than on overweight and obesity – both of which are difficult topics for staff to discuss with parents/caregivers. The rationale for focusing on healthy lifestyles instead of overweight and obesity as *NY Fit WIC* topics was to facilitate buy-in on the part of WIC educators. Evidence showing that physical activity behavior improved among WIC staff over the course of the study does indeed validate the rationale for focusing *NY Fit WIC* messages on less sensitive topics such as physical activity and other healthy lifestyles habits. The fact that improvements in physical activity behaviors were observed among parents/caregivers and WIC children would therefore have not been unexpected. Such an effect demonstrates that staff felt empowered, by the *NY Fit WIC* initiative, to discuss ways of improving family-based physical activity with parents/caregivers once they (WIC staff) took steps to improve their own physical activity habits. The differential impact of the intervention by race/ethnicity, however, points to the need for continued efforts to address health disparities within all WIC local agencies, particularly those that serve diverse populations.

In addition to impact on staff, parent/caregiver, and child behavior, another important indicator of the successful revitalization of the NYS WIC program nutrition services is improvement in retention (or recertification) rates among eligible children. The results of this study showed that retention rates improved at three of the 32 agencies for which analysis could be conducted. Due to the lack of adequate post-*NY Fit WIC* data at many WIC local agencies, the retention analyses were conducted using data from only one-third of all NYS WIC local agencies. Future evaluation projects will need to include the assessment of retention rates using data from all NYS WIC agencies. Both the *Client-Centered Nutrition Education* and the *Families on the Go* pilot intervention have the potential to also increase retention rates among WIC children if they were to be implemented statewide. However, both pilot interventions would need to be retested using larger samples of WIC local agencies to determine whether they can actually be replicated statewide.

A future evaluation project for the NYS WIC program would be to conduct a comprehensive process evaluation to identify the challenges, infrastructure and resource needs particular to the implementation of *CCNE*. Such a study would provide invaluable information to agencies intended on implementing facilitated group discussions in their respective clinics.

Finally, this evaluation did not include measures of sustainability. In addition to improved retention rates in the short-term, another key indicator of success for the *NY Fit WIC* initiative would be evidence that suggested that the intervention will be sustainable even after the NYS WIC program was no longer able to provide the Healthy Lifestyle mini-grants. It is important for WIC agencies to ensure that educators continue to incorporate physical activity and other healthy lifestyle messages into counseling sessions so that future WIC participants also will have the potential for improving their physical activity behavior long after the evaluation study has been completed.

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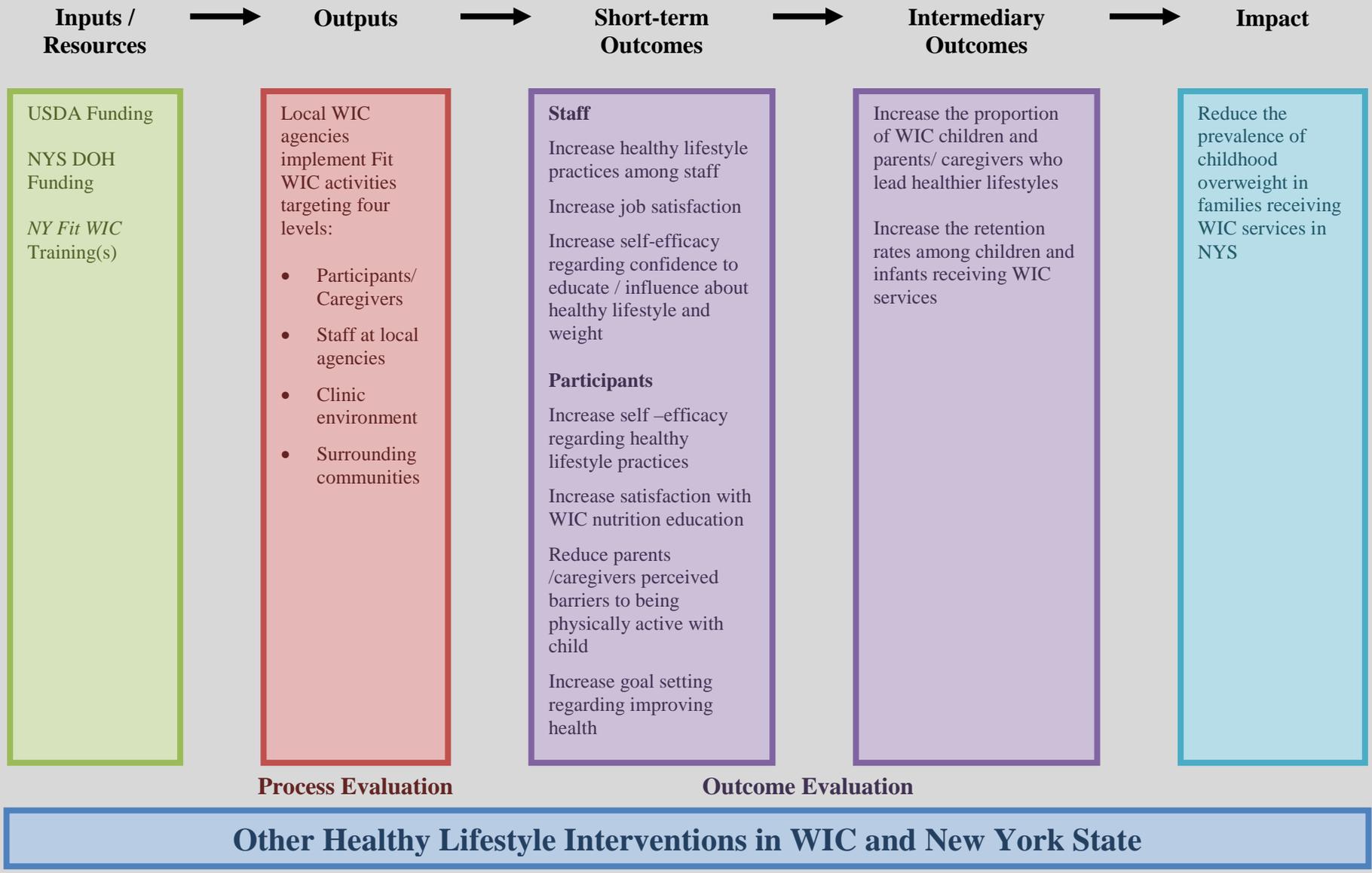
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II. APPENDICES

WIC Special Project WISP-06-NY-1

APPENDIX II-A	<i>NY Fit WIC</i> Logic Model
APPENDIX II-B	Timeline of NYS WIC Staff Trainings
APPENDIX II-C	<i>NY Fit WIC</i> Trainer Handbook - Table of Contents
APPENDIX II-D	<i>NY Fit WIC</i> Resource Book - Table of Contents
APPENDIX II-E	<i>NY Fit WIC</i> Materials Purchased by Local WIC Agencies
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APPENDIX II-G	Media Recognition
APPENDIX II-H	Nassau County Health Department Fit WIC Activity Kit
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NY Fit WIC Logic Model



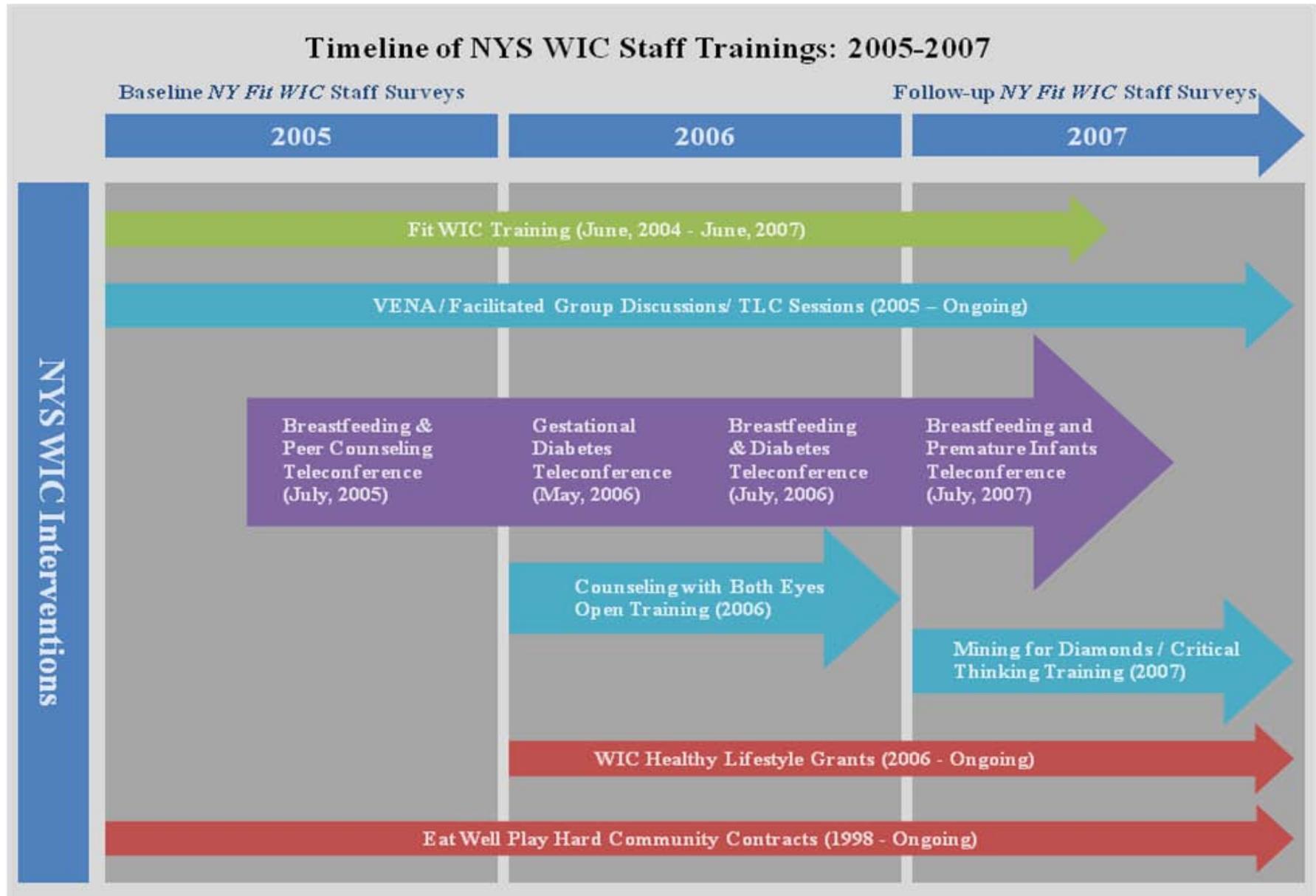


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Fit WIC Resource Book



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- What is Fit WIC?
- Lessons Learned and Recommendations

NYS Fit WIC

- NYS Goal for Fit WIC
- NYS Fit WIC Training Power Point
- Handouts
 - ABCs of Successful Movement
 - Simple Games



Implementing Fit WIC

Staff

- Developing an Employee Wellness Program
- Healthy Meeting Guidelines
- Physical Activity at Meetings
- Tips for Leading a Physical Activity Break
- Ideas for Fitness Breaks in Meetings
- Physical Activity that Works for You
- At Your Desk Workout
- Ergonomic Workout
- National Employee Health and Fitness
- Purchasing Pedometers or Step Counters
- How to Use your Step Counter
- Count Steps for All Activities
- Log of Steps or Distance
- Take the Stairs Challenge
- Water Challenge
- Walking Challenge
- Healthy Brown Bag Challenge



- Motivational Fliers for Take the Stairs Challenge

Nutrition Education

- Fruits and Vegetables Community Kit (WIC Works)
 - Preschooler Activity # 1 - I'm Hungry as a Bear
 - Preschooler Activity # 2 - I Love Carrots
 - Preschooler Activity # 3 - Vegetable Party
 - Preschooler Activity # 4 - I'm a Fit WIC kid!
- Physical Activity for Children (from NYS NE curriculum)
- Helping Participants Move Along the Stages of Change
- Key Messages

Staff Training Materials on Feeding Relationships

- Working with Preschoolers (ppt)
- Childhood Obesity Prevention Project (ppt)
- Caregiver Discussion Groups (ppt)
- Discussion Questions, Child of Mine
- Child Feeding Training Pre-Test
- Child Feeding Training Post-Test



Activities/Equipment

- Fit WIC Activity Book
- Fit WIC Activity Pyramid
- Everyday... Play Outside
- Everyday Activities
- Plan for Active Time
- Skill-Building Physical Play
- Toys that Encourage Physical Play
- Running and Jumping Games
- Tumbling, Rolling, Crawling and Climbing
- Rhythmic Movement and Balance
- Catching, Throwing, Kicking Games
- Pretend Games and Imagination
- Family Activity Sheets (English and Spanish)
- Hand-Eye Coordination/Striking Skills
- Hand-Eye Coordination with a Ball
- School Readiness using Rope
- Homemade Equipment (English and Spanish)
- More Active Toys you can make at Home (VT)



Fit WIC Resources/References

Handouts/Books

- Fitness for Children: Birth to Age Five
- Nutrition Books for Preschoolers
- Active Play Books for Preschoolers
- Sources for Kids' Physical Activity: Music and Videos



Websites

- Early Childhood Websites
- Fit WIC Websites

Community Resources

- Community Coalition Building (USDA. P.175)
- Children and Weight, What Can Communities Do? (CA Website)



Obesity Research

- Feasibility and Benefits of a Parent-Focused Preschool Child Obesity Initiative
- Guidelines for Childhood Obesity Prevention Programs
- References about Childhood Overweight and Related Topics

Miscellaneous

- NASPE Releases Physical Activity Guidelines for Infants and Toddlers
- Physical Activity for Children (Physical Activity Guidelines for Infants and Toddlers)
- Fit WIC Supplies
- NYS WIC Physical Activity Tools for Fit WIC Training
- Wagon Wheel Records Ordering Form
- Lyrics from *Can Cockatoos Count By Twos?* By Hap Palmer
- The Use of Incentives (USDA, p.40)



ACTIVITY KITS AND NUTRITION EDUCATION MATERIALS PURCHASED

Many of the local WIC agencies have done activity kits for the different participant categories women (pregnant, breastfeeding and postpartum), infants and children or kits with items for all family members. The topics of the activity kits varied. Physical activity kits had variations for the season and location (urban vs. rural). Other themes were cooking/shopping and gardening/farmer's market.

Some local agencies purchased similar items to give to participants and families individually as part of their nutrition education promoting healthy lifestyle changes. Listed below are examples of items provided either in the kits or individually by theme.

COOKING/SHOPPING:

Aprons (children and adult)
Calendars with recipes or Cookbooks
Cookie Cutters
Cutting Board, Kitchen Utensils, Measuring Cups or Spoons
Eco-Friendly Reusable Grocery Bags
Herbs/Spices
Pasta Measurers/Servers
Potholders/Oven Mitts

PHYSICAL ACTIVITY (Spring/Summer):

Arm Reflector Bands for Walking
Beach Balls
Beach Towel
Bubbles/Wands etc.
Bug/Butterfly Nets/Containers
Chalk for Hopscotch or Drawing
Frisbees
Hula Hoops (24 inch)
Jump Ropes
Kites
Sand Box/Beach Toys
Child Size Sport Equipment
Shovel and Pail
Children's Sport Balls
Sun Hats/Visors/Sunscreen

MISCELLANEOUS:

Insulated Lunch Bags
Toothbrush/toothpaste/floss

GARDENING/FARMER'S MARKET:

Children and Adult Gardening Tools
Seeds
Windowsill Garden
Sturdy Bags for Produce

PHYSICAL ACTIVITY (Fall/Winter):

Children's Rake or Snow Shovel
Snow Man Making Kit
Winter Hats/Mittens/Gloves

PHYSICAL ACTIVITY (Anytime):

Activity Calendars
Soft Balls
Bean Bags
Child Size Sport Equipment
Dyna Bands
Foam Flyers
Hacky Sacs
Kids Coloring/Activity Books
Kids Books
Fitness Dice
Music CDs
Pedometers
Plastic Water Bottles
Ribbon Wands/Rainbow Hoop/Dancing Wrist
Scarves/Jingle Bell Wristband
Physical Activity/Dance Videos/DVDs
Scarves

Attachment K
Fit WIC Resources

1 Avenue Brooklyn, NY 11218 • 718.686.3799 • fax 718.871.7736



Fit WIC Resources

Online Resources

..... <http://www.americanheart.org/presenter.jhtml?identifier=4596>
 <http://www.healthierus.gov/exercise.html>
Music for Little People www.mflp.com
KiDiddles Online Store www.kididdles.com/shop
Greg and Steve www.gregandsteve.com
Raffi www.raffinews.com
Jose-Luis Orozco www.joseluisorozco.com
Charlotte Diamond www.charlottediamond.com
Joanie Bartels www.joaniebartels.com
Sugar Beats www.sugar-beats.com
Banana Slug String Band www.bananaslugstringband.com
Music, Movement, and Dance Videos www.amazon.com
Music, Movement, and Dance Videos www.kididdles.com/shop
Music, Movement, and Dance Videos www.activevideos.com/kidonly.htm

Collections of Kids' Music

Wagon Wheel Records and Books (714) 846-8169

Kids' Music, Movement, and Dance Videos

Sesame Street especially Elmo, and some other Elmo videos that include movement/dance
Barney especially Sing and Dance with Barney (available in Spanish)
Teletubbies especially Dance with the Teletubbies
The Wiggles
Blues Clues
Greg and Steve — Musical Adventures
The Learning Station — Movin' and Groovin'; All Aboard

Activity Play Books for Preschoolers

Animal Action ABC by Karen Pandell
The Animal Boogie by Debbie Harter
April Showers by George Shannon
Barnyard Dance! By Sandra Boynton
Bailando! By John E. Barrett
Bearobics: A Hip-Hop Counting Story by Vic Parker
Brown Bear, Brown Bear, What Do You See? by Bill Martin Jr. and Eric Carle
Clap Your Hands by Lorinda Bryan Cauley
Come Out and Play by Maya Ajmera and John D. Ivanka
Do Donkeys Dance? by Melanie Walsh
Frog Legs: A Picture Book of Action Verse by George Shannon
From Head to Toe by Eric Carle
Funny Walks by Judy Hindley
Hop Jump by Ellen Stoll Walsh
I Went Walking by Sue Williams
Sali de Paseo by Sue Williams
If You're Happy and You Know It by Penny Dann
Jump Frog Jump by Robert Kalan
Oh, the Things You Can Do that are Good for You! by Tish Rabe
Pretend You're A Cat by Jean Marzollo
Shimmy Shake Earthquake: Don't Forget to Dance Poems by Cynthia Jabar

Yeled V'Yalda WIC Fit WIC Handouts

Mr. Fit's Farm
Just Move It!
Ways To Increase Your Family's Physical Activity/Activity Guide Pyramid
Healthy Start Planners
Fit WIC (Yarn Balls and Foam Shapes)



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Attachment K
Local Fit WIC Attractions

Yeled v'Yalda
EARLY CHILDHOOD CENTER
718.686.3700
Yeled v'Yalda WIC Program
Tel. 718.686.3799 • Fax 718.686.2199
www.yeled.org



A LISTING OF ATTRACTIONS FOR HEALTHY OUTINGS IN BROOKLYN

BROOKLYN BOTANIC GARDEN

900 Washington Avenue
718.623.7200

Subway Accessibility:

- 2 or 3 to Eastern Parkway – Brooklyn Museum station
- B or Q to Prospect Park station
- 4 to Franklin Avenue
- S Shuttle to Prospect Park station

City Bus Accessibility:

- Lorimer Street B48 to Franklin Avenue
- Flatbush Avenue B41 to Empire Boulevard
- Prospect-Lefferts Gardens/Greenpoint B43 to Empire Boulevard/Washington Avenue
- Crown Heights/Cobble Hill B71 to Brooklyn Botanic Garden
- St. Johns Place B45 to Washington Avenue
- Bay Ridge B16 to Empire Boulevard

BROOKLYN OUTDOOR POOLS

Open June 27, 2008 – September 1, 2008
Hours of Operation: 11:00 am – 7:00 pm

• **Douglas and DeGraw Pool**

Third Avenue and Nevins Street
718.625.3268

• **Sunset Park Pool**

Seventh Avenue between 41st and 44th Streets
718.965.6578

BROOKLYN PLAYGROUNDS

- **Albemarle Park:** Albemarle and Dahill Roads
- **Diglio Playground:** McDonald Avenue and Avenue F
- **East Fourth Street Garden:** East Fourth Street, Caton Avenue, Fort Hamilton Parkway
- **Greenwood Playground:** Fort Hamilton Parkway, Greenwood, East 5th Street
- **Jesse and Charles Dome Playground:** 38th Street and Dahill Road

MARINE PARK

Flatbush, Gerritsen, and Fillmore Avenues

PARK ATTRACTIONS:

- Baseball fields
- Basketball courts
- Bicycling and greenways
- Football fields
- Handball courts
- Playgrounds
- Soccer fields
- Tennis courts

NEW YORK AQUARIUM

Surf Avenue at West 8th Street, in Coney Island

Subway Accessibility:

- F or Q train to the West 8th Street Station

City Bus Accessibility:

- B36 to Surf Avenue and West 8th Street
- B68 to Neptune Avenue and West 8th Street

PROSPECT PARK

Subway Accessibility:

- F train at 7th Avenue Station, 15th St./Prospect Park station and Fort Hamilton Parkway Station
- 2 or 3 train at Grand Army Plaza station
- Q train at Parkside Avenue Station and Prospect Park Station
- S train at Prospect Park Station
- B train at Prospect Park Station

City Bus Accessibility:

- B41 or B71 along Flatbush Avenue to Grand Army Plaza or Ocean Avenue
- B69 along Prospect Park West
- B75 along 9th Street to Prospect Park West
- B68 along Coney Island Avenue/Prospect Park Southwest to Park Circle or Bartel-Pritchard Circle

PARK ATTRACTIONS:

- Prospect Park Audubon Center at the Boathouse
- Lefferts Historic House
- Pedal Boat Rentals at Wollman Rink
- Ice Skating at Wollman Rink
- Prospect Park Zoo



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Yeled v' Yalda WIC Program
Tel. 718.686.3799 • Fax 718.686.2199
www.yeled.org



A LISTING OF ATTRACTIONS FOR HEALTHY OUTINGS IN BROOKLYN

BROOKLYN BEACHES

- **Brighton Beach & Coney Island and Coney Island Boardwalk**
On Atlantic Ocean, from West 37th Street to Corbin Place
718.946.1350
- **Manhattan Beach**
On Atlantic Ocean, Oriental Boulevard, from Ocean Avenue to Mackenzie Street
718.946.1373

Healthy Lifestyle Activities:

- Walking
- Running
- Swimming
- Playing volleyball/Frisbee/catch

BROOKLYN BOTANIC GARDEN
900 Washington Avenue
718.623.7200

Subway Accessibility:

- 2 or 3 to Eastern Pkwy – Brooklyn Museum station
- B or Q to Prospect Park station
- 4 to Franklin Avenue
- S Shuttle to Prospect Park station

City Bus Accessibility:

- Lorimer Street B48 to Franklin Avenue
- Flatbush Avenue B41 to Empire Boulevard
- Prospect-Lefferts Gardens/Greenpoint B43 to Empire Boulevard/Washington Avenue
- Crown Heights/Cobble Hill B71 to Brooklyn Botanic Garden
- St. Johns Place B45 to Washington Avenue
- Bay Ridge B16 to Empire Boulevard

Healthy Lifestyle Activities:

- Walking
- Running

BROOKLYN OUTDOOR POOLS
Open June 27, 2008 – September 1, 2008
Hours of Operation: 11:00 am – 7:00 pm

- **Douglas and DeGraw Pool**
Third Avenue and Nevins Street
718.625.3268
- **Sunset Park Pool**
Seventh Avenue between 41st and 44th Streets
718.965.6578

Healthy Lifestyle Activities:

- Walking
- Swimming

MARINE PARK
Flatbush, Gerritsen, and Fillmore Avenues

PARK ATTRACTIONS:

- Baseball fields
- Bicycling & greenways
- Handball courts
- Soccer fields
- Basketball courts
- Football fields
- Playgrounds
- Tennis courts

Healthy Lifestyle Activities:

- Walking
- Running
- Swinging
- Jumping
- Biking
- Rollerblading
- Skateboarding
- Playing Frisbee/catch
- Baseball, football, soccer, field hockey

BROOKLYN PLAYGROUNDS

- **Albemarle Park:** Albemarle and Dahill Roads
- **Diglio Playground:** McDonald Avenue and Avenue F
- **East Fourth Street Garden:** East Fourth Street, Caton Avenue, Fort Hamilton Parkway
- **Greenwood Playground:** Fort Hamilton Parkway, Greenwood, East 5th Street
- **Jesse and Charles Dome Playground:** 38th Street and Dahill Road

Healthy Lifestyle Activities:

- Walking
- Running
- Swinging
- Jumping
- Biking
- Rollerblading
- Skateboarding
- Playing Frisbee/catch



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Instilling healthy habits

Local coalition works to combat childhood obesity

ERIKA STREET
Special to The Citizen

As the number of overweight people in the United States has skyrocketed, childhood obesity has become a national concern. In New York, a recent study found that 33 percent of low-income children ages 2 to 5 are overweight or at risk of becoming overweight. Such alarming statistics demonstrate that the obesity epidemic must be addressed at an early age.

"There's always been the phenomenon of baby fat," said Phillip Gioia, MD, MPH of Auburn. "Almost all kids are chubby when they're 4 to 6 months old, but usually when they start walking around, they get thinner. The problem is that now a lot of preschoolers and early elementary school kids are overweight. It used to be that only about 5 percent of kids were obese 10 to 20 years ago, but now it's up to about 25 percent."

Gioia blames the rapid increase in overweight children on factors such as poor family eating habits, too much corn syrup, sugar in the diet and less exercise.

"Kids are playing less outdoors because there aren't enough safe places to play," he said.

In an effort to stop this dangerous trend, a local coalition — Women, Infants and Children — has begun helping children develop healthy habits at home.

"We as a community have come together to fight this new and preventable health issue," said

See 'PLAY, C5



Jennifer Meyers / The Citizen

Volunteers Angela Houghtelling, left, and Cynthia Burke stuff backpacks full of activities and games for children. The program's goal is to encourage children over the age of 2 to develop three healthy habits: drinking low-fat instead of whole milk, eating more fruits and vegetables and becoming more physically active.

'Play is a form of love'

Continued from C1

Mary Beth Hogan, director of the Cayuga County WIC Program. "Whether we call ourselves Fit WIC, Healthy Lifestyle Program, Eat Well Play Hard or Active 8 Kids, we are all battling the same health issue."

According to Hogan, the coalition is encouraging children over the age of 2 to develop three healthy habits: drinking low-fat instead of whole milk, eating more fruits and vegetables and becoming more physically active.

In order to help children make these changes, the coalition realizes that they must first educate parents; the WIC Program is therefore providing parents with information and tools. Thanks to a grant from the New York State Division of Nutrition, 800 WIC clients are receiving backpacks filled with crayons, books, a growth chart and games such as jump ropes, Frisbees, beach balls and cones. The backpacks also include instructions for parents and a book of activity ideas.

According to Hogan, the parents will each enter into a contract with WIC to increase play at home for three months.

"We hope that they will increase the number of minutes and times during the week that they play with their children," she said, "and in doing that, they will decrease their sedentary behavior."

"When the three months are finished, questionnaires will be completed by the parents and reviewed by the WIC staff," she said. "Then the children (and the parents) who participated will have a chance to win a bicycle, a helmet or a crock-pot."

The coalition hopes that the new habits the children develop during the three months will stick with them throughout their lives.

"In kids, the biggest problem is not that the weight is going to give them high blood pressure or diabetes now," Dr.

Gioia said. "Usually the problem with kids is that they get in bad habits that they keep all their lives."

"We hope that as they become young adults, they'll continue to learn the importance of increased physical activity," Hogan said, "and that they'll continue making healthy lifestyle changes for their entire lives."

Although the program is intended to encourage children to change, the coalition expects that it will also lead to healthier habits for the whole family.

"We're hoping it will help all of them," said Joe Mushock, physical activities coordinator for Eat Well Play Hard, who helped Hogan put together the backpacks. "For example, each backpack has two jump ropes — one for the child and one for the mother. So I hope that it will put ideas for physical activity in the young mothers' minds."

Hogan believes that the program will benefit the participants emotionally as well as physically.

"Play is a form of love," she said, "so I think it will change the children's lives because as they feel more loved, their self esteem will increase. Parents will also feel good about themselves because they'll have new ideas about how to parent."

The ideas and activities included in the FitWic program are the culmination of efforts by a number of organizations. Eat Well Play Hard provided the helmets, beach balls, growth charts and crock-pots; Success by Six contributed the reading material; and Cornell Cooperative Extension will provide food demos.

"What's nice about our coalition is that we have all of these groups thinking together about how to get kids active and eating healthier," Mushock said. "There are a lot of good people out there who are concerned about this issue, so we're trying to give them the avenue to really address it."

Hogan agreed.

"The more people (that) work together, the more people's lives we can change," she said.

Although the backpacks are only available to WIC clients, the basic principles outlined in the FitWIC program — switching to low-fat milk, increasing your child's fruit and vegetable intake and increasing his or her physical activity — should be helpful to all parents.

"You just have to keep encouraging exercise," Dr. Gioia said. "Usually it's hard to keep kids from exercising, so when they're toddlers and they want to run around, just try to find safe places. Make sure there's a safe yard or a safe playground nearby. Try to walk places instead of drive. You can also encourage them to participate in sports teams or competitions if they're interested."

Gioia also suggests staying away from highly processed foods.

"Try to keep sugar to a minimum in your child's diet. Sugar not only gives you more weight, it also increases the risk of diabetes and for hardening of the arteries. Another thing that improves general health and decreases obesity is getting whole grains in the diet, stuff like whole wheat and whole grain foods. Fruits are good, too, and skim milk has a lot of protein and calcium."

Hogan said that by making changes such as these, parents will help keep their children from becoming overweight.

"We need our parents to stop this upward trend toward childhood obesity," she said. "No one person or agency can do it alone — the whole community must get involved."

www.news10now.com

Lewis County WIC program encourages family time

Updated: 7/24/2006 10:08:42 PM

By: Staff

The Lewis County WIC program is hoping a relatively new program will bring families closer together.



It ordered 5,000 backpacks full of fun toys including jump ropes and balls, all in order to get parents active with their children.

They are handing them out to kids in Lewis, Jefferson, St. Lawrence, and Franklin Counties. They also want parents to be more aware of what their children are playing with, and hopefully be able to join in on the fun.

Karen Ritz, Lewis County WIC coordinator, said they're trying to encourage new methods of family interaction.

"So many of the times the children are playing while mom is fixing supper because she's in a hurry and has been working all day," Ritz said. "We're encouraging structured playtime and structured activities so it's a whole family thing."

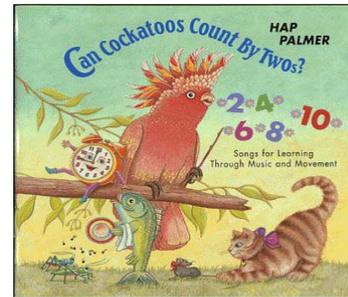
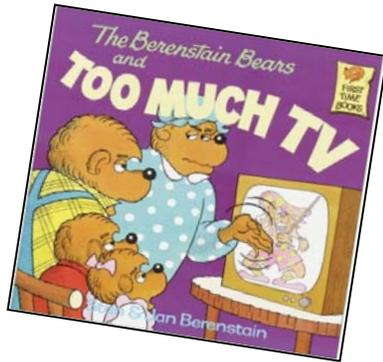
The program will last until March, but Lewis County is hoping it can go on much longer than that.

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Nassau County Health Department Fit WIC Activity Kit

A flashy red back pack

- **Pedometer for Mom**
- **Three bean bags**
- **Three scarves**
- **Beach Ball**
- **Can Cockatoos Count By Twos CD**
- **Berenstein Bears and Too Much TV book**
- **Fit WIC Activity Book**



FIT-WIC Participant Survey 2009

Please take a moment to complete the following survey. We appreciate your time to help us.

- 1) **Did you and/or any member of your family receive a FIT-WIC Kit or item i.e.: sand pail, beach ball, beach bag coolers, bubbles, kite, plate or rattle for infant, etc.**

Yes _____ No _____

If you answered "yes" to #1, please check all that apply for who received the items.

_____ Mom _____ Infant _____ Child

- 2) **How often did you /child/infant use these items?**

_____ Daily _____ Weekly _____ Did not use it

- 3) **How likely do you feel you/your child or infant will continue to use the item(s)?**

_____ likely _____ somewhat likely _____ very likely _____ not very likely

- 4) **How do you feel you/your child's activity level is since receiving these items:**

_____ increased _____ decreased _____ stayed the same

- 5) **Please list the items you / your child liked the most:**

Your Name (optional) _____

Thank you. Please return to any of our WIC Program staff.



Fit WIC Family Contest



All WIC participants in a family can win a prize just by completing the contest!! It's fun and easy.

Contest Rules:

1. All WIC families are eligible.
2. Put the calendar on your refrigerator.
3. There are 42 "activities" on the following chart. Between now and your next WIC appointment, try to do them all! Mark each square (color it, stickers, etc.), as you complete the activity.
4. If you need to substitute a physical activity, resources are available:
 - ♥ Kids in Action booklet
 - ♥ Games, Activity Guide Pyramid, etc. all are located with our monthly clinic display.

Pregnant women may need to adjust the activities accordingly. The activities are more challenging the farther down the chart you go. You may want to start at the top.
5. To receive a prize, complete as many activities as possible on the contest sheet before your next WIC appointment. Bring the sheet back to that appointment, and all WIC participants in your family will receive a prize!

If you were able to do ALL 42 ACTIVITIES, *Good for you!* Your contest sheet will also be entered in a GRAND PRIZE drawing!

Serve a vegetable with lunch.	Turn TV off during dinner.	Dance or move to music for 15 minutes.	"Double" your vegetable serving at dinner.	Go for a 15 minute walk or hike with family.	Serve a yellow fruit or veggie. (peaches, carrots...)	Do 15 jumping jacks or 15 arm circles.
Turn off the TV all morning.	Go for a 20 minute walk.	Try the fruit snack recipe on the back.	Do 20 jumping jacks or 20 arm circles.	Try a lower fat milk than you usually drink.	Do 15 toe touches. Do them slowly and gently.	Turn off the TV and read for 15 minutes.
Serve fruit at lunch and dinner.	Dance or move to music for 20 minutes.	Play Head, shoulders, knees and toes game.	Turn off the TV during lunch and dinner.	Serve a dark green vegetable (broccoli, spinach...)	Go for a 25 minute walk or hike with family.	Serve both a fruit and vegetable at dinner.
Try the vegetable snack recipe on the back.	Walk around a local park for 30 minutes.	Turn off the TV and read for 20 minutes.	Play outside with your children for 20 minutes.	Try eating fruit in place of a glass of juice.	Dance or move to music for 25 minutes.	Serve a fruit and vegetable at both lunch & dinner.
Turn off the TV during breakfast, lunch and dinner.	Do 20 toe touches. Do them slowly and gently.	Try a serving of a new fruit or vegetable.	Do 25 jumping jacks or 25 arm circles.	Serve a fruit with all three meals.	Go for a 30 minute walk or hike with family.	Try either lowfat yogurt, ice cream or cheese.
Turn off the TV all day and have a TV Free day.	Pick an activity. From: KIDS IN ACTION, display, etc.	Serve two vegetables with dinner.	Go for a 30 minute walk or hike with family.	Serve fruit as a snack.	Play ball with your children.	Eat 5 servings of fruits and vegetables today.

LWASH. 00

Names of family members on WIC: _____

Did you know?

How much activity should my child get?

Toddlers, age 1 to 3, should get 30 minutes or more a day of physical activity. This might include playing on a playground, going for a walk or riding a tricycle. They should also get at least one hour of free play allowing time to explore with their toys.

Preschoolers, age 3 to 5, should have 30-60 minutes a day of structured play time. They may want to play simple games. "Duck, Duck, Goose", "Ring Around the Rosy" playing catch or jumping rope are always favorites. They also need at least one hour of free play each day, but preferably, they have several hours a day to play.

What about TV? DVD's? Videos?

Should my child be watching TV?

It is now recommended that children under the age of two not watch TV at all. At two years of age and over, children should not watch more than 2 hours a day. This includes videos, TV and DVD's. It is important for parents to control what their child is viewing. Pick a time to watch videos or movies together.

Recent studies show that children that watch too much TV are overweight. This is because they are watching commercial TV and eating at the same time. Commercial TV targets our children to try many unhealthy snack foods, convenience foods and cereals. The more TV a child watches, the more he or she eats thus leading to a potential weight problem.

INSTEAD, take back that remote, put on a movie or PBS program (no commercials) that you approve of and make one of the snack recipes below.

Try these recipes with your children!

Rabbit Snacks



Ingredients:

- 6 large lettuce leaves
- 6 ozs. reduced fat cheddar cheese, grated
- ½ cup finely chopped walnuts
- 2 stalks celery, finely chopped
- 2-3 tablespoons ranch dressing

Directions:

1. Wash the lettuce leaves and pat dry.
 2. Mix the cheese, nuts, celery and dressing.
 3. Divide among the lettuce leaves.
 4. Roll up the lettuce leaves and eat.
- Makes 6 servings.

Option: This can be used as a sandwich filling.

Peanut Butter-Banana Wheels

Ingredients:

- Bananas
- Peanut Butter
- Favorite WIC crunchy cereal

Directions:

1. Peel bananas.
2. Using a table knife, cut each banana into ½ to 1 inch circles.
3. Spread with peanut butter.
4. Roll in cereal and enjoy.



Please tell us what you think.

Is this recipe easy? Yes or no
 Do you like this recipe? Yes or no
 Would you make this again? Yes or no

Is this recipe easy? Yes or no
 Do you like this recipe? Yes or no
 Would you make this again? Yes or no

WASH CO

Fit WIC Family Contest 2009

Family Name _____ All WIC Families are eligible!

Contest Rules



- Put this contest on your refrigerator or in some other visible spot. Complete as many activities as possible before your next WIC appointment.
- Mark each square (color it, stickers, etc.) as you complete each activity. Try to spread out the activities over the next three months.
- Bring this sheet back to your next appointment and receive a prize! No sheet- no prize ☹.
- If you are able to do all 56 activities, you will be entered into a drawing to win an invitation to our annual WIC Celebration!

*** You may change the activities as needed for your condition and/or lifestyle. For example, if you are pregnant, and the square gives you a choice of jumping jacks or arm circles, you should choose the arm circles! ☺ If you live alone, and the square says to go for a walk with your family, it's ok to go by yourself! If you don't have children and the square says to play tag with your children, just choose a different activity such as one of those listed on page 3. ***

Serve a vegetable with lunch.	Turn the TV off during dinner.	Dance or move to music for 5 minutes.	Go for a 15 minute walk or hike with your family.	Serve a yellow or orange fruit or veggie.	Double your usual vegetable serving at dinner.	Do 15 jumping jacks or 15 arm circles.
Turn off the TV all morning.	Go for a 20 minute walk.	Play head, shoulders, knees and toes game.	Drink only skim or 1% milk today.	Try the chili recipe from the back of this sheet.	Answer the questions with the chili recipe.	Do some stretching for 5 minutes.
Serve fruit at lunch and dinner.	Dance or move to music for 10 minutes.	Use whole grain bread or crackers for a snack.	Turn off the TV during lunch and dinner.	Serve a dark green vegetable.	Go to the library.	Serve both a fruit and vegetable at dinner.

EASY CHILI

- 1 lb lean ground beef
- 1 cup chopped onions
- 1 green pepper, chopped
- 2 15 oz cans kidney beans
- 1 16 oz can stewed tomatoes
- 1 15 oz can tomato sauce
- 1 tsp ground cumin (optional)
- 2 tsp chili powder

1. In large sauce pan add ground beef, onions, green peppers, and garlic.
2. Cook over medium heat until ground beef is brown. Stir often.
3. Add beans, tomatoes, tomato sauce, & spices.
4. Bring to a boil. Reduce heat. Simmer for 20 minutes.
5. Serve hot and enjoy. Makes 6 servings.

How did your family like the chili? _____

Would you make it again? _____

CHEESY BROCCOLI AND BROWN RICE

- 3 cups chopped fresh or frozen broccoli
- 2 cups instant brown rice, uncooked
- 2 cans 10.75 oz cream of mushroom soup
- ½ cup lowfat shredded cheddar cheese
- onion or garlic powder to taste (optional)

1. In large pot, bring 3 cups water to a boil.
2. Add broccoli and rice. Cook for 7 minutes over high heat. Stir often.
3. Reduce heat to medium and add soup.
4. Add onion or garlic powder if desired.
5. Cook until bubbly (about 2 minutes). Stir often.
6. Remove from heat. Stir in cheese.
7. Serve and enjoy. Makes 6 servings.

How did your family like the cheesy broccoli and rice? _____

Would you make it again? _____

KRAZY KRISTIN'S CHEESE BREAD

- 4 slices whole grain bread
- 1 cup shredded low fat mozzarella or cheddar cheese
- garlic powder
- soft spread margarine (optional)

1. Preheat oven to 350°
2. Lay out bread on cookie sheet.
3. Spread w/ margarine and sprinkle lightly with garlic powder.
4. Sprinkle cheese on top of bread.
5. Bake for 10 minutes until lightly browned.
6. Remove from oven. Cut into quarters or triangles. Serves 4.

How did your family like the cheese bread? _____

Would you make it again? _____

BROWN RICE PILAF

- 1 tbsp. minced garlic
- ¼ cup minced carrots
- ½ cup diced onions
- 2 tbsp. butter or margarine
- 1 cup regular cooking brown rice
- 2 ½ cup water
- 1 bay leaf (optional)

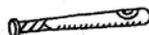
1. In a frying pan sauté the garlic, carrots and onions in butter for about 3-4 minutes.
2. Add the brown rice and sauté 2-3 minutes.
3. Add water and bay leaf. Bring to a simmer.
4. Pour into small roasting pan or casserole dish and cover with foil.
5. Bake in 350° oven for 45 minutes. Season with salt and pepper. Serves 6.

How did your family like the rice pilaf? _____

Would you make it again? _____

This institution is an equal opportunity provider.

Try a brown rice recipe from the previous page.	Answer the questions with the brown rice recipe.	Have an indoor or outdoor picnic.	Turn off the TV and read for 20 minutes.	Do 15 toe touches. Do them slowly and gently.	Clean out a junk drawer.	Dance or move to music for 15 minutes.
Turn off the TV during all 3 meals.	Try a new fruit or vegetable.	Try either lowfat yogurt, ice cream or cheese.	Walk around a local park for 30 minutes.	Play outside with your children for 20 minutes.	Practice your fire evacuation plan.	Clean out a closet.
Serve fruit with all three meals today.	Go for a 25 minute walk or hike with your family.	Try making the cheese bread recipe from the prev. pg	Answer the questions with the Bread recipe.	Play a game with a ball.	Vacuum or sweep today.	Visit a playground with your kids.
Leave the TV off all day!	Serve a red, blue or purple fruit or veggie.	Do some gardening.	Do 20 toe touches. Do them slowly and gently.	Have your kids act out a story as you read it.	Park as far from a store as possible and walk!	Play a board game instead of watching TV.
Mop your kitchen floor.	Complete the survey on p. 4.	Eat 5 servings of fruits and vegetables today.	Go for a 30 minute walk or hike with your family.	Play catch or ride a bike.	Complete the Family Activity exercise on p. 4.	Do 25 jumping jacks or 25 arm circles



Ideas and suggestions for active families!

Playing catch
 Skipping
 Raking leaves
 Bowling
 Country Line Dancing
 Tumbling
 Riding a bike
 Fishing



Mowing the lawn
 Scavenger hunt
 House bowling
 Flying Kites
 Vacuuming
 Hopscotch
 Swimming
 Mopping the floor



Jumping rope
 Obstacle course
 Sweeping
 Horseback riding
 Gardening
 Soccer
 Kickball
 Jumping Jacks

Family Activities

1. How many hours a day do you/your child spend watching TV, videos, DVD's or use the computer and/or video games?
____None ____0-1 hours ____1 hour ____2-3 hours ____4-5 hours (or more)

Did you know?

- Infants and children less than 2 years old should not watch TV at all.
- Children 2 and older: no more than 2 hours a day watching TV, DVD's or videos.
- Experts recommend no TV in a child's bedroom.

2. How often do you sit and eat together as a family?
____All the time ____Most of the time ____Sometimes ____Rarely ____Never

Did you know?

- Children are happiest with structure: planned meals and snacks.
- Eat with your child as soon as they can join the "family table".
- Children eat better when you turn off the TV and have pleasant conversation.
- Children learn how to interact with others during family meals.

3. What does your family do every week to stay active?

Did you know?

- Children 1-3 years old should get 30 minutes a day of physical activity: riding a tricycle, going for walks. They also need time for free play.
- Children 3-5 years old should get 60 minutes a day of planned physical activity: simple games, playing catch, jumping rope. They also need time for free play.

Please complete this survey.

1. What food did you/your family try for the first time? _____

2. Of all of the activities in this contest, which were the most difficult to do? _____

3. What new fruit or vegetable did you/your family try? _____

4. What activities will you continue to do? _____

LOCAL AGENCIES TRAINED IN FIT WIC

Telephone Survey

Agency Name: _____ Agency #: _____

Coordinator's Name: _____ Phone #: _____

Date of Fit WIC Training: _____

Message _____ Voicemail _____ Contact made

I am calling today in regards to your agency's implementation of Fit WIC. I just have a few questions on how you have integrated Fit WIC into your agency since your training. You were trained on (see date above).

1. Do you currently use Fit WIC techniques in your agency? YES NO

If no, do you plan to implement Fit WIC in your agency? YES NO

If YES, when? _____

If no, what issues or barriers exist for your agency?

2. How have you implemented Fit WIC in each of the following areas? (still have agencies answer this question if they are planning to implement Fit WIC in the future)

a. Education of WIC Families:

→ Individual:

→ Group:

- b.** Support for WIC Staff (walking club, salad bowl lunch, physical activity breaks etc.)

 - c.** Promoting Healthy Lifestyles for all children (activity kits, waiting room activities such as exercise or music videos, physical activity classes etc.)

 - d.** Community Efforts (partnerships, Health Fairs, family fun days etc.)
- 3. Do you have anything else you would like to tell us about your Fit WIC activities?**

Thank you for answering our questions on the implementation of Fit WIC in your agency!

WIC STAFF SURVEY

Agency # _____

As part of the Fit WIC initiative, we are interested in your opinion and experience working with WIC families in providing information, education or counseling on achieving healthy lifestyles. We are also interested in your perceptions of the Fit WIC initiative, and, for those who have been trained, how the training has influenced your interaction with WIC caregivers and participants. Your responses will help us understand whether any improvements could be made to the WIC program.

Your contribution to this survey is strictly confidential. The survey should take approximately 10 minutes to complete.

We value your opinion and thank you for taking the time to help us improve the New York State WIC program.



Fall 2005

QUESTIONS 1-2 ASK FOR YOUR OPINION ON CHILDREN AND HEALTHY LIFESTYLES.

1. Do you consider overweight to be a problem among young children today?

- YES NO

2. Which of the following do you BELIEVE are the most common reasons that a child under the age of five is overweight? (Check all that apply)

- a. Not enough exercise
- b. Their natural body shape
- c. Parenting style
- d. Eating too much junk food (for example candy, chips)
- e. Eating too much
- f. Drinking too much soda or juice
- g. Watching too much television
- h. Don't know
- i. Other _____

QUESTIONS 3-8 ASK ABOUT YOUR EXPERIENCE WORKING WITH WIC FAMILIES.

3. Do MOST parents/caregivers of overweight children recognize that their children are overweight?

- YES NO DON'T KNOW

4. What do you do when parents/caregivers of overweight children come into your WIC agency? (Check all that apply)

- a. Discuss general information on eating a healthy diet
- b. Recommend low-fat foods
- c. Recommend increase fruit and vegetable intake
- d. Discuss information on physical activity
- e. Refer to physical activity programs
- f. Recommend decrease in television viewing
- g. Refer to health care providers
- h. Nothing
- i. Not applicable to job
- j. Other _____

5. In an average week, how often do you talk to WIC parents/caregivers about the following?

	Very Often	Often	Sometimes	Never	Not Applicable
	1	2	3	4	5
a. Overweight/Obesity	<input type="checkbox"/>				
b. Physical Activity	<input type="checkbox"/>				

6. How comfortable are you discussing the following with WIC parents/caregivers?

	Very Comfortable	Comfortable	Uncomfortable	Very Uncomfortable	Not Applicable
	1	2	3	4	5
a. Weight/Obesity	<input type="checkbox"/>				
b. Physical Activity	<input type="checkbox"/>				

7. What makes it difficult for you to talk with parents/caregivers about children and their weight? (Check all that apply)

- a. Your weight status
- b. Not enough time
- c. Need more training
- d. Parent/caregiver appears bored or uninterested
- e. Parent/caregiver appears unwilling to talk
- f. Parent/caregiver has to care for children during counseling discussions
- g. Parent/caregiver believe their child is not overweight
- h. Not difficult at all
- i. Don't know
- j. Not applicable to job
- k. Other _____

8. To what extent do you think it is possible for WIC staff at your agency to:

	Very possible	Somewhat possible	A little possible	Not at all possible
	1	2	3	4
a. Help children maintain a healthy weight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Help overweight children reach a healthy weight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Help overweight postpartum women reach a healthy weight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9 Please check the response that best describes your level of agreement with the statements below:

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Applicable
	1	2	3	4	5
a. I have enough resources to effectively <u>educate</u> participants about healthy lifestyles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. I am confident in my abilities to <u>educate</u> participants about healthy lifestyles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. I am confident in my abilities to <u>influence</u> participants to change to a healthier lifestyle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. I am confident in my abilities to <u>educate</u> participants on helping their child achieve or maintain a healthy weight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. I am confident in my abilities to <u>influence</u> participants on helping their child achieve or maintain a healthy weight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. What are the most effective things WIC is doing or can do to help children achieve or maintain a healthy weight? (Check all that apply)

- a. Integrate physical activity messages into individual counseling
- b. Integrate physical activity topics in group classes
- c. Conduct interactive physical activity group classes
- d. Give parents physical activity toys for home, and/or show them how to make low-cost toys
- e. Refer families to community programs
- f. Integrate nutrition messages into individual counseling
- g. Integrate nutrition messages into WIC group classes
- h. Tailor WIC food packages to each participant
- i. Conduct food demonstrations
- j. Other _____

QUESTION 11 ASKS FOR YOUR THOUGHTS ON THE FIT WIC INITIATIVE.

11. The Fit WIC initiative strives to teach staff how to work with parents/caregivers to achieve or maintain a healthy weight/lifestyle for WIC families. How do you feel about including concepts of Fit WIC at your agency? (Check all that apply)

- a. Enthusiastic
- b. Interested
- c. Already include aspects of Fit WIC
- d. Indifferent
- e. Too much additional work for staff
- f. Lack of resources
- g. Not willing to include Fit WIC in agency
- h. Not aware of Fit WIC concepts
- i. Don't know
- j. Other _____

THIS NEXT SECTION ASKS QUESTIONS ABOUT YOU, YOUR WORK POSITION, AND ANY EXPERIENCE YOU HAVE WITH WEIGHT CHANGE.

12. How old are you? _____ years

13. Are you: Male Female

14. What is your staff position at WIC? (Check all that apply)

- a. Coordinator b. Site Manager c. CPA d. Support Staff
 e. Nutrition Assistant/Aide

15. How many years have you worked with WIC? _____ years

16. How satisfied are you with the work you do as a WIC employee?

- a. Very satisfied
 b. Satisfied
 c. Neutral
 d. Unsatisfied
 e. Very unsatisfied

17. What is your level of education?

- a. High school graduate/GED b. Certification school c. Some college
 d. Associate degree e. Bachelor's degree f. Post bachelor's degree
 g. Other _____

18. Are you Hispanic/Latino? YES NO

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

- a. Black/African American b. Asian c. Pacific Islander
 d. Native American/Alaskan Native e. White

20. **What is your height?** _____ feet _____ inches

What is your weight? _____ pounds

21. **During the past month, how often per week did you eat fruits or vegetables (Excluding potatoes)?** _____ times per week

22. **During the past month, did you do any tasks or activities for at least 10 minutes that took moderate or greater physical effort?** Moderate physical effort means tasks or activities that caused light sweating or a slight moderate increase in your heart rate or breathing; such as mowing the lawn, heavy cleaning, brisk walking, bicycling, or dancing.

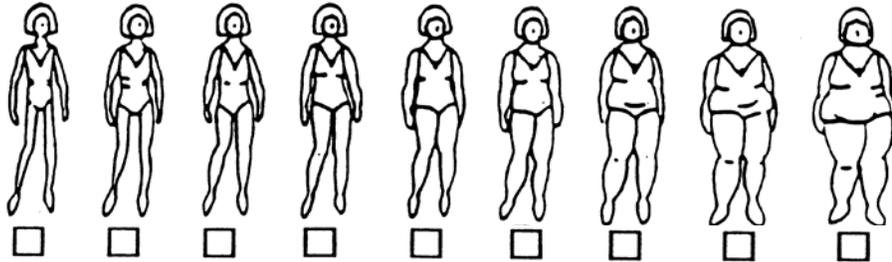
- YES NO

If YES, how many times per week? _____ times per week

23. **Do you do any of the following to maintain/change your weight? (Check all that apply)**

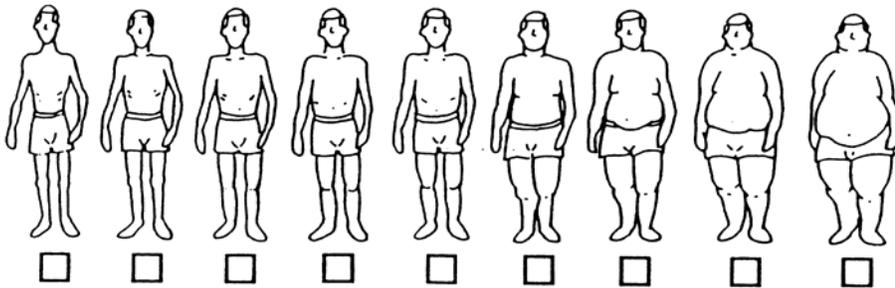
- a. Eat less food
 b. Engage in physical activity
 c. Watch less TV
 d. Eat more fruits and vegetable
 e. Eat or drink low fat foods
 f. Other _____

24. Please check the box that corresponds to the picture that you think is most like your own body shape.



FEMALES

A B C D E F G H I



MALES

A B C D E F G H I

25. Have you attended any of the following training sessions?

- a. Three Step Counseling YES NO
- b. Facilitated Group Discussion YES NO
- c. Fit WIC training YES NO

If you've attended a Fit WIC training, please CONTINUE to the next set of questions.

All others: you have now completed the survey. Thank you for your input in this project.

THIS FINAL SECTION ASKS QUESTIONS ABOUT YOUR EXPERIENCE WITH FIT WIC AND WHAT YOU HAVE DONE DIFFERENTLY AT YOUR AGENCY SINCE THE TRAINING.

26. Do you plan to change the way you interact with WIC participants in your agency based on information received at the Fit WIC training?

- a. Plan to make many changes b. Plan to make some changes
 c. No changes needed d. Already made changes e. Not applicable

27. Now that you have been to Fit WIC training, what do you do differently:

a. In your personal life? _____

b. At your local WIC agency? _____

28. Do you think the Fit WIC training will facilitate your interaction with participants during:

- a. Group Education Classes** YES NO Not Applicable
b. Individual Nutrition Education YES NO Not Applicable

Please share any comments, suggestions, or ideas on how to improve Fit WIC.

Thank you for being a part of Fit WIC, and providing ideas on how to improve the initiative while at the same time helping to reduce the childhood overweight problem.

Please mail completed survey to:

Attn: DON Secretary
Bureau of Supplemental Foods
Division of Nutrition
Riverview Center
150 Broadway 6th Floor West
Albany, NY 12204-2719

WIC STAFF SURVEY

Agency # _____

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Your contribution to this survey is strictly confidential. The survey should take approximately 10 minutes to complete.

We value your opinion and thank you for taking the time to help us improve the New York State WIC program.



Fall 2007

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1. Do you consider overweight to be a problem among young children today?

- YES NO

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- a. Not enough exercise
- b. Their natural body shape
- c. Parenting style
- d. Eating too much junk food (for example candy, chips)
- e. Eating too much
- f. Drinking too much soda or juice
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QUESTIONS 3-8 ASK ABOUT YOUR EXPERIENCE WORKING WITH WIC FAMILIES.

3. Do MOST parents/caregivers of overweight children recognize that their children are overweight?

- YES NO DON'T KNOW

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b. Help overweight children reach a healthy weight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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9. Please check the response that best describes your level of agreement with the statements below:

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Applicable
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c. I am confident in my abilities to <u>influence</u> participants to change to a healthier lifestyle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. I am confident in my abilities to <u>educate</u> participants on helping their child achieve or maintain a healthy weight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. I am confident in my abilities to <u>influence</u> participants on helping their child achieve or maintain a healthy weight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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- a. High school graduate/GED b. Certification school c. Some college
 d. Associate's degree e. Bachelor's degree f. Post bachelor's degree
 g. Other _____

18. **Are you Hispanic/Latino?** YES NO

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

- a. Black/African American b. Asian c. Pacific Islander
 d. Native American/Alaskan Native e. White

20. **Do you have access to the internet at work?** YES NO

21. **What is your height?** _____ feet _____ inches

What is your weight? _____ pounds

22. **During the past month, how often per week did you eat fruits or vegetables (Excluding potatoes)?** _____ times per week

23. **During the past month, did you do any tasks or activities for at least 10 minutes that took moderate or greater physical effort?** Moderate physical effort means tasks or activities that caused light sweating or a slight moderate increase in your heart rate or breathing; such as mowing the lawn, heavy cleaning, brisk walking, bicycling, or dancing.

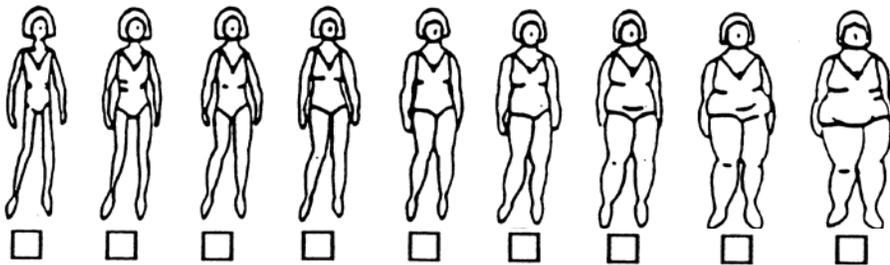
- YES NO

If YES, how many times per week? _____ times per week

24. **Do you do any of the following to maintain/change your weight? (Check all that apply)**

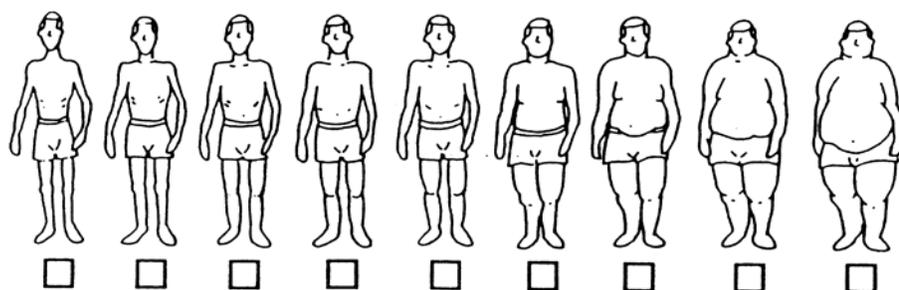
- a. Eat less food
- b. Engage in physical activity
- c. Watch less TV
- d. Eat more fruits and vegetable
- e. Eat or drink low fat foods
- f. Other _____

25. **Please check the box that corresponds to the picture that you think is most like your own body shape.**



FEMALES

A B C D E F G H I



MALES

A B C D E F G H I

26. Have you attended any of the following training sessions?

- a. Three-Step Counseling YES NO
- b. Facilitated Group Discussion YES NO
- c. Fit WIC training YES NO
- d. Counseling with Both "I's" Open YES NO

If you've attended a Fit WIC training, please CONTINUE to the next set of questions.

All others: you have now completed the survey. Thank you for your input in this project.

THIS FINAL SECTION ASKS QUESTIONS ABOUT YOUR EXPERIENCE WITH FIT WIC AND WHAT YOU HAVE DONE DIFFERENTLY AT YOUR AGENCY SINCE THE TRAINING.

27. Have you changed the way you interact with WIC participants in your agency based on information received at the Fit WIC training?

- a. Made many changes
- b. Made some changes
- c. No changes needed
- d. Not applicable

28. Now that you have been to Fit WIC training, what do you do differently:

a. In your personal life? _____

b. At your local WIC agency? _____

29. Do you think the Fit WIC training has facilitated your interaction with participants during:

a. Group Education Classes YES NO Not Applicable

b. Individual Nutrition Education YES NO Not Applicable

Please share any comments, suggestions, or ideas on how to improve Fit WIC.

Thank you for being a part of Fit WIC, and providing ideas on how to improve the initiative while at the same time helping to reduce the childhood overweight problem. 😊

Please mail completed survey to:

Attn: DON Secretary
Evaluation and Analysis Unit
Division of Nutrition
Riverview Center
150 Broadway, 5th Floor West
Albany, NY 12204-2719

2006 WIC SURVEY

If you have a child in your care **two to five years of age** enrolled in WIC, please answer this short survey. If you have more than one child in WIC, please answer these questions about your oldest child enrolled in WIC.

The survey takes about 15 minutes to complete and asks about ways that we can help you and your family enjoy healthy lifestyles.

We appreciate your taking the time to help us improve the New York State WIC program.

When finished, please place survey in the envelope provided. Return sealed envelope to WIC staff, or place in box provided.

Thank you!



Appendix II-N: NY Fit WIC Baseline Participant Survey

1. Today's Date ____/____/____
month day year

2. Child's Date of Birth ____/____
month year

3. Child is a Girl Boy

4. Child's Height ____feet ____ inches

5. Child's Weight _____pounds

QUESTIONS 6 - 13 ASK ABOUT YOU, THE PARENT/CAREGIVER

6. About how many years have you or your children received WIC benefits? _____ years

7. Are you Hispanic/Latino? YES NO

8. What is your race? (Check all that apply)

a. Black or African American b. White c. Pacific Islander

d. Native American/Alaskan Native e. Asian

9. What language do you speak most often at home?

a. English b. Spanish c. Chinese d. Other _____

10. Where were you born?

a. United States

b. Outside the United States, print name of country or Puerto Rico _____

11. If you were born outside the United States, when did you come to live in the United States?

Year ____

12. What is your Date of Birth? ____/____/____

month year

13. What is the highest level of school you completed? (Please check only one)

- a. No schooling completed
- b. Nursery school to 4th grade
- c. 5th, 6th, 7th, or 8th grade
- d. 9th, 10th, 11th, or 12th grade, No diploma
- e. High School Graduate or GED
- f. Some college, no degree
- g. Associate, trade, technical, or vocational degree (for example AA, AS)
- h. Bachelor's degree or more (for example: BA, AB, BS)

QUESTIONS 14 - 15 ASK ABOUT THIS CHILD'S EATING HABITS

14. Over the last 7 days, on average, how many times each day did this child have the following?

Fruit	0	1	2	3	4	5 or more
Vegetables	0	1	2	3	4	5 or more
100% fruit juice	0	1	2	3	4	5 or more
Soda/sweetened beverages	0	1	2	3	4	5 or more
Plain milk	0	1	2	3	4	5 or more
Flavored milk	0	1	2	3	4	5 or more
Water	0	1	2	3	4	5 or more

15. What kind of milk does this child drink most often?

- a. Fat-free (skim)
- b. Low-fat (1%)
- c. Reduce fat (2%)
- d. Whole
- e. Other

QUESTIONS 16-17 ASK ABOUT YOUR NUTRITIONAL BELIEFS

16. What type of milk do you think this child should drink? (Check all that apply)
- a. Fat-free (skim) b. Low-fat (1%) c. Reduce fat (2%) d. Whole e. Other
17. Which of the following do you think are reasons that a child under the age of five is overweight?
- a. Not enough physical activity YES NO
- b. Their natural body shape YES NO
- c. Eat the wrong foods YES NO
- d. Eat too much YES NO
- e. Poor parenting YES NO
- f. Other _____
- g. Don't know

QUESTIONS 18 – 23 ASK ABOUT TELEVISION VIEWING

18. On an average day, how much time **does this child** spend watching TV?
- _____ hours _____ minutes
19. Does this child have a TV in his/her bedroom? YES NO
20. Do you limit your child's TV viewing to less than 2 hours per day?
- Always Usually Sometimes Rarely Never
21. On an average day, how much time **do you** spend watching TV?
- _____ hours _____ minutes
22. Do you watch TV during meals?
- Always Usually Sometimes Rarely Never

23. I am confident in my ability to reduce my child's TV viewing time.

- Strongly agree Agree Don't know Disagree Strongly disagree

QUESTIONS 24 - 28 ASK ABOUT PHYSICAL ACTIVITY

24. On a typical day, how much time does your child spend playing outdoors?

Waking up until noon:

- none 1-15 minutes 16-30 minutes 31-60 minutes over 60 minutes

Noon until 6 pm:

- none 1-15 minutes 16-30 minutes 31-60 minutes over 60 minutes

6 pm until bedtime:

- none 1-15 minutes 16-30 minutes 31-60 minutes over 60 minutes

25. Do you do as many physical activities with this child as you would like? YES NO

If No, why? (Check all that apply)

- a. I don't have enough time
- b. I'm too tired
- c. There aren't safe areas to play
- d. Weather
- e. Don't know where to go or what to do with child
- f. Not enough activity programs for parents and young children
- g. I have to watch my other children
- h. Other _____

Appendix II-N: NY Fit WIC Baseline Participant Survey

26. I am confident in my ability to encourage my child to be physically active.
 Strongly agree Agree No Opinion Disagree Strongly disagree

27. How many days per week do you participate in MODERATE physical activity for at least 30 minutes (for example bicycling at a steady pace, walking briskly or gardening)? _____ days

28. How many days per week do you participate in VIGOROUS physical activity for at least 20 minutes (for example aerobics, running, or fast bicycling)? _____ days

QUESTIONS 29 - 38 ASK ABOUT WIC NUTRITION EDUCATION

29. In the past 12 months, have you attended WIC nutrition education classes?
 YES NO If yes, how many times? _____

30. Did WIC staff discuss the following with you?

a. Fruits and vegetables	<input type="checkbox"/> YES	<input type="checkbox"/> NO
b. Low-fat dairy	<input type="checkbox"/> YES	<input type="checkbox"/> NO
c. Physical activity	<input type="checkbox"/> YES	<input type="checkbox"/> NO
d. TV viewing	<input type="checkbox"/> YES	<input type="checkbox"/> NO

31. Did you learn something new from WIC staff about:

a. Fruits and vegetables	<input type="checkbox"/> YES	<input type="checkbox"/> NO
b. Low-fat dairy	<input type="checkbox"/> YES	<input type="checkbox"/> NO
c. Physical activity	<input type="checkbox"/> YES	<input type="checkbox"/> NO
d. TV viewing	<input type="checkbox"/> YES	<input type="checkbox"/> NO

Appendix II-N: NY Fit WIC Baseline Participant Survey

32. Are you offering or encouraging this child to:
- a. Eat fruits and vegetables YES NO
 - b. Eat or drink low-fat dairy YES NO
 - c. Be physically active YES NO
 - d. Reduce TV viewing time YES NO
33. I am satisfied with WIC nutrition education:
- Strongly agree Agree No Opinion Disagree Strongly disagree
34. I am confident in my ability to help this child reach/maintain a healthy body weight:
- Strongly agree Agree No Opinion Disagree Strongly disagree
35. I am confident in my ability to offer this child more fruits and vegetables:
- Strongly agree Agree No Opinion Disagree Strongly disagree
36. I am confident in my ability to offer this child low fat milk:
- Strongly agree Agree No Opinion Disagree Strongly disagree
37. I am comfortable talking to WIC staff about any health-related issues:
- Strongly agree Agree No Opinion Disagree Strongly disagree
38. As a result of WIC nutrition education, I have started to set my own goals to improve my health:
- Strongly agree Agree No Opinion Disagree Strongly disagree

QUESTION 39 ASKS ABOUT GENERAL DIFFICULTIES

39. Do you have:

- | | | |
|--|------------------------------|-----------------------------|
| a. Enough money for healthy foods | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| b. Safe places for young children to play outside | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| c. Places to buy fresh foods in your neighborhood | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| d. Transportation to go places | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| e. Enough support from family or friends | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| f. Feelings about being out of control with what this child eats | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| g. Problems attending WIC education classes | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| h. Other _____ | <input type="checkbox"/> YES | <input type="checkbox"/> NO |

PLEASE SHARE OTHER COMMENTS: _____

Thank you

2008 WIC SURVEY

If you have a child in your care **two to five years of age** enrolled in WIC, please answer this short survey. If you have more than one child in WIC, please answer these questions about your OLDEST child now enrolled in WIC.

The survey takes about 15 minutes to complete and asks about ways that we can help you and your family enjoy healthy lifestyles.

We appreciate your taking the time to help us improve the New York State WIC program.

When finished, please place survey in the envelope provided. Return sealed envelope to WIC staff, or place in box provided.

Thank you!



Appendix II-O: *NY Fit WIC* Follow-up Participant Survey

1. Today's Date: ____/____/____
month day year

2. Child's Date of Birth: ____/____/____
month day year

3. Child is a: Girl Boy

4. Child's Height: ____feet ____ inches

5. Child's Weight: _____pounds

QUESTIONS 6 - 13 ASK ABOUT YOU, THE PARENT/CAREGIVER

6. About how many years have you or your children received WIC benefits? _____ years

Please answer both questions 7 and 8:

7. Are you Hispanic/Latino? Yes No

8. What is your race? (Check all that apply)

- a. Black or African American b. White c. Pacific Islander
 d. Native American/Alaskan Native e. Asian

9. What language do you speak most often at home?

- a. English b. Spanish c. Chinese d. Other _____

Appendix II-O: *NY Fit WIC* Follow-up Participant Survey

10. Where were you born?

a. United States

b. Puerto Rico

c. Outside the United States. Print name of country: _____

11. If you were born outside the United States, when did you come to live in the United States?

Year ____ _

12. What is your Date of Birth? ____ / ____ / ____

month day year

13. What is the highest level of school you completed? **(Please check only one.)**

a. No schooling completed

e. High School Graduate or GED

b. Nursery School to 4th grade

f. Some college, no degree

c. 5th, 6th, 7th, or 8th grade

g. Associate, trade, technical degree (e.g., AA, AS)

d. Some high school but no diploma

h. Bachelor's degree or more (e.g., BA, AB, BS)

QUESTIONS 14 - 15 ASK ABOUT THIS CHILD'S EATING HABITS

14. In the past week, on average, how many times a day did this child have the following?
(Circle the times per day.)

Fruit	0	1	2	3	4	5 or more
Vegetables	0	1	2	3	4	5 or more
100% fruit juice	0	1	2	3	4	5 or more
Soda/sweetened beverages	0	1	2	3	4	5 or more
Plain milk	0	1	2	3	4	5 or more
Flavored milk	0	1	2	3	4	5 or more
Water	0	1	2	3	4	5 or more

15. What kind of milk does this child drink most often?

- a. Fat-free (skim) b. Low-fat (1%) c. Reduced fat (2%) d. Whole e. Other

QUESTIONS 16-17 ASK ABOUT YOUR NUTRITIONAL BELIEFS

16. What type of milk do you think this child should drink? (Check all that apply.)

- a. Fat-free (skim) b. Low-fat (1%) c. Reduced fat (2%) d. Whole e. Other

17. Which of the following do you think are reasons that a child under the age of five is overweight?

(Please check all reasons that apply.)

- a. Not enough physical activity Yes
- b. Their natural body shape Yes
- c. Eats the wrong foods Yes
- d. Eats too much Yes
- e. Poor parenting Yes
- f. Other _____
- g. Don't know

QUESTIONS 18 – 23 ASK ABOUT TELEVISION VIEWING

18. On an average day, how much time **does this child** spend watching TV?

_____ hours _____ minutes

19. Does this child have a TV in his/her bedroom? Yes No

20. Do you limit this child's TV viewing to less than 2 hours per day?

Always Usually Sometimes Rarely Never

21. On an average day, how much time **do you** spend watching TV?

_____ hours _____ minutes

22. Do you watch TV during meals?

Always Usually Sometimes Rarely Never

23. I am confident in my ability to reduce this child's TV viewing time.

Strongly agree Agree Don't know Disagree Strongly disagree

QUESTIONS 24 - 28 ASK ABOUT PHYSICAL ACTIVITY

24. On a typical day, how much time does this child spend playing outdoors?

From waking up until noon:

- None 1-15 minutes 16-30 minutes 31-60 minutes Over 60 minutes

From noon until 6 pm:

- None 1-15 minutes 16-30 minutes 31-60 minutes Over 60 minutes

From 6 pm until bedtime:

- None 1-15 minutes 16-30 minutes 31-60 minutes Over 60 minutes

25. Do you do as many physical activities with this child as you would like?

Yes → **If Yes**, go to question 26.

No → **If No**, check all of the reasons that apply.

- a. I don't have enough time
- b. I'm too tired
- c. There aren't safe areas to play
- d. Weather
- e. Don't know where to go or what to do with child
- f. Not enough activity programs for parents and young children
- g. I have to watch my other children
- h. Other _____

Appendix II-O: *NY Fit WIC* Follow-up Participant Survey

32. Are you offering or encouraging this child to do any of the following? (Please check all that apply.)

- a. Eat fruits and vegetables Yes
- b. Eat or drink low-fat dairy Yes
- c. Be physically active Yes
- d. Reduce TV viewing time Yes

33. I am satisfied with WIC nutrition education:

- Strongly agree Agree No Opinion Disagree Strongly disagree

34. I am confident in my ability to help this child reach/maintain a healthy body weight:

- Strongly agree Agree No Opinion Disagree Strongly disagree

35. I am confident in my ability to offer this child more fruits and vegetables:

- Strongly agree Agree No Opinion Disagree Strongly disagree

36. I am confident in my ability to offer this child low fat milk:

- Strongly agree Agree No Opinion Disagree Strongly disagree

37. I am comfortable talking to WIC staff about any health-related issues:

- Strongly agree Agree No Opinion Disagree Strongly disagree

38. As a result of WIC nutrition education, I have started to set my own goals to improve my health:

- Strongly agree Agree No Opinion Disagree Strongly disagree

QUESTION 39 ASKS ABOUT GENERAL DIFFICULTIES

39. Do you have any of these difficulties? (Please check all that apply.)

- a. Enough money for healthy foods Yes
- b. Safe places for young children to play outside Yes
- c. Places to buy fresh foods in your neighborhood Yes
- d. Transportation to go places Yes
- e. Enough support from family or friends Yes
- f. Feelings about being out of control with what this child eats Yes
- g. Problems attending WIC education classes Yes
- h. Other _____ Yes

QUESTION 40 ASKS ABOUT USING THE INTERNET

40. Do you have access to the internet through any of these? (Please check all that apply.)

- a) A computer at home? Yes
- b) A computer at a family or friend's house? Yes
- c) A computer at school? Yes
- d) A computer at the library or internet café? Yes
- e) A hand-held device (cell phone, PDA) Yes
- f) Other _____ Yes

PLEASE SHARE OTHER COMMENTS: _____

Thank you.

NY FIT WIC PARTICIPANT SURVEY SAMPLING PLAN

SELECTION OF “UNTRAINED SITES”

As of July 2006, forty-nine local agencies with 217 local sites had not yet received Fit WIC training. These agencies had 57 rural and 160 non-rural sites. To aid study planning, the average monthly counts of eligible participants at each site were obtained from PedNESS data sources for the period January to July, 2006. To reduce the burden on selected agencies, WIC DOH staff decided that only sites with at least five expected eligible participant visits per month would be considered for the survey. This reduced the number of eligible untrained sites to 168.

Of 57 rural sites, 32 had at least five expected eligible participant visits per month. To meet the grant objectives, all 32 sites in rural census tracts with at least five expected visits of eligible participants per month were selected. These sites belonged to 14 different local agencies. The total number of eligible visits per month at the 32 sites was about 397, which was 86 percent of all expected visits at rural sites. Participating rural sites were asked to recruit all eligible Fit WIC participants over a two month period.

Classification of sites as urban and rural for the initial evaluation sample was done in two steps. The addresses of all WIC sites were first geocoded using ArcGIS v9.1 (ESRI Redlands, CA). The WIC sites were then classified as urban or rural according to the USDA’s year 2000 Rural-Urban Commuting Area (RUCA) Codes for NYS.¹

The 160 non-rural sites had 10,254 expected eligible participant visits per month. Of these sites, 136 had at least five expected eligible visits per month, with 10,194 visits expected, or 99.4 percent of the non-rural expected total. These 136 sites in the 49 untrained agencies constituted the “frame” for the non-rural sample.

To assure reasonable statewide representation, the non-rural agencies were classified into four geographic-racial sampling strata. The strata were initially based on three geographic regions: Upstate, Western, and Downstate. In the Downstate region, Whites were a minority. To assure adequate representation of Whites in the Downstate sample, the Downstate agencies were divided into two strata: Whites with less than 20 percent of expected eligible population (n=25 agencies) and Whites with more than 20 percent of expected population (n=9 agencies).

The standard method for selecting units of different sizes, in this case, agencies, is to sample them with probability proportional to size (“PPS” sampling).² For the non-rural evaluation sample, we chose 23 as the number of agencies to select; this number would be manageable and would provide sufficient degrees of freedom for estimating the standard errors. The number to be selected in each stratum was made roughly proportional to the stratum sizes:

¹ Alma Young. 2000 Rural-Urban Commuting Area Codes. *USDA Economic Research Service* 2005 March 11; Available at: URL: <http://www.ers.usda.gov/Data/RuralUrbanCommutingAreaCodes/2000/>. Accessed November 27, 2009.

² Kish L. *Survey Sampling*. NY: Wiley; 1965.

two from the upstate stratum; four from the western stratum; 12 from the downstate stratum with Whites < 20% of expected visits; and five from the downstate stratum with Whites > 20% expected visits. We chose as a size measure the monthly number of expected visits. Suppose n agencies in a stratum are to be selected without replacement with probability z , proportional to size. PPS sampling cannot be carried out unless $z < (1/n)$ (Cochran, 1977, p. 262). The PPS algorithm identified 11 agencies so large that they failed this criterion. These agencies were taken into the sample with certainty, and the remainder were sampled. For example, consider sampling stratum three, downstate NY agencies in which whites had fewer than 20% of expected visits. The plan was to sample $n = 12$ of the 24 agencies from this stratum. The largest agency, number 249, had 10.1% of visits. For this agency, $z = 0.10$ was greater than $1/12 = 0.0833$. Therefore agency 249 was drawn into the sample with certainty. After agency 249 was excluded, 11 selections remained for stratum three. The second largest agency in the stratum, number 248, had $z = 0.102$, which was greater than $1/11$. Therefore it, too, was drawn with certainty into the sample, and 10 agencies were selected in stratum three.

In the second stage of sampling, sites were clustered into “sampling units.” Sampling units were collections of sites within each contracting WIC agency, for which collectively at least 50 visits per month by eligible participants were expected. In small agencies, all sites within the agency were selected, even if the total number of expected visits was fewer than 50. The sampling units in other agencies were formed so that, if possible, each consisted of one large site and one or more small sites. These are so-called “dumb-bell” sampling units: each represents both large and small sites, which is desirable for cluster sampling.³

The specific procedure for forming sampling units within an agency was as follows: First the local sites for the agency were listed in reverse order of the expected number of eligible visits per month. Each “large” site (>50 expected eligible visits) was assigned to a different sampling unit. Next the small sites (<50 expected visits) were each assigned to the sampling unit of one large site, in reverse order of size of the large sites. That is, the first small site was attached to the smallest large site; the next small site was attached to the second-smallest large site, and so on. The process continued until each small site had been attached to a larger site. An advantage of this procedure was that the sampling units within one agency were made as equal in size as possible. The following table is an example of the creation of three sampling units from five sites, three “large” and two “small.” After the “large” sites were assigned sampling unit numbers 1, 2, and 3, the largest “small” site was assigned to sampling unit 3; and the next largest “small” site was assigned to sampling unit 2.

Table 1: Description of sampling units

Site	Expected Visits	Type	Assigned Sampling Unit
1	120	Large	1
2	80	Large	2
3	60	Large	3
4	30	Small	3

³ Deming WE. On Simplifications of Sampling Design Through Replication with Equal Probabilities and without Stages. *Journal of the American Statistical Association* 51[273], 24-53. 1956.

5	15	Small	2
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The largest number of sampling units formed in a single agency was six. It was not always possible to form an “ideal” sampling unit. For example if there was only one large site and several small sites, one sampling unit might have contained only small sites.

The last sampling step was for the non-rural sites and was to select one sampling unit at random from each agency. This led to a sample of 41 sites in 23 sampling units, one sampling unit per agency.

Computation of counts by racial group led to concern that there would be too few Blacks in the sample. To increase the potential number of Black participants, sites in already selected agencies were ranked by the percentage of expected Black participants. To avoid giving too much weight to a single agency, only the highest ranking site at each agency was considered. The three highest ranking sites, from three agencies, were added to the final sample, giving a total of 44 non-rural sites.

The final untrained sample for survey one consisted of 76 sites (32 rural, 44 non-rural) from the 33 selected agencies. Fourteen agencies were selected because they had rural sites and 23 were selected for the non-rural sample. Four of these 23 also had selected rural sites, leading to the total of 33 unique agencies.

Sample size calculations for the Fit WIC evaluation suggested that we obtain 2,000 questionnaires at each of the survey periods. Calculations showed that this number would be attainable if, at each selected site, 100 surveys, or the maximum possible, were given over a two-month period. WIC staff monitored the survey yield and at some sites, primarily the rural sites, the sampling period was extended by an additional month. Sample size calculations used fairly conservative methods outlined by Henry, which assume limited knowledge of probable outcome.⁴ This evaluation was planned to allow for the possibility of examining results within sub-groups such as region, race/ethnicity and possibly other characteristics, so that each subgroup had to have a complete sample. The methods applied resulted in a sample size of approximately 2,000 surveys.

SELECTION OF “TRAINED SITES”

To assess for selection bias in terms of whether sites that volunteered early for training differed from sites that had not, additional surveys were sent to 33 sites in 15 trained agencies.

The design for the sample of trained agencies and sites is similar to that of the non-rural untrained sample described above: two-stage sampling of agencies and sites. Fifty-two agencies with 292 sites had received Fit WIC training by July/August, 2006. Fifty sites had fewer than five expected eligible visits per month, totaling about one percent (0.8%) of all expected monthly visits. These sites were eliminated from the population of sites eligible for sampling.

⁴ Henry GT. *Practical Sampling*. Newbury Park, CA: Sage Publications, Inc.; 1990.

Appendix II-P: Technical Notes – *NY Fit WIC* Participant Survey Sampling Plan

For sampling purposes, the trained agencies were divided into two geographical strata: 1) Upstate and Western (23 agencies), 2) Downstate (29 agencies). Fifteen agencies were selected. One was selected with certainty from the downstate region. The others were sampled with probability proportional to size: four from the Upstate and Western stratum and 10 from the Downstate stratum.

The selected agencies had 114 local sites. These were formed into 49 sampling units, following the procedure described above for non-rural untrained sites. One sampling unit was drawn at random from each agency. The final sample consists of 33 different local sites. Agencies were asked to obtain at least 90 surveys per month for two months at each selected site, or the maximum possible for two months.

NY FIT WIC PARTICIPANT SURVEY DATA CLEANING

In the Spanish version of the survey, some of the answer choices in the question asking about the parent’s/ caregiver’s highest level of education, were mistranslated. For example, the word “College” may have been interpreted by some as meaning High School. To compensate for this issue, the higher levels of education categories were collapsed into a “high school or more” (see descriptive results section) category which eliminated the need to divide the Hispanic respondents by the language of the survey they used. There may also have been translation problems for questions regarding physical activity. The most reasonable conclusion based on past and current findings, was that Spanish and English language survey respondents were different, and that necessitated separate analysis for each group.

Missing values were indentified and investigated using a variety of techniques from simple individual frequencies and cross-tabulations to logistic regressions. Logistic regression was employed to determine whether the missing values were randomly distributed or were associated with a particular group. The preliminary analysis was based on a “complete-case” data set which contained no missing values for the outcome variables. In the final data set for the subsequent analyses, records that had more than five missing values of the key predictor variables were removed. The resulting data set had a manageable amount of missing data in the predictor variables, and was used to assess each outcome variables.

Appendix II-R: Agency Training Dates, Cohorts, and Duration of Follow-up

Agency training dates, cohorts, and duration of follow-up

Agency	Training date	Start of break in period	End of break in period	Start of post training cohort	End of post training cohort	Start of pre training cohort	End of pre training cohort	Pre training censoring date	Post training censoring date	Actual follow up in months
1	03/09/07	03/01/2007	09/01/2007	09/01/2007	08/31/2008	03/01/2004	02/28/2005	02/28/2007	08/31/2009	11
2	05/31/07	06/01/2007	12/01/2007	12/01/2007	11/30/2008	06/01/2004	05/31/2005	05/31/2007	08/31/2009	9
3	06/15/04	07/01/2004	01/01/2005	01/01/2005	12/31/2005	07/01/2001	06/30/2002	06/30/2004	12/31/2007	23
4	03/09/07	03/01/2007	09/01/2007	09/01/2007	08/31/2008	03/01/2004	02/28/2005	02/28/2007	08/31/2009	11
5	06/29/05	07/01/2005	01/01/2006	01/01/2006	12/31/2006	07/01/2002	06/30/2003	06/30/2005	12/31/2008	24
6	02/06/06	02/01/2006	08/01/2006	08/01/2006	07/31/2007	02/01/2003	01/31/2004	01/31/2006	07/31/2009	24
7	02/27/06	03/01/2006	09/01/2006	09/01/2006	08/31/2007	03/01/2003	02/29/2004	02/28/2006	08/31/2009	24
8	03/30/07	04/01/2007	10/01/2007	10/01/2007	09/30/2008	04/01/2004	03/31/2005	03/31/2007	08/31/2009	11
9	06/15/04	07/01/2004	01/01/2005	01/01/2005	12/31/2005	07/01/2001	06/30/2002	06/30/2004	12/31/2007	23
10	04/22/05	05/01/2005	11/01/2005	11/01/2005	10/31/2006	05/01/2002	04/30/2003	04/30/2005	10/31/2008	24
11	03/30/07	04/01/2007	10/01/2007	10/01/2007	09/30/2008	04/01/2004	03/31/2005	03/31/2007	08/31/2009	11
12	06/15/04	07/01/2004	01/01/2005	01/01/2005	12/31/2005	07/01/2001	06/30/2002	06/30/2004	12/31/2007	23
13	02/27/06	03/01/2006	09/01/2006	09/01/2006	08/31/2007	03/01/2003	02/29/2004	02/28/2006	08/31/2009	24
14	09/29/05	10/01/2005	04/01/2006	04/01/2006	03/31/2007	10/01/2002	09/30/2003	09/30/2005	03/31/2009	24
15	09/29/05	10/01/2005	04/01/2006	04/01/2006	03/31/2007	10/01/2002	09/30/2003	09/30/2005	03/31/2009	24
16	01/10/06	01/01/2006	07/01/2006	07/01/2006	06/30/2007	01/01/2003	12/31/2003	12/31/2005	06/30/2009	24
17	01/10/06	01/01/2006	07/01/2006	07/01/2006	06/30/2007	01/01/2003	12/31/2003	12/31/2005	06/30/2009	24
18	09/29/05	10/01/2005	04/01/2006	04/01/2006	03/31/2007	10/01/2002	09/30/2003	09/30/2005	03/31/2009	24
19	04/22/05	05/01/2005	11/01/2005	11/01/2005	10/31/2006	05/01/2002	04/30/2003	04/30/2005	10/31/2008	24
20	06/30/06	07/01/2006	01/01/2007	01/01/2007	12/31/2007	07/01/2003	06/30/2004	06/30/2006	08/31/2009	20
21	03/30/05	04/01/2005	10/01/2005	10/01/2005	09/30/2006	04/01/2002	03/31/2003	03/31/2005	09/30/2008	24
22	04/22/05	05/01/2005	11/01/2005	11/01/2005	10/31/2006	05/01/2002	04/30/2003	04/30/2005	10/31/2008	24
23	05/06/05	05/01/2005	11/01/2005	11/01/2005	10/31/2006	05/01/2002	04/30/2003	04/30/2005	10/31/2008	24
24	05/31/07	06/01/2007	12/01/2007	12/01/2007	11/30/2008	06/01/2004	05/31/2005	05/31/2007	08/31/2009	9
25	05/31/07	06/01/2007	12/01/2007	12/01/2007	11/30/2008	06/01/2004	05/31/2005	05/31/2007	08/31/2009	9
26	09/29/05	10/01/2005	04/01/2006	04/01/2006	03/31/2007	10/01/2002	09/30/2003	09/30/2005	03/31/2009	24
27	05/31/07	06/01/2007	12/01/2007	12/01/2007	11/30/2008	06/01/2004	05/31/2005	05/31/2007	08/31/2009	9
28	05/31/07	06/01/2007	12/01/2007	12/01/2007	11/30/2008	06/01/2004	05/31/2005	05/31/2007	08/31/2009	9
29*	06/29/07	07/01/2007	01/01/2008	01/01/2008	12/31/2008	07/01/2004	06/30/2005	06/30/2007	08/31/2009	7
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31	05/07/07	05/01/2007	11/01/2007	11/01/2007	10/31/2008	05/01/2004	04/30/2005	04/30/2007	08/31/2009	9
32	05/25/07	06/01/2007	12/01/2007	12/01/2007	11/30/2008	06/01/2004	05/31/2005	05/31/2007	08/31/2009	9
33*	05/25/07	06/01/2007	12/01/2007	12/01/2007	11/30/2008	06/01/2004	05/31/2005	05/31/2007	08/31/2009	9
34	05/01/07	05/01/2007	11/01/2007	11/01/2007	10/31/2008	05/01/2004	04/30/2005	04/30/2007	08/31/2009	9
35	05/18/07	06/01/2007	12/01/2007	12/01/2007	11/30/2008	06/01/2004	05/31/2005	05/31/2007	08/31/2009	9
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37	05/18/07	06/01/2007	12/01/2007	12/01/2007	11/30/2008	06/01/2004	05/31/2005	05/31/2007	08/31/2009	9

Appendix II-R: Agency Training Dates, Cohorts, and Duration of Follow-up

Agency training dates, cohorts, and duration of follow-up

Agency	Training date	Start of break in period	End of break in period	Start of post training cohort	End of post training cohort	Start of pre training cohort	End of pre training cohort	Pre training censoring date	Post training censoring date	Actual follow up in months
38	03/29/06	04/01/2006	10/01/2006	10/01/2006	09/30/2007	04/01/2003	03/31/2004	03/31/2006	08/31/2009	23
39	03/24/05	04/01/2005	10/01/2005	10/01/2005	09/30/2006	04/01/2002	03/31/2003	03/31/2005	09/30/2008	24
40	09/08/06	09/01/2006	03/01/2007	03/01/2007	02/29/2008	09/01/2003	08/31/2004	08/31/2006	08/31/2009	18
41	04/13/07	04/01/2007	10/01/2007	10/01/2007	09/30/2008	04/01/2004	03/31/2005	03/31/2007	08/31/2009	11
42	04/13/07	04/01/2007	10/01/2007	10/01/2007	09/30/2008	04/01/2004	03/31/2005	03/31/2007	08/31/2009	11
43	04/13/07	04/01/2007	10/01/2007	10/01/2007	09/30/2008	04/01/2004	03/31/2005	03/31/2007	08/31/2009	11
44	01/26/07	02/01/2007	08/01/2007	08/01/2007	07/31/2008	02/01/2004	01/31/2005	01/31/2007	08/31/2009	13
45	09/08/06	09/01/2006	03/01/2007	03/01/2007	02/29/2008	09/01/2003	08/31/2004	08/31/2006	08/31/2009	18
46	04/27/07	05/01/2007	11/01/2007	11/01/2007	10/31/2008	05/01/2004	04/30/2005	04/30/2007	08/31/2009	9
47	11/17/06	12/01/2006	06/01/2007	06/01/2007	05/31/2008	12/01/2003	11/30/2004	11/30/2006	08/31/2009	15
48	12/01/06	12/01/2006	06/01/2007	06/01/2007	05/31/2008	12/01/2003	11/30/2004	11/30/2006	08/31/2009	15
49	04/27/07	05/01/2007	11/01/2007	11/01/2007	10/31/2008	05/01/2004	04/30/2005	04/30/2007	08/31/2009	9
50	01/12/07	01/01/2007	07/01/2007	07/01/2007	06/30/2008	01/01/2004	12/31/2004	12/31/2006	08/31/2009	14
51	04/05/06	04/01/2006	10/01/2006	10/01/2006	09/30/2007	04/01/2003	03/31/2004	03/31/2006	08/31/2009	23
52	07/13/05	07/01/2005	01/01/2006	01/01/2006	12/31/2006	07/01/2002	06/30/2003	06/30/2005	12/31/2008	24
53	09/26/05	10/01/2005	04/01/2006	04/01/2006	03/31/2007	10/01/2002	09/30/2003	09/30/2005	03/31/2009	24
54	10/20/06 05/11/07	05/01/2007	11/01/2007	11/01/2007	10/31/2008	11/01/2003	10/31/2004	10/31/2006	08/31/2009	9
55	05/19/05	06/01/2005	12/01/2005	12/01/2005	11/30/2006	06/01/2002	05/31/2003	05/31/2005	11/30/2008	24
56	09/20/06	10/01/2006	04/01/2007	04/01/2007	03/31/2008	10/01/2003	09/30/2004	09/30/2006	08/31/2009	17
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59*	06/30/06	07/01/2006	01/01/2007	01/01/2007	12/31/2007	07/01/2003	06/30/2004	06/30/2006	08/31/2009	20
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62	10/27/06	11/01/2006	05/01/2007	05/01/2007	04/30/2008	11/01/2003	10/31/2004	10/31/2006	08/31/2009	16
63	04/29/05	05/01/2005	11/01/2005	11/01/2005	10/31/2006	05/01/2002	04/30/2003	04/30/2005	10/31/2008	24
64	11/18/05	12/01/2005	06/01/2006	06/01/2006	05/31/2007	12/01/2002	11/30/2003	11/30/2005	05/31/2009	24
65	06/30/06	07/01/2006	01/01/2007	01/01/2007	12/31/2007	07/01/2003	06/30/2004	06/30/2006	08/31/2009	20
66	04/29/05	05/01/2005	11/01/2005	11/01/2005	10/31/2006	05/01/2002	04/30/2003	04/30/2005	10/31/2008	24
67	10/20/06 02/16/07	03/01/2007	09/01/2007	09/01/2007	08/31/2008	11/01/2003	10/31/2004	10/31/2006	08/31/2009	11
68	03/30/06	04/01/2006	10/01/2006	10/01/2006	09/30/2007	04/01/2003	03/31/2004	03/31/2006	08/31/2009	23
69	02/16/07	03/01/2007	09/01/2007	09/01/2007	08/31/2008	03/01/2004	02/28/2005	02/28/2007	08/31/2009	11
70	03/08/05	03/01/2005	09/01/2005	09/01/2005	08/31/2006	03/01/2002	02/28/2003	02/28/2005	08/31/2008	24
71	11/29/05	12/01/2005	06/01/2006	06/01/2006	05/31/2007	12/01/2002	11/30/2003	11/30/2005	05/31/2009	24
72	04/28/06	05/01/2006	11/01/2006	11/01/2006	10/31/2007	05/01/2003	04/30/2004	04/30/2006	08/31/2009	22

Appendix II-R: Agency Training Dates, Cohorts, and Duration of Follow-up

Agency training dates, cohorts, and duration of follow-up

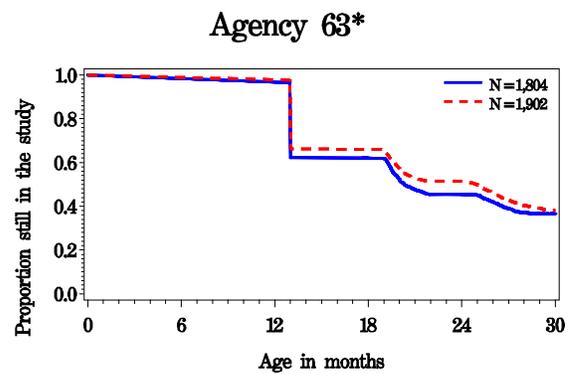
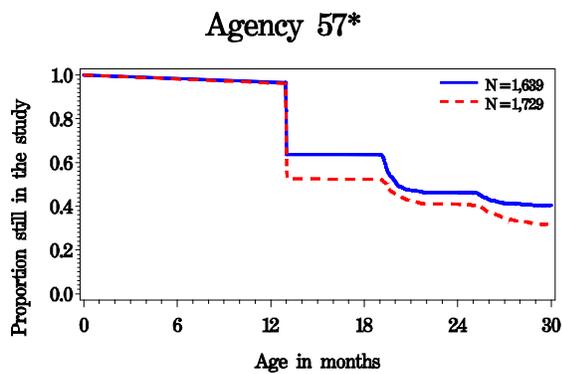
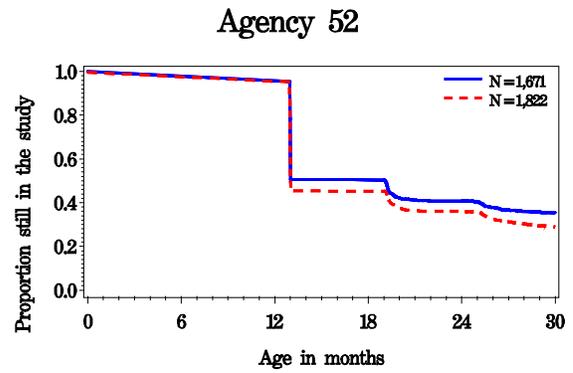
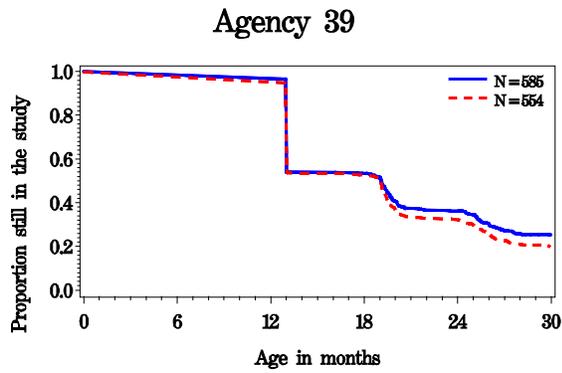
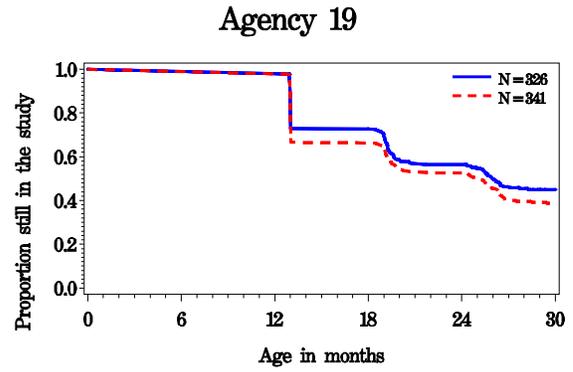
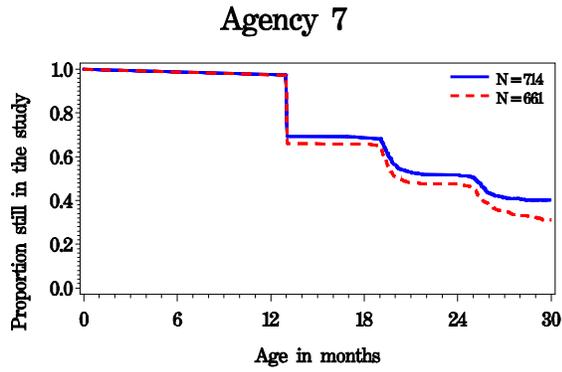
Agency	Training date	Start of break in period	End of break in period	Start of post training cohort	End of post training cohort	Start of pre training cohort	End of pre training cohort	Pre training censoring date	Post training censoring date	Actual follow up in months
73	04/16/07	05/01/2007	11/01/2007	11/01/2007	10/31/2008	05/01/2004	04/30/2005	04/30/2007	08/31/2009	9
74	05/18/07	06/01/2007	12/01/2007	12/01/2007	11/30/2008	06/01/2004	05/31/2005	05/31/2007	08/31/2009	9
75	08/31/06	09/01/2006	03/01/2007	03/01/2007	02/29/2008	09/01/2003	08/31/2004	08/31/2006	08/31/2009	18
76	05/11/07	05/01/2007	11/01/2007	11/01/2007	10/31/2008	05/01/2004	04/30/2005	04/30/2007	08/31/2009	9
77	08/30/05	09/01/2005	03/01/2006	03/01/2006	02/28/2007	09/01/2002	08/31/2003	08/31/2005	02/28/2009	24
78	01/31/06	02/01/2006	08/01/2006	08/01/2006	07/31/2007	02/01/2003	01/31/2004	01/31/2006	07/31/2009	24
79	12/08/06	12/01/2006	06/01/2007	06/01/2007	05/31/2008	12/01/2003	11/30/2004	11/30/2006	08/31/2009	15
80	02/17/06	03/01/2006	09/01/2006	09/01/2006	08/31/2007	03/01/2003	02/29/2004	02/28/2006	08/31/2009	24
81	02/02/07	02/01/2007	08/01/2007	08/01/2007	07/31/2008	02/01/2004	01/31/2005	01/31/2007	08/31/2009	13
82	05/18/07	06/01/2007	12/01/2007	12/01/2007	11/30/2008	06/01/2004	05/31/2005	05/31/2007	08/31/2009	9
83	05/26/06	06/01/2006	12/01/2006	12/01/2006	11/30/2007	06/01/2003	05/31/2004	05/31/2006	08/31/2009	21
84	10/27/06	11/01/2006	05/01/2007	05/01/2007	04/30/2008	11/01/2003	10/31/2004	10/31/2006	08/31/2009	16
85	05/26/06	06/01/2006	12/01/2006	12/01/2006	11/30/2007	06/01/2003	05/31/2004	05/31/2006	08/31/2009	21
86	02/02/07	02/01/2007	08/01/2007	08/01/2007	07/31/2008	02/01/2004	01/31/2005	01/31/2007	08/31/2009	13
87	10/13/06	10/01/2006	04/01/2007	04/01/2007	03/31/2008	10/01/2003	09/30/2004	09/30/2006	08/31/2009	17
88	02/15/07	03/01/2007	09/01/2007	09/01/2007	08/31/2008	03/01/2004	02/28/2005	02/28/2007	08/31/2009	11
89	05/11/07	05/01/2007	11/01/2007	11/01/2007	10/31/2008	05/01/2004	04/30/2005	04/30/2007	08/31/2009	9
90	12/15/06	01/01/2007	07/01/2007	07/01/2007	06/30/2008	01/01/2004	12/31/2004	12/31/2006	08/31/2009	14
91	04/28/06	05/01/2006	11/01/2006	11/01/2006	10/31/2007	05/01/2003	04/30/2004	04/30/2006	08/31/2009	22
92	01/28/05	02/01/2005	08/01/2005	08/01/2005	07/31/2006	02/01/2002	01/31/2003	01/31/2005	07/31/2008	24
93	01/27/05	02/01/2005	08/01/2005	08/01/2005	07/31/2006	02/01/2002	01/31/2003	01/31/2005	07/31/2008	24
94	05/18/07	06/01/2007	12/01/2007	12/01/2007	11/30/2008	06/01/2004	05/31/2005	05/31/2007	08/31/2009	9
95	04/28/06	05/01/2006	11/01/2006	11/01/2006	10/31/2007	05/01/2003	04/30/2004	04/30/2006	08/31/2009	22
96	04/29/05	05/01/2005	11/01/2005	11/01/2005	10/31/2006	05/01/2002	04/30/2003	04/30/2005	10/31/2008	24
97	05/11/07	05/01/2007	11/01/2007	11/01/2007	10/31/2008	05/01/2004	04/30/2005	04/30/2007	08/31/2009	9
98	01/12/07	01/01/2007	07/01/2007	07/01/2007	06/30/2008	01/01/2004	12/31/2004	12/31/2006	08/31/2009	14
99	01/16/07	02/01/2007	08/01/2007	08/01/2007	07/31/2008	02/01/2004	01/31/2005	01/31/2007	08/31/2009	13
100	01/16/07	02/01/2007	08/01/2007	08/01/2007	07/31/2008	02/01/2004	01/31/2005	01/31/2007	08/31/2009	13
101	06/29/07	07/01/2007	01/01/2008	01/01/2008	12/31/2008	07/01/2004	06/30/2005	06/30/2007	08/31/2009	7

Note: Agencies with ‘*’ closed during the study period and their records were not included in analysis.

RETENTION CURVES FOR SELECTED AGENCIES

— Post-training cohort

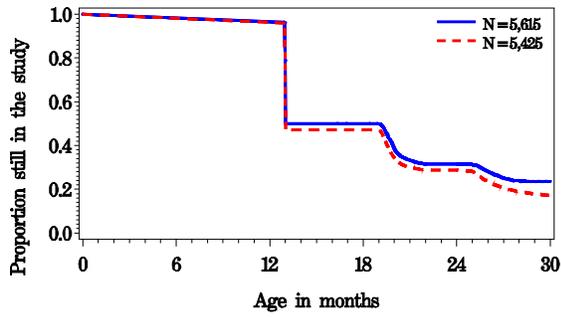
⋯ Pre-training cohort



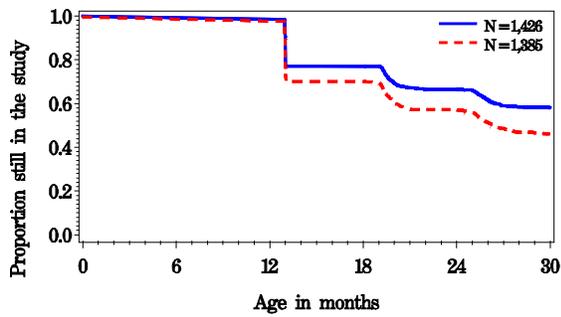
RETENTION CURVES FOR SELECTED AGENCIES

— Post-training cohort ····· Pre-training cohort

Agency 92*



Agency 96*



* indicates significant difference in retention at .05 level.

Comparison of retention rates by agency

Agency	Retention rate		Training date	Difference in retention Post - Pre	95% confidence limits		Significant
	Pre training	Post training			Pre	Post	
5	39.3	39.7	06/29/05	0.39	36.06 , 42.57	36.52 , 42.89	
6	48.1	51.5	02/06/06	3.39	44.76 , 51.33	48.13 , 54.72	
7	47.6	51.7	02/27/06	4.05	43.78 , 51.38	47.95 , 55.28	
10	59.5	56.5	04/22/05	-2.97	53.98 , 64.51	51.27 , 61.36	
13	57.3	54.0	02/27/06	-3.35	52.16 , 62.16	48.90 , 58.79	
14	50.2	50.0	09/29/05	-0.22	45.53 , 54.72	45.26 , 54.55	
15	55.3	55.8	09/29/05	0.54	51.88 , 58.50	52.53 , 58.93	
16	56.4	53.0	01/10/06	-3.42	53.40 , 59.28	50.04 , 55.82	
17	44.5	43.7	01/10/06	-0.78	41.70 , 47.19	41.04 , 46.28	
18	50.5	44.1	09/29/05	-6.43	45.35 , 55.49	38.70 , 49.37	
19	52.5	56.4	04/22/05	3.95	47.06 , 57.64	50.88 , 61.62	
21	47.4	43.7	03/30/05	-3.72	45.53 , 49.31	41.82 , 45.58	
22	48.4	51.4	04/22/05	2.99	45.39 , 51.32	48.51 , 54.16	
23	46.9	43.4	05/06/05	-3.49	44.83 , 48.96	41.42 , 45.40	
26	48.5	45.2	09/29/05	-3.34	43.58 , 53.28	40.00 , 50.21	
39	32.7	36.4	03/24/05	3.74	28.80 , 36.59	32.52 , 40.30	
52	36.4	40.9	07/13/05	4.49	34.24 , 38.65	38.57 , 43.28	
53	53.7	55.5	09/26/05	1.75	50.74 , 56.58	52.59 , 58.23	
55	38.8	39.2	05/19/05	0.32	35.36 , 42.30	35.69 , 42.61	
57	41.0	46.2	03/18/05	5.18	38.68 , 43.32	43.76 , 48.58	Yes
61	41.9	41.4	05/19/05	-0.48	40.26 , 43.55	39.76 , 43.09	
63	51.4	45.5	04/29/05	-5.91	49.15 , 53.64	43.20 , 47.79	Yes
64	55.0	57.5	11/18/05	2.53	52.74 , 57.13	55.22 , 59.69	
66	43.9	47.0	04/29/05	3.05	40.46 , 47.36	43.59 , 50.31	
70	53.0	49.9	03/08/05	-3.11	51.10 , 54.85	47.97 , 51.78	
71	42.0	40.5	11/29/05	-1.43	40.24 , 43.70	38.73 , 42.36	
77	46.2	45.1	08/30/05	-1.14	45.38 , 47.09	44.22 , 45.96	
78	43.8	42.5	01/31/06	-1.33	41.89 , 45.66	40.72 , 44.17	
80	56.1	56.7	02/17/06	0.64	54.06 , 58.04	54.81 , 58.58	
92	28.7	31.5	01/28/05	2.75	27.54 , 29.95	30.28 , 32.70	Yes
93	35.5	35.2	01/27/05	-0.27	33.96 , 36.95	33.67 , 36.70	
96	57.7	66.6	04/29/05	8.93	55.04 , 60.24	64.11 , 69.00	Yes

III. APPENDICES

WIC Special Project WISP-06-NY-1

APPENDIX III-A	FOTG Community Resources Guides
APPENDIX III-B	FOTG Training Material
APPENDIX III-C	FOTG Nutrition Spotlight Newsletter
APPENDIX III-D	FOTG Monthly Calendar of Events
APPENDIX III-E	FOTG Focus Group Protocol
APPENDIX III-F	FOTG Counselors' Cheat Sheet
APPENDIX III-G	FOTG Logic Model
APPENDIX III-H	FOTG Pre-Intervention Participant Survey
APPENDIX III-I	FOTG Post-Intervention Participant Survey



Community Resource Guide

GET OUT AND PLAY



Families on the Go

Funded by USDA WIC Special Projects Grant WISP-06-NY-1.
The information provided here is the sole responsibility of the authors and may not reflect the views of the funding agency.
This **draft** copy of the Community Resource Guide was produced by the New York State Department of Health, Division of Nutrition. Comments and suggestions can be sent to Brett Wyker, Assistant Project Manager at:

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State of New York
Eliot Spitzer, Governor
Department of Health
Richard F. Daines, M.D., Commissioner

1/08



welcome

to Families on the Go!

Community Resource Guide

Congratulations! Your clinic has been chosen to participate in the Families on the Go program. The program provides resources to help you find ways to increase your children's physical activity and improve their health.

What are the goals of Families on the Go?

Goal 1 Increase the time your children play outdoors

Goal 2 Decrease the time your children watch TV

To help you reach these goals, this community guide:

- Outlines benefits of an active lifestyle for you and your children.
- Identifies areas in your community where you and your children can be physically active.
- Provides maps of the city and descriptions of areas.
- Provides a calendar of outdoor events to get you out and about.

Get out and play!
Switch it up! Switch it off!

Things to do just outside of Syracuse

Below is a list of places that are not included on the maps. They are 20 minutes or more outside of downtown Syracuse, but they have a lot of activities for families. Check out the calendar of events for more information.

Beaver Lake Nature Center
8477 East Mud Lake Road
Baldwinsville, NY 13027
638-2519

Pratt's Falls Park
7671 Pratt's Falls Park
Pompey, NY 13138
682-5934

Highland Forest
Highland Park Road
Fabius, NY 13063
683-5550

New York State Fairgrounds
581 State Fair Boulevard
Syracuse, NY 13209
487-7711

Long Branch Park
371 Long Branch Road
Syracuse, NY 13209
689-9367

Clark Reservation State Park
6105 East Seneca Turnpike
Jamesville, NY 13078
492-1590

Onondaga Lake Park
6790 Onondaga Lake Trail
Liverpool, NY 13088
689-9367

The Ultimate Goal Family Sports Center
3800 Lee Mulroy Road
Marcellus, NY 13108
673-4625



Visit these websites for more activities
www.syracuseparent.net
www.syracuse.ny.us/visitorCalendar.asp
www.syracuse.ny.us/Parks/index.html

What indoor places can we go to during the winter to be active?

- Try bowling at **Boulevard Bowling Center**. **27**
- Go ice skating at one of these locations:
 - 8** Sunnycrest Park **14** Clinton Square
 - 24** Tennity Ice Pavilion **25** Meacham Fields
- Go for a swim at one of these locations:
 - 16** Southwest Community Center **25** Valley Pool

- Take a walk during mall walking hours:

<p>Carousel Center 9090 Carousel Center 466-7000</p> <p>Ride the carousel on the second floor. Tokens to ride are \$1. Mall walking hours: Mon. - Sat. 7am - 10am Sun. 7am - 11am Use the Yellow Carousel entrance</p>	<p>Shoppingtown Mall 3649 Erie Blvd. East 466-9160</p> <p>Indoor play area for preschoolers by the food court. Mall walking hours: Mon. - Sat. 7am - 10am Sun. 7am - 11am</p>
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What can kids do inside during the winter other than watching TV?

Try these fun indoor games:

- **Slam Dunk** - toss bean bags or rolled up socks into a basket or box.
- **Freeze Dancing** - put on some music and let your child dance. When you stop the music, everyone needs to freeze until you put the music back on.
- **Indoor fort** - Make an indoor fort or tunnels to crawl through using a blanket and chairs.
- **Other games** - Play other games such as follow the leader or hide and seek.

Possible **Benefits** of increasing outdoor time & decreasing TV time

Children can

- Learn better
- Be more confident
- Improve their health
- Sleep better after a day outdoors
- Fight less with their brothers and sisters
- Develop strong bones

You can

- Be more active
- Prevent the “winter blues” and reduce “cabin fever”
- Relieve stress
 - Fresh air is relaxing
 - Children seem less noisy when outdoors
 - Children sleep better after a day outdoors
 - With less TV time, children are less likely to ask for foods and toys seen on TV



An active lifestyle is the key to good health

In addition to all of the health benefits listed above, being physically active will reduce your child’s risk of following health conditions

- **Diabetes (sugar)** • **Obesity** • **Asthma**

Being cold does not give you a cold

Colds are not caused by temperature, they’re caused by viruses. Although colds are more common in the winter, this is because we spend more time indoors passing the virus to each other. *Being cold* has nothing to do with *catching* a cold.

Goal 1: Increase the amount of time your children play outdoors

What the experts say:

Children should be active for at least 60 minutes per day.

Physical activity helps protect children from obesity.

Children are most active when outdoors.

Encourage your child to play outdoors every day

- Make a game out of going outdoors. Go on a hunt for outdoor things like animal tracks in the snow.
- Select toys that can be used for outdoor active play such as sleds, shovels and ice skates.
- Find things that the whole family can do, like making a snowman family.
- Use this guide to find new places to visit in your area.

Tips

Goal 2: Decrease the time your children spend watching TV

What the experts say:

Children should watch no more than 2 hours of TV per day (this includes video games and DVDs)

Watching TV more than 2 hours a day increases your child's risk of obesity.

Children who have TVs in their bedroom watch the most TV.

Limit TV viewing to no more than 2 hours per day

- Turn TV off during mealtime.
- Encourage your children to choose at most 1-2 favorite programs each day.
- Avoid using TV as a reward.
- Remove the TV from your child's bedroom.
- Encourage your child to play outdoors instead of watching TV.

Tips

Parents' Frequently-Asked Questions

It is hard to get everyone dressed to go outside in the winter. How can I make this easier?

- Put gloves, hats and scarves in a box by the door.
- Encourage your child to put on some of his or her clothing.
- Dress your oldest child first -- dress the baby last.



Remember, kids love snow!



Taking the TV out of my child's bedroom will be hard on my child and me. How can I make this easier for everyone?

- Find other things that your child can do in his or her bedroom, such as listen to music, color and read.

Tips on how to do this:

- Put a radio or CD player in your child's room.
- Get books from the library. The library also has books on CD or cassette.
- Put blankets and cushions on the floor to make coloring and reading more fun for children.
- Find places in your community that have Story Time for children. Many libraries and book stores have Story Time and it is free (see page 6 for library info.)
- Reduce fights over watching TV by planning ahead. Decide as a family which shows to watch.

Appendix III-A: FOTG Community Resource Guide

South-East Side - Map D

26 **Thornden Park**
300 Ostrom Ave.
473-4330

27 **Boulevard Bowling Center**
2312 Erie Blvd. E.
446-8560

20 kids lanes (bumpers in gutters)
Price: \$8 for 2 games and shoes

28 **Barry Park**
1200 Westcott St.
473-4330

29 **Nottingham High School**
310 East Genesee St.
435-4390

Basketball games
(see schedule at the back of the guide)

12

How to use the maps

The next few pages include maps of the city of Syracuse. The city is broken down into four areas: **North, South, South-West and South-East.**

- > Find your home on the map.
- > On each map you will find numbered recreation sites. Match the number on the map to the number on the next page. Blue dots are outdoor places and red dots are indoor places.

For example, **1** on the North Side map refers to: **1** **Washington Square Park**

Syracuse, NY Area

North Side (Map A)

South-West Side (Map B)

South-East Side (Map D)

South Side (Map C)

● Winter Recreation Areas

North Side - Map A

Outdoor: ●
Indoor: ●

Libraries: [Library icon]
Parks: [Park icon]

Visit the library!

There are many things for preschoolers to do at your local library. Visit your nearest library to learn more about Story Time readings and activities like Toddler Tango dancing and Kids Yoga. Libraries are marked on each map with the symbol above.



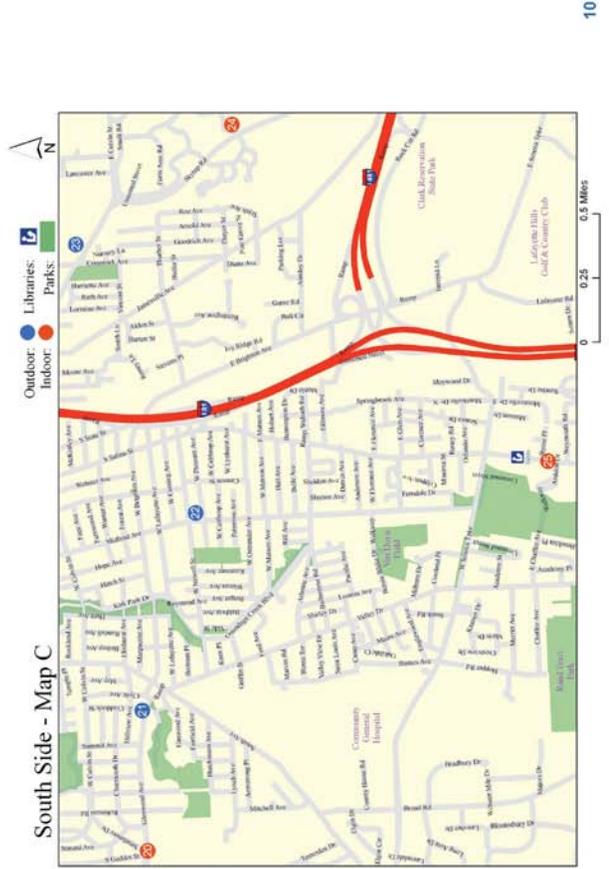
Outdoor fun in the winter

Play in the snow! It doesn't cost anything and it's right outside your front door.

- ⊛ Have a snowball fight
- ⊛ Find animal tracks
- ⊛ Make footprints
- ⊛ Build a snowman
- ⊛ Make snow angels
- ⊛ Go sledding
- ⊛ Go for a walk at one of the parks listed in the guide.

SOUTH SIDE - MAP C

- 20** **Corcoran High School**
919 Glenwood Ave.
435-4293
Basketball games
Ice hockey games
(see schedule at the back of the guide)
- 21** **Elmwood Park**
150 Glenwood Ave.
473-4330
- 22** **McKinley Park**
W. Newell St. (between Kenmore & Midland Ave.)
473-4330
- 23** **Comfort Tyler Park**
1300 East Colvin St.
473-4330
- 24** **Syracuse University**
Tennity Ice Pavilion
551 Skytop Rd.
443-4254
Next to Syracuse University
Cost \$5, \$2.50 on Sundays
Skate rentals \$4, \$2 Mon.& Tues.
- 25** **Meachem Field**
4800 S. Salina St.
473-4336
Ice skating - Costs: \$2 for adults,
\$1 for children under 12 and
adults 55 or older.
Skate rentals: \$3.
- Near Meachem Field:
Valley Pool (indoor)- located
behind Clary Middle School.



Tips for enjoying the outdoors in the winter

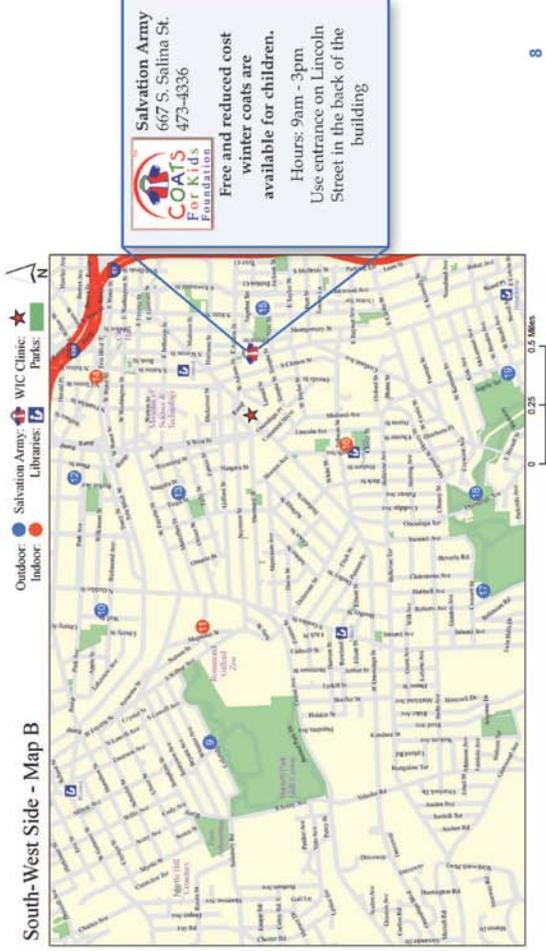


- ❖ Make sure you have warm clothing for your children including:
 - Coat
 - Hat
 - Scarf
 - Gloves
 - Snow boots
- ❖ More info about free and low-cost winter coats on page 8.
- ❖ Dress your child in layers, including two pairs of socks.
- ❖ Keep your child's ears covered.
- ❖ Attach mittens to your child's coat with yarn or string.
- ❖ Line boots with bags to keep feet dry.
- ❖ Rather than going outside for an hour, go out twice for 20-30 minutes.
- ❖ Take water to drink.

NORTH SIDE - MAP A

- 1** Washington Square Park
400 LeMoynes Ave.
473-4330
 - 2** Union Park
1100 N. Salina St.
473-4330
 - 3** McChesney Park
2300 Grant Blvd.
 - 4** Schiller Park
1100 Rugby Rd.
473-4330
 - 5** Lincoln Park
100 Robinson St.
473-4330
 - 6** Henninger High School
600 Robinson St.
435-4810
- Basketball games (see schedule at the back of the guide)
- 7** Norwood Park
400 Norwood Ave.
473-4330
 - 8** Sunnycrest Park
701 Robinson St.
473-4330
- Ice skating at the Frank Salanger Athletic Complex - \$2 for adults, \$1 for children under 12 and adults 55 or older. Skate rentals: \$3.
- 

Many of the sites listed in the guide are on the Centro busline. Maps, schedules and fare information are available by calling 442-3333 or online at www.centro.org



SOUTH-WEST SIDE - MAP B

<p>9 Burnet Park 300 Coleridge Ave. 473-4330</p> <p>10 Frazer Park 400 Richmond Ave. 473-4330</p> <p>11 Fowler High School 227 Magnolia St. 435-4364</p> <p>Basketball games Wrestling matches (see schedule at the back of the guide)</p> <p>12 Leavenworth Park 300 Park Ave. 473-4330</p> <p>13 Skiddy (West End) Park 300 Troga St. 473-4330</p>	<p>14 Clinton Square 50 S. Clinton St. 473-4330</p> <p>Ice skating - Costs: \$3 for adults, \$1.50 for children under 12 and adults 55 or older. Skate rentals: \$3.</p> <p>15 Roesler (New Street) Park 1000 S. State St. 473-4330</p> <p>16 Southwest Community Center 401 South Ave. 474-6823</p> <p>Indoor pool.</p> <p>17 Onondaga Park-Upper 600 Roberts Ave. 473-4330</p>	<p>18 Onondaga Park-Lower 655 Onondaga Ave. 473-4330</p> <p>19 Kirk Park 400 W. Borden Ave. 473-4330</p> <p>Roller skating</p>
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Winter safety

- ❖ **Always supervise children when playing in the snow**
- ❖ **Beware of these dangerous areas**
Frozen ponds and rivers.
Snow banks near the road (snowplow drivers may not see children playing).
Snow tunnels and snow forts (the roof might collapse).
- ❖ **When sledding**
Avoid very steep hills or hills with a lot of trees.
Check hills for ice and other hazards (like branches).
Do not sled near roads, lakes or ponds.
Do not sled head-first. Your feet should point downhill.
- ❖ **Watch for signs of Frostbite** - grey or white patches on the skin, tingling, numbness and a burning sensation on the skin.

Families on the Go

An intervention implemented at the Onondaga WIC clinic



Developed and administrated by NYSDOH and the School of Public Health at the University at Albany

What is Families on the Go all about?

- ❖ “Families on the Go” is a physical activity program designed for parents of WIC-enrolled children between the ages of 2 to 5 years.
- ❖ The program is an extension of Fit WIC and will be tested at this WIC site. If it is successful at this site, it will likely be expanded to other WIC sites across New York State.

What are the goals of the program?

- ❖ Goals of Fit WIC:
 1. Develop new, innovative strategies to prevent overweight in children
 2. Promote physical activity with WIC families and support WIC staff in developing healthy lifestyles
 3. Provide materials and resources for WIC staff and participant education
- ❖ Goals of Families on the Go:
 1. Increase the amount of time children spend playing outdoors
 2. Decrease the amount of time children spend watching TV

What will Families on the Go involve?

1. Nutrition counseling: WIC counselors will be trained on how to incorporate the goals of increasing physical activity and decreasing TV viewing into counseling sessions.
2. A Community Guide: During WIC counseling sessions, WIC counselors will give parents a community guide that outlines:
 - a. The goals of the program
 - b. Tips on how to achieve the goals
 - c. A calendar of local outdoor events (such as fairs)
 - d. Maps of outdoor places where children and families can be active

What is my role in this program?

Support Staff

In the past...

- ❖ Facilitated the scheduling of focus groups and training sessions.
- ❖ Helped keep record of completed surveys and weekly time sheets.

Now...

- ❖ Monitor the supply of community guides and calendar of events. Make sure the most up-to-date calendars are inserted in to the community guides.
- ❖ Talk to parents about upcoming outdoor events in the area.
- ❖ Be available to answer parents' questions about the guide.

Nutrition Counselors

- ❖ Talk to parents during counseling sessions about the importance of increasing children's physical activity and decreasing their TV viewing time.
- ❖ Troubleshoot with parents ways to overcome barriers they may be facing.

- ❖ Distribute the community guide and show parents how to use the guide to achieve the goals of Families on the Go.

What is the timeline for the program?

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
2006	Program development											
2007	Program development				Collect baseline information		Counselor training July 31st		Families on the Go runs from August 1, 2007 until May 2008			
2008	Families on the Go runs from August 1, 2007 until May 2008				Collect post-program information				Was the program successful?			

October 2006 – June 2007: Program development

⇒ Conduct a literature review

- Identify expert recommendations for physical activity and television viewing for children.
- Identify successful family-based strategies to promote physical activity in low- income populations.
- Develop ideas (or “tips”) on how to achieve the goals of the program.

⇒ Identify safe parks and playgrounds in the area

- Conduct online searches of recreation venues in the Syracuse area.
- Contact the Syracuse Department of Parks and Recreation.
- All locations were plotted on maps by DOH staff using Geographic Information Systems (GIS).
- All locations were identified to make sure they were appropriate for families with young children.

⇒ Draft the Community Guide using this information

⇒ Solicit feedback from WIC staff

- A draft of the guide was distributed to WIC staff and counselors for their input.
- Suggested adding things such as “Drink plenty of water while outdoors” and “Pack a healthy snack for a picnic at the park”.
- The guide was changed based on these suggestions.

⇒ Solicit feedback from parents with WIC-enrolled children

- Two focus groups were conducted with parents from this clinic.
- Parents suggested things such as providing information on how to deal with children with different ages and outdoor recreation areas that we had missed.
- The guide was revised based on their feedback. The addition of a frequently asked questions section was the direct result of feedback from the focus groups.

⇒ Revisions and Printing

May 2007: Gathering baseline information

⇒ Approximately 500 parents of children 2-5 years from this clinic completed surveys in the waiting room. The surveys will provide us with information on the following:

- Demographics (i.e. age, sex, height, weight, race/ethnicity)
- Television viewing habits
 - Average amount of time child spends watching TV per day
 - Whether the child has a TV in their bedroom
 - How often the child eats or snack while watching TV

July 31, 2007: Counselor training

- ⇒ A one-day workshop will be provided for all Onondaga WIC staff to:
- Outline in detail the goals of Families on the Go and the process by which the program was developed.
 - Emphasize the importance of increasing physical activity & decreasing TV viewing.
 - Outline the timeline of events.
 - Encourage counselors to incorporate physical activity into all counseling sessions.
 - Teach counselors how to use the community guide to inform parents about the goals of the program and ways to achieve these goals.
 - Identify possible barriers that parents might experience and ways to overcome some of these barriers.

August 2007 – May 2008: PROGRAM BEGINS AUGUST 1st

- ⇒ During this 8-month period, the program, and in particular the community guide, will be incorporated into the nutrition counseling sessions.
- ⇒ A revised version of the guide will be developed for the winter months to include winter activities.

May 2008: Conduct post-intervention survey

- ⇒ Another 500 parents will complete the same survey that was completed during May of 2007.
- ⇒ The results of the two surveys will be used to evaluate the effectiveness of the program.

June 2008 – December 2008: Was the program successful?**The program will be evaluated in a number of ways.**

- ⇒ We will compare parents' answers on the surveys that they completed before the program was implemented and at the end of the program. We would like to see the following:
- Decrease in the number of hours children spend watching TV
 - Increase in parents' perception of their ability to reduce children's TV time
 - Increase in the number of times per week children go to a park or playground
 - Increase in the number of hours children spend outdoors
 - Increase in parents' perception of their ability to encourage outdoor activities
- ⇒ We will ask you for your feedback on the program both during the program and at its completion on the following:
- Was the community guide useful?

- Were there any obstacles to including the program in to your nutrition counseling sessions?
- Were parents receptive to your efforts?
- ⇒ We will also ask parents how useful they thought the guide was and what parts of the guide were most useful. This will allow us to keep the good stuff and improve the things that were less helpful if we extend this program to other sites.
 - Current physical activity
 - Number of times the child plays at a park or playground each week
 - Amount of time child spends playing outdoors
 - Number of days per week the parent participates in moderate and vigorous physical activity

THE COMMUNITY GUIDE

What information is included in the guide?

- ❖ Benefits of an active lifestyle
- ❖ Tips on how to achieve the program goals
- ❖ Lists of safe outdoor recreation areas in the community and the amenities at each location
- ❖ Detailed maps of the recreational areas
- ❖ Frequently asked questions about how to achieve the goals
- ❖ Calendar of outdoor events in the community

How can I incorporate the guide into my counseling sessions?

- ❖ From August 1, 2007 – May 2008 the community guide will be distributed to all parents with a WIC-enrolled child who is 18 months or older (Parents of infants and pregnant women are excluded).
- ❖ Explain that this community guide was developed specifically for this clinic and is tailored to the Syracuse community.
- ❖ Point out the two goals of the program and show parents the key sections in the guide including (see Suggested Topics to Cover on the next page):
 - The health benefits
 - The tips page
 - The frequently asked questions
 - The maps and the descriptions of each location
- ❖ It is important to go through the booklet with them. Please, do not just hand it to them and ask them to read it later.
- ❖ Each parent will visit the clinic 2-3 times between August 2007 and May 2008. If the parent has already received the guide during a previous visit, you can focus your discussion on their progress toward the goals of the program. The types of questions you could pose include: Do they remember what the goals of the program are? Do they still have their guide? Is the guide helpful? If yes, what was most helpful (this could be important information to pass on to other parents)? If they have not been successful, what has made it difficult for them?
- ❖ If parents have lost their first copy of the guide, please provide them with a second copy. Also, if a non-eligible parent (i.e., a parent of an infant or a pregnant client) requests a guide, please provide the parent with a copy.
- ❖ During the course of the program, Jill will be available to answer any questions or concerns you may have. She will be in regular contact with us to give us an update on how things are going and challenges that you may be experiencing. We will also brainstorm some issues you may experience and develop possible solutions.

Suggested Topics to Cover

Client's 1st introduction to the program (approximately August '07 – October '07)

- ❖ GOALS (page 3). Tell the client what the two goals are:
 - Increase the amount of time your child plays outdoors
 - Decrease the time your child spends watching TV

- ❖ BENEFITS (page 4). Highlight the benefits for the parent.
 - Kids seem less noisy outdoors
 - Children sleep better after being outdoors
 - Etc...

- ❖ MAPS (pages 5-12). Help each client find their place of residence on a map and highlight that spot.

- ❖ Point out the recreation areas near their house and encourage them to visit at least 2 new places before their next appointment.

- ❖ FREQUENTLY ASKED QUESTIONS (pages 13-14). Let them know that there is some helpful information on how to achieve the two goals.

- ❖ CALENDAR OF EVENTS

Client's 2nd or 3rd visit during the program (approximately November '07 – May '08)

- ❖ Ask the client if they need another copy of the guide. Provide them with the most recent calendar of events.

- ❖ Remind parents about the two goals of the intervention and ask them about their progress to date.

- ❖ Ask if they have visited any new recreation sites since their last visit.

If yes: Where did they go?

 What did they like/dislike?

Did the child(ren) have fun?

Did you make it to any of the events?

If no:

Why not?

Once they have explained the barriers (transportation, not enough time, weather, etc.) preventing them from visiting any of the recreation sites, try to troubleshoot possible solutions with parents.



Nutrition Spotlight: ABC's of Health

July-Sept. 2008
Inside this issue:

A **Aim For Fitness**
Aim for a healthy weight and be active each day. Just get you and your family moving. By walking 30 minutes a day you can be a role model for your children and make a huge difference in their lives. Many studies have shown the benefits of regular activity. Daily activity can reduce the risk of heart disease, diabetes, high blood pressure and colon cancer. It can also help you and your family to stay at a healthy weight.

The U.S. Center for Disease Control says that daily activity:

- Helps build and keep bones and muscles healthy
- Helps control weight and reduce fat
- Improves self esteem and it can be something fun your family can do together.

Playing games like hopscotch, dancing, family walks, playing at the park, flying a kite, riding a bike, and playing baseball or soccer are fun for the whole family. Turn off the TV—children who watch more than 2 hours a day of TV are those children who tend to be overweight!

B **Build a Healthy Base**
Let the USDA Food Pyramid guide your choices. Ask your WIC Nutritionist for a copy and together you can review it. Most of your diet should come from the gold section (grains) of the Food Guide Pyramid (bread, cereal, rice and pasta). These foods provide energy, but choose them well! Choose whole grain foods. Many studies have shown us that eating whole grain foods that contain dietary fiber help ward off heart disease. Whole grains also help prevent your child from being constipated and helps keep children feeling "full". This prevents overeating.

Choose a variety of fruits and vegetables. Since no single fruit or vegetable has all of the nutrients your child needs, the Dietary Guidelines say to eat a variety of fruits and vegetables each day.

Nutrition Spotlight, cont. 2

Get Moving! 3

WIC News 3

What's Cooking: Banana Splits 4

Nutrition Tidbits:

- Daily activity can reduce the risk of heart disease, diabetes, high blood pressure and colon cancer.
- Kids who watch more than 2 hours of TV a day have a greater chance of being overweight versus those who don't.

Nutrition Spotlight, continued

C Choose Smart

Choose a diet that is low in saturated fat and cholesterol and moderate in total fat. Choose 1% or fat-free skim milk for children over 2 years of age. Kids in this country are not only getting too fat but they are eating too much of it. By consuming 1% or fat-free skim milk your child will be well on the way to achieving the goal of a diet low in saturated fats.

Keep the amount of juice to one 4-6 ounce glass a day. Add 4-6 ounces of water and this can become 2 servings. Many children become overweight because they drink too many sweet drinks, which includes soda, fruit punch, Kool-Aid and energy drinks. Water is still the best and safest thirst quencher during the summer months.

D Don't Be Afraid To Try Something New!

Offer your children a new type of vegetable and fruit each day. If they don't care for it, they do not need to eat the rest. Studies have shown that it can take up to eight to ten tries before your child will actually even taste a new food.

Sneak veggies and fruits into foods that your child enjoys. For example, add raisins or shredded carrots to salads or put slices of peppers into pasta sauces.



E Eat Well, Play Hard

Did you know that studies show that kids who watch more than 2 hours of TV a day have a greater chance of being overweight versus those who don't? One out of three kids in our state is overweight. This is for two reasons:

- 1) They are eating more foods that are high in fat and calories, and
- 2) They are not as active as in years past.

TV and computer games have replaced running around and outdoor play. Here are some tips to keep your kids active:

- Limit TV and computer games to a total of 2 hours a day
- Play and be active with your children. Be a role model and let your child see that you enjoy being active.
- Take your child to local playgrounds
- Sign up for activities like baseball, dancing or swimming lessons.

F Farmers Market is Here

It's everybody's favorite time at WIC! Enjoy shopping the area's Farmers Markets and buy your favorite fruits and vegetables. Your WIC clinic has new ideas for you to try. Ask your WIC Nutritionist for this year's recipes.

The market is also a nice way for you to spend some "active" time with your child. Simply walking through the market stalls is fun!

Remember most fruits and vegetables that you see at the market you can buy with your Farmers Market checks. The only requirement is that they be grown in New York State. Enjoy!

Get Moving CNY



Got 30-60 Minutes?

This summer, exercise 30-60 minutes every day for 30 days and earn great prizes! Run, swim, garden, mow the lawn, take your dog for a walk, or do any type of physical activity that you enjoy! Track your fitness goal by downloading your "Get Moving CNY" log sheet and information packet at: www.onondagacountyparks.com, or by calling 453-6712. After 30 days of activity, mail, fax, or drop your log sheet off at Onondaga Lake Park! Begin this FREE program today! It's the fit thing to do!

WIC News

- The WIC Program will be closed Friday, July 4th and Labor Day, Monday, September 1st
- Farmers Market checks are being distributed beginning June 2nd and can be used from July 1st through November 15th. Please ask at your WIC clinic about receiving Farmers Market checks for your family and locations of markets they can be used. Every Wednesday there will be a farmers market at the Bayberry Plaza WIC site, and beginning June 18th, the mobile farmers market will be outside the West Onondaga WIC site.
- If you have a question, you can email the WIC office at hlwicinfo@ongov.net.
- Remember that to enroll on WIC or to receive your WIC checks and/or a new WIC ID card you must have photo ID or a WIC ID card
- Remember that WIC Proxies are not allowed to pick up a WIC ID card.

Here's What's Cooking

Watermelon-Blueberry Banana Splits



Ingredients

- 2 large ripe bananas***
- 8 scoops seedless watermelon** or ***
- 1 pint blueberries** or ***
- ½ cup low-fat vanilla yogurt
- ¼ cup crunchy cereal*

How to Prepare

1. Cut the bananas crosswise in half; cut each piece lengthwise in half.
2. For each serving, place 2 pieces of banana against the sides of a long shallow dessert dish.
3. Place a scoop of watermelon at each end of the dish. *Cooking tip:* Use an ice cream scoop to scoop out the watermelon balls and remove the seeds, if necessary.
4. Fill the center with blueberries.
5. Stir the yogurt until smooth; spoon over the watermelon.
6. Sprinkle with the cereal.

Makes 4 servings

* WIC Foods

** Use Farmers Market checks

*** Fruit and Vegetable WIC check for those 2 years of age & older

Onondaga County Health Department WIC Program
375 West Onondaga Street, Room 12, Syracuse, NY 13202 • 435-3304

Standards for participation in the WIC Program
are the same for everyone regardless of race, color, creed,
national origin, political beliefs or sex.



Joanne M. Mahoney
County Executive



Cynthia B. Morrow, MD, MPH
Commissioner of Health

www.ongov.net

FOTG Article:

GET OUT AND PLAY! SWITCH IT UP! SWITCH IT OFF!

- ❖ **Toddlers and preschool-aged children should be active for at least 60 minutes per day**

What are the BENEFITS of physically activity?

Physical activity ...

- Helps to increase children's self-esteem and improve their general health
- Improves their coordination and fitness
- Protects children from obesity
- Helps children sleep better, which reduces your stress

HOW can we be active?

- Play outside as much as possible
- Go to a park or playground
- Talk family walks in the evening to help everyone unwind
- Choose toys that encourage active play such as jump ropes, balls, bubbles and bikes
- Do family activities outside such as raking leaves

- ❖ **Toddlers and preschool-aged children should watch no more 2 hours of TV each day**

WHY watch less TV?

- Watching more than 2 hours per day increases your child's risk of obesity
- If your child watches less TV, they will likely to nag for things that they see on TV
- Time spent watching reduces that time children have for active play

HOW can we watch less TV?

- Encourage your child to play outside instead of watching TV
- Remove the TV from your child's bedroom
- Turn the TV off while eating

- Try not to use the TV as a reward. You could reward your child with a trip to the playground.

Your WIC counselor will talk to you about a new program in this clinic called “Families on the Go” that will help you and your family reduce TV time and get out and explore your community this summer.

1. Your child should be active for at least _____ minutes each day.
 - a. 15
 - b. 30
 - c. 60
2. Your child should watch less than _____ hours of TV each day.
 - a. 2
 - b. 4
 - c. 6
3. What are the benefits of your child being active? Circle all of the right answers.
 - a. Health
 - b. Happiness
 - c. Child sleeps better
 - d. High self esteem
 - e. Protects child from obesity

The next two questions do not have a right or wrong answer.

4. Does your child have a TV in his/her bedroom?
 - a. Yes
 - b. No
5. How often does your child play outside?
 - a. Never
 - b. Once a week
 - c. Every other day
 - d. Every day

Appendix III-D: FOTG Monthly Calendars of Events

FOTG Monthly Calendars of Events

July & August 2008 Events	
What, When & Where	Event description
 Animal Demonstrations July 1-August 1 everyday Where: Rosamond Gifford Zoo	Animal Demonstrations will take place during the day Cost: FREE with zoo admission Phone: 315-435-8511
Strathmore Saturdays Saturdays in July & August (7am-11:30am) Where: Upper Onondaga Park	Roadway around the park will be closed for walking, jogging & biking. Cost: FREE Phone: (315) 473-4330
 Downtown Farmer's Market Every Tuesday Jul-Oct (7am-4pm) Where: Corner of W. Washington & S. Salina Streets	Enjoy local produce, assorted food vendors and more! Cost: FREE Phone: 315-422-8284
 Independence Day Fireworks Spectacular! July 4 th (5pm) Where: Empire Expo Center/NYS Fairgrounds, 581 State Fair Blvd.	Patriotic songs by Syracuse Univ. Brass Ensemble-6pm & Syracuse Symphony-8pm with fireworks later Cost: FREE with admissions Phone: 315-487-7711
Y94 FM Parkway Sundays Sun July 6 th -Aug 10 (9am-12pm) Where: Onondaga Lake Park	Roadway around the park will be closed for walking, jogging & biking. Cost: FREE Phone: (315) 453-6712
 A Wild Berry Ice Cream Hike July 9, 11, 23, 25 (1:30pm) Where: Beaver Lake Nature Center	Go on a wild raspberry ramble. Help pick berries and make ice cream! Cost: \$5.00, please register Phone: 315-635-2519
 Sharing Nature Summer Camp Thur & Fri July & Aug (10am-11:30am) Where: Beaver Lake Nature Center	Ages 3-5, and an accompanying adult will enjoy discovery, hikes, games and crafts. Cost: \$6.00, per session Phone: 635-2519
 New York State Rhythm & Blues Festival Sat & Sun July 12 th , 13 th (2pm-11pm) Where: Clinton Square	Enjoy one of Syracuse's largest festivals. Cost: FREE Phone: (315) 473-4330
 Weekend Guided Walks Saturdays & Sundays July 12 th , 13 th , 19 th , 20 th , 26 th , 27 th (2pm) Where: Beaver Lake Nature Center	Join a guide as he points out different animals and plants! Cost: \$2 Phone: 315-635-2519

July & August 2008 Events (Continued)	
What, When & Where	Event Description
 Movie Nights Wednesday July 16 th , 23rd (8pm) Where: McKinley (West Newell Street) & Burnet Parks	(16) Akeelah & the Bee-McKinley (23) Shrek the 3 rd - Burnet Cost: FREE Phone: (315) 473-4330
 Jazz in the Square Thur July 24 th -Sat July 26th Where: Clinton Square	Downtown international Jazz Festival Cost: FREE Phone: (315) 473-4330
 Arts & Crafts Festival July 25 th - 27 th (10 am - 5 pm) Where: Columbus Circle	Enjoy music, multicultural performances, summer refreshments, and family activities. Cost: FREE Phone: 315-422-8284
Syracuse Children's Theater August 1 st , 15 th , 16 th (7pm-10pm) Where: Mulroy Civic Center at Oncenter, 800 S. State St.	Enjoy August 2008 shows Cost: TBD Phone: 315.435.8000
 Weekend Guided Walks Sat & Sun August 2 nd , 3 rd , 9 th , 10 th , 16 th , 17 th , 23 rd , 24 th , 30 th , 31st (2pm) Where: Beaver Lake Nature Center	Join a guide as he points out different animals and plants! Cost: \$2 per vehicle park admission Phone: 315-635-2519
Family Fest "Musical Storytime" Sun August 13th (11am) Where: First Presbyterian Church 97 E. Genesee St.	Enjoy Little Red Riding Hood & Goldilocks and the Three Bears Cost: Free Phone: 315-685-7418
Latin American Festival Sat & Sun Aug 16 th & 17 th (1pm-10pm) Where: Clinton Square	Share the richness of Latino traditions. Enjoy the entertainment. Cost: FREE Phone: (315) 473-4330
 Asian Elephant Extravaganza Saturday Aug 19 th (10am-4:30pm) Where: Rosamond Gifford Zoo	Enjoy demonstrations, elephant face painting, guess an elephant's weight, and see an elephant get a pedicure! Cost: FREE with Zoo admission Phone: 315-435-8511
 New York State Fair August 21-Sept 1 (8am-12midnight) Where: The Empire Expo Center 581 State Fair Blvd.	Join 1 million people for top entertainment, the International Horse Show, rides, and fun Cost: \$10, under 12 free Phone: 315-487-7711

Appendix III-D: FOTG Monthly Calendars of Events

FOTG Monthly Calendars of Events

September 2008 Events	
What, When & Where	Event description
 Animal Demonstrations Monday Sept 1st (all day) Where: Rosamond Gifford Zoo	Animal Demonstrations will take place during the day Cost: FREE with zoo admission Phone: 435-8511
 Downtown Farmer's Market Sept 2, 9, 16, 23, & 30 (7am-4pm) Where: corner of W. Washington & S. Salina Street	Come select from healthy local produce and food vendors Cost: FREE Phone: 315-422-8284
 Time for Twos Wed Sept 3, 10, 17, 24 (10am) Where: Soule Branch Library	Picture books, songs, and rhymes, for age 2. Cost: FREE Phone: 449-4300
 Teddy Bear Story Time Wed Sept 3rd, 10th, 17th, 24th (10am) Where: Paine Branch Library	Stories, songs, finger plays, rhymes, games and crafts for ages 4-5 Cost: FREE Phone: 435-5442
 Beta Fish Story Time Thursdays Sept 4, 11, 18, & 25 (10:30am-11am) Where: Betts Branch Library	Picture books, music and lots of fun for children ages 2 to 5 years. Cost: FREE Phone: 435-1940
 Golden Harvest Festival Sat & Sun- Sept 6 & 7 (10am-7pm) Where: Beaver Lake Nature Center	Enjoy arts, crafts, storytelling, a petting zoo, music, & magic shows Cost: Free for kids 5 & under Phone: 638-2519
 Preschool Story Time Thursday Sept 11, 18, 25 (10am) Where: Soule Branch Library	Stories, songs, and poetry for ages 3 to 5. Cost: FREE Phone: 449-4300
 Festival of Centuries Sat & Sun Sept 13 & 14 (10am-5pm) Where: Sainte Marie among the Iroquois	See a Roman gladiator & enjoy crafts, children's activities, music, and an 11am parade Cost: FREE under age 5 Phone: 453-6768

September 2008 Events Continued	
What, When & Where	Event Description
 Animal Enrichment Day Sat Sept 13 (10am-4:30pm) Where: Rosamond Gifford Zoo	See animal demonstrations with tigers, elephants, penguins, & more! Cost: FREE with zoo admission Phone: 435--8511
 Weekend Guided Walks Sat & Sun Sept 13, 14, 20, 21, 27, 28 (2pm) Where: Beaver Lake Nature Center	Join a guide as he points out different animals and plants! Cost: Free with zoo admission Phone: 635-2519
 Festa Italiana Sept 13 to Sept 15 (11am-11pm) Where: In front of City Hall	Enjoy children's activities and Italian food. Cost: FREE Phone 315-463-5134
Trail Tales Thursday Sept 18th (1pm) Where: Beaver Lake Nature Center	A story and nature walk for children 3 to 5 years. Cost: Free with park admission Phone: 638-2519
JDRF Walk to Find a Cure Sat Sept 27 (9am) Where: Long Branch Park	Come join the walk to cure diabetes at this family friendly event. Cost: FREE, please pre-register Phone: 453-9327
 Big Powersports Show Fri-Sat Oct 3-5 (Fri 5-10pm, Sat 10am-9pm, Sun 10-4pm) Where: Oncenter Convention Center	Come see the best powersports show in the Northeast! Cost: Kids under 5 free, adults \$9 Phone: 315-470-1910
 An Enchanted Beaver Lake October 23-26 (6pm-8:30pm) Where: Beaver Lake Nature Center	See 400 jack-o-lanterns, face painting, fortune telling, & more Cost: FREE under age 3 or \$3 Phone: 635-2519

Appendix III-D: FOTG Monthly Calendars of Events

FOTG Monthly Calendars of Events

October & November Events	
What, When & Where	Event description
Eastside Neighborhood Farmer's Market Thursdays Oct. 4, 11, 18, 25 (3pm-8pm) Where: Lexington Park	Fresh local fruits & veggies, herbs, plants, jams & sauces. Cost: FREE to attend Phone: 470-4893
Trail Tails Thursdays Oct. 4, 18 (1pm) Thursdays Nov. 1, 15 (1pm) Where: Beaver Lake Nature Center	Stories and guided nature walk designed for 3-5 year olds. Cost: \$2 per vehicle Phone: 638-2519
Reptile & Amphibian Exhibit Saturday Oct. 6 (10am-4pm) Where: Beaver Lake Nature Center	One day exhibit of animals like snakes, turtles, geckos and lizards. Cost: \$2 per vehicle Phone: 638-2519
Signs of Autumn Walk Sat/Sun Oct. 6/7, 13/14, 20/21, 27/28 (2:30pm) Sat/Sun Nov. 3/4, 10/11, 17/18, 24/25 (2:30pm) Where: Beaver Lake Nature Center	Participate in a family hike to explore the autumn woods, lake and wildlife. Cost: \$2 per vehicle Phone 638-2519
Zoo Boo Fri/Sat Oct. 19/20, 26/27 (6pm-8:30pm) Where: Rosamond Gifford Zoo	The zoo is having a Halloween bash! Fun for the whole family! Cost: \$4 (advance), \$5 (at door), FREE (under 3 years) Phone: 435-8511 ext 113
Halloween in the Park Friday Oct. 26 (3pm-9pm) Saturday Oct. 27 (10am-9pm) Where: Long Branch at Onondaga Lake Park	Live music, plays, hayrides, magicians, costumes and games. Cost: \$7 (adult), \$5 (ages 6-18), FREE (under 6 years) Phone: 436-2884
Enchanted Beaver Lake Fri/Sat/Sun Oct. 26, 27, 28 (6pm-8:30pm) Where: Beaver Lake Nature Center	Face painting, fortune telling, and trails lit up by jack-o-lanterns. Cost: \$3, FREE (under 3 years) Phone: 638-2519
N.Y. Barge Canal: New Century & System Every day in October (10am-5pm) Where: Erie Canal Museum 318 Erie Blvd.	Walk and discover the history of trains and canals in New York. Cost: FREE Phone: 471-0593
Family Fun at the Hollow October 1-30 (6pm-9pm) Where: The Hollow 3735 W. Seneca Turnpike	Corn maze, farm animals and other outdoor activities. Cost: \$1-\$2 per event
LaFayette Apple Festival Saturday Oct. 6 (9am-6pm) Sunday Oct. 7 (9am-5pm) Where: LaFayette, NY (call for directions)	Crafts, scarecrow contest, rides, games, ponies and lots of apples! Cost: \$4 per person Phone: 877-3300
33rd Annual Train Fair Saturday Nov. 3 (10am-6pm) Sunday Nov. 4 (10am-5pm) Where: New York State Fairgrounds	Come visit the fair to see hundreds of model trains. Cost: \$7 (adult), \$5 (children) Phone: 488-8208

Fit WIC Physical Activity Focus Group Guide

What kind of information would help you to increase your child's time outdoors and decrease their TV time?

(Share the guide with them, then ask the following questions)

What do you think of this guide?

What parts of the guide do you think are most useful?

What would make this guide better for your family's use?

What do you think about the tips to parents section?

- Do these tips seem reasonable to you?
- Should we change any of the tips?
- Are there other tips that we should add?

We have explored various recreation places in your area and have created a map of those places that are safe.

What are your reactions to the maps?

Please tell us of any recreation areas near you that we have overlooked.

We have checked all of these places for safety (so dangerous looking places were taken off the list). Are there places in your area on this list that you know are not safe?



The Community Guide Cheat Sheet

Client's 1st introduction to the program

GOALS Page 3	Physical activity Decreased TV time
BENEFITS Page 4	Highlight the benefits for parents Children sleep better Kids seem less noisy outdoors
MAPS Page 5-12	Find the client's house Point out recreation areas nearby
FAQ'S Pages 13-14	Make clients aware of this section
CALENDAR	Highlight the upcoming events

Client's 2nd or 3rd appointment during the program

Do you still have the guide? Give out another copy if needed plus the updated calendar of events.

Examples of conversation starters:

Have you visited any of the recreation areas?

Which one?

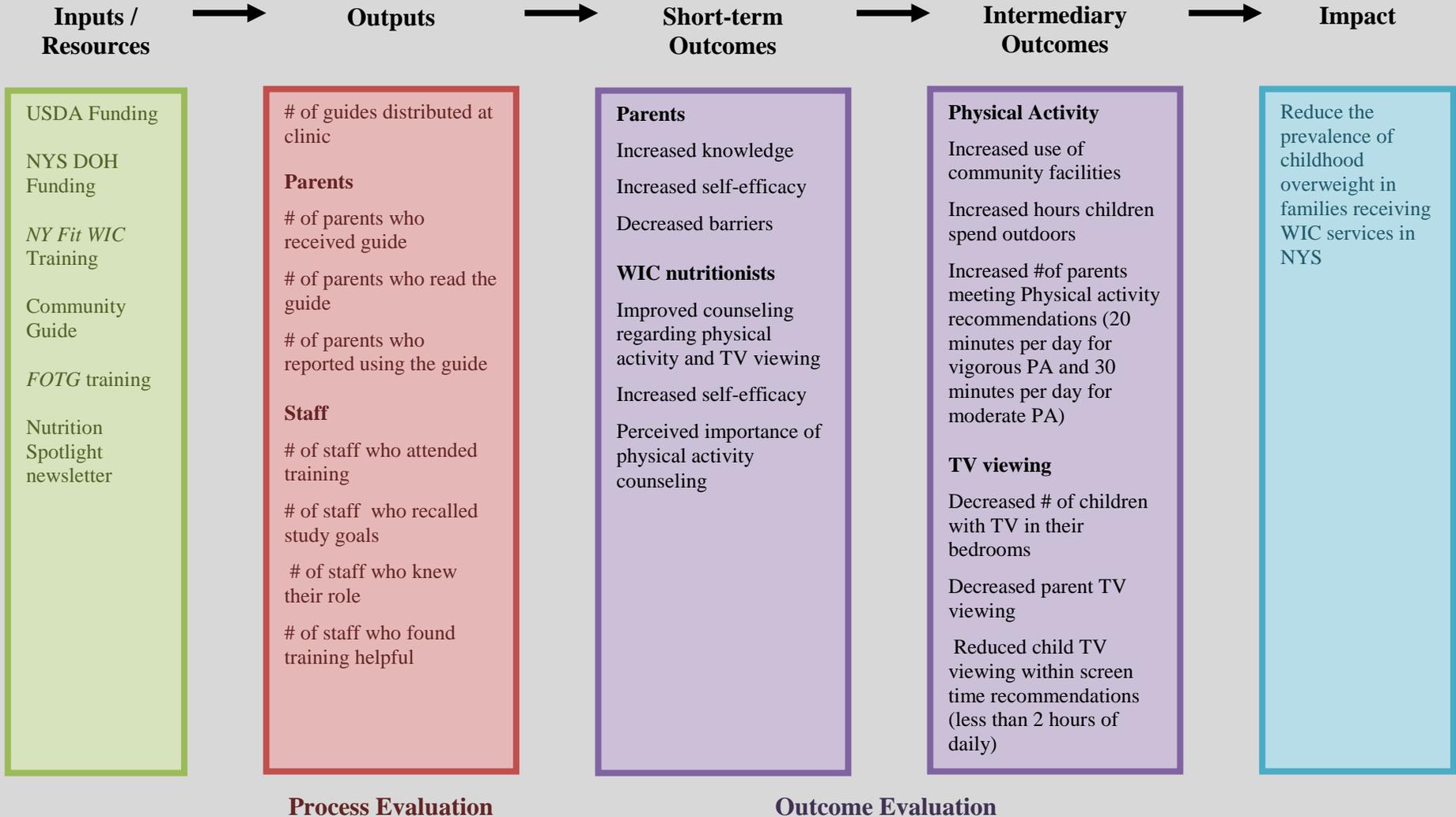
What did you like/dislike?

Did kids have fun?

Did you go to any of the outdoor events?

If they have not used the guide, find out why and try to address some of the barriers that the clients are facing.

FOTG Logic Model



NY Fit WIC and Other Healthy Lifestyle Interventions in WIC and New York State

WIC survey

If you have a child in your care between the ages of 2 to 5 years who is enrolled in WIC, please answer this short survey. If you have more than one child in this age group, please answer this survey for the OLDEST child currently enrolled in WIC.

When finished, please give the completed survey to the interview assistant or put it in the box provided.

QUESTIONS 1 - 10 ASK ABOUT YOUR OLDEST CHILD ON WIC AND ABOUT YOU, THE PARENT/CAREGIVER

1. Child's Date of Birth: month: _____ year: _____
2. Child is a Girl Boy
3. Child's Height: _____ feet _____ inches
4. Child's Weight _____ pounds
5. How would you describe **this child's** weight?
 Underweight A Little Underweight Just Right A Little Overweight
 Overweight
6. Has your child's doctor or someone at WIC ever told you that **this child** is overweight?
 YES NO
7. What is your Date of Birth? month: _____ year: _____
8. Are you Hispanic/Latino? YES NO
9. What is your race? (Check all that apply)
 Black or African American White Pacific Islander
 Native American/Alaskan Native Asian Other _____ (please specify)
10. What is the highest level of school you completed? (Please check only one)
 No Schooling Completed Nursery School to 4th Grade
 5th, 6th, 7th, or 8th Grade 9th, 10th, 11th, or 12th Grade, No Diploma
 High School Graduate or GED Some College or Beyond

QUESTIONS 11 – 20 ASK ABOUT TELEVISION VIEWING FOR YOUR OLDEST CHILD ON WIC AND FOR YOU

11. On an average day, how much time does **this child** spend
watching TV _____ hours _____ minutes
on the computer _____ hours _____ minutes
playing video games _____ hours _____ minutes
12. Do you think that **this child** watches too much TV? YES NO
13. Does **this child** have a TV in his/her bedroom? YES NO
14. Do you limit **this child's** TV viewing to less than 2 hours per day?
 Always Usually Sometimes Rarely Never
15. How often does **this child** eat or snack while watching TV?
 Always Usually Sometimes Rarely Never
16. Has anyone at WIC discussed limiting the amount of TV **this child** watches?
 YES NO
17. I am confident in my ability to reduce **this child's** TV viewing time.
 Strongly Agree Agree Don't Know Disagree Strongly Disagree
18. On an average day, how much time do **you** spend watching TV?
_____ hours _____ minutes
19. How often do **you** eat or snack while watching TV?
 Always Usually Sometimes Rarely Never
20. Last week, how many days did **your family** eat dinner with the TV turned on? (circle one)
0 1 2 3 4 5 7 days

QUESTIONS 21- 27 ASK ABOUT PHYSICAL ACTIVITY FOR YOUR OLDEST CHILD ON WIC AND FOR YOU.

21. In a typical week, how many times do you take **this child** to a park, playground or recreation area to be active? _____ times

22. On a typical day, how much time does **this child** spend playing outdoors?
- Waking up until noon:**
 None 1-15 Minutes 16-30 Minutes 31-60 Minutes Over 60 Minutes
- Noon until 6 pm:**
 None 1-15 Minutes 16-30 Minutes 31-60 Minutes Over 60 Minutes
- 6 pm until bedtime:**
 None 1-15 Minutes 16-30 Minutes 31-60 Minutes Over 60 Minutes
23. Do you do as many physical activities with **this child** as you would like? YES NO
If NO, why? (Check all that apply)
 I don't have enough time Don't know where to go or what to do with child
 I'm too tired Not enough activity programs for parents and young children
 There aren't safe areas to play I have to watch other children
 Weather Other _____
24. Has anyone at WIC discussed increasing **this child's** physical activity? YES NO
25. I am confident in my ability to encourage **this child** to be physically active.
 Strongly Agree Agree No Opinion Disagree Strongly Disagree
26. How many days per week do **you** participate in MODERATE physical activity for at least 30 minutes (for example bicycling at a steady pace, walking briskly or gardening)? _____ days
27. How many days per week do **you** participate in VIGOROUS physical activity for at least 20 minutes (for example aerobics, running, or fast bicycling)? _____ days

THANK YOU! PLEASE SHARE OTHER COMMENTS:

THE END

WIC Survey

Please answer this short survey. Your answers will help us to improve the WIC program. When you have completed the survey, please give it to interview assistant or put it in the box provided.

QUESTIONS 1 - 11 ASK ABOUT YOUR OLDEST CHILD ON WIC AND ABOUT YOU (THE PARENT OR GUARDIAN)

1. Child's Date of Birth: _____ month _____ year (please answer for your oldest child on WIC)
2. Child is a Girl Boy
3. Child's Height: _____ feet _____ inches
4. Child's Weight _____ pounds
5. How would you describe **this child's** weight?
 Underweight A Little Underweight Just Right A Little Overweight
 Overweight
6. Has your child's doctor or someone at WIC ever told you that **this child** is overweight? YES NO
7. What is your Date of Birth? _____ month _____ year
8. Are you Hispanic/Latino? YES NO
9. What is your race? (Check all that apply)
 Black or African American Native American/Alaskan Native
 White Asian
 Pacific Islander Other _____ (please specify)
10. What is the highest level of school you completed? (Please check only one)
 No Schooling Completed 9th, 10th, 11th, or 12th Grade, No Diploma
 Nursery School to 4th Grade High School Graduate or GED
 5th, 6th, 7th, or 8th Grade Some College or Beyond
11. How long have you been coming to **this** WIC clinic? Less than 1 year More than 1 year

QUESTIONS 12 – 19 ASK ABOUT TELEVISION VIEWING FOR YOUR OLDEST CHILD ON WIC AND FOR YOU

12. On an average day, how much time does **this child** spend watching TV _____ hours _____ minutes
13. Do you think that **this child** watches too much TV? YES NO

Appendix III-I: *FOTG* Post-Intervention Participant Survey

14. Does **this child** have a TV in his/her bedroom? YES NO
15. Do you limit **this child's** TV viewing to less than 2 hours per day?
 Always Usually Sometimes Rarely Never
16. Has anyone at WIC discussed limiting the amount of TV **this child** watches? YES NO
17. I am confident in my ability to reduce **this child's** TV viewing time.
 Strongly Agree Agree Don't Know Disagree Strongly Disagree
18. On an average day, how much time do **you** spend watching TV? _____ hours ____ minutes

QUESTIONS 19- 25 ASK ABOUT PHYSICAL ACTIVITY FOR YOUR OLDEST CHILD ON WIC AND FOR YOU.

19. In a typical week, how many times do you take **this child** to a park, playground or recreation area to be active? _____ times
20. On a typical day, how much time does **this child** spend playing outdoors?
Waking up until noon:
 None 1-15 Minutes 16-30 Minutes 31-60 Minutes Over 60 Minutes
- Noon until 6 pm:**
 None 1-15 Minutes 16-30 Minutes 31-60 Minutes Over 60 Minutes
- 6 pm until bedtime:**
 None 1-15 Minutes 16-30 Minutes 31-60 Minutes Over 60 Minutes
21. Do you do as many physical activities with **this child** as you would like? YES NO
If NO, why? (Check all that apply)
 I don't have enough time There aren't safe areas to play
 I don't know where to go or what to do with my child I have to watch other children
 I'm too tired Weather
 Not enough activity programs for parents and young children Other _____
22. Has anyone at WIC discussed increasing **this child's** physical activity? YES NO
23. I am confident in my ability to encourage **this child** to be physically active.
 Strongly Agree Agree No Opinion Disagree Strongly Disagree
24. How many days per week do **you** participate in MODERATE physical activity for at least 30 minutes (for example bicycling at a steady pace, walking briskly or gardening)? _____ days
25. How many days per week do **you** participate in VIGOROUS physical activity for at least 20 minutes (for example aerobics, running, or fast bicycling)? _____ days

THE QUESTIONS ON THIS PAGE ASK ABOUT A COMMUNITY GUIDE THAT HAS BEEN GIVEN OUT AT THE CLINIC.

26. Did you ever get a copy of one of these community guides? They include maps and a list of events and places to go.

- YES NO

If **NO** → Please stop here. Thank you for completing the survey.

If **YES** → How many copies did you get?

- 1 2 3 4 or more (circle one)



27. Did you read or look at any part of the guide?

- YES NO

Questions 28-34 ask about how you used the guide. Please read each sentence and check YES if it is true and NO if it is false

28. I used the guide to help my child to be more active. YES NO
29. I used the guide to help my child watch less TV YES NO
30. I used the maps in the guide to find places to take my child YES NO
31. I used the guide to help my family get out more in winter YES NO
32. I used the guide to find places to get low-cost winter clothing for my child (Coats for Kids)? YES NO
33. I used the list of events to find things to do with my child YES NO
- If **YES** → Please check which events or places you went to
- Library events
 - High school basketball games
 - Parks and playgrounds
 - Swimming pool
 - Fairs and festivals
 - Other _____ (please explain)
34. Using the guide helped me to be more active YES NO

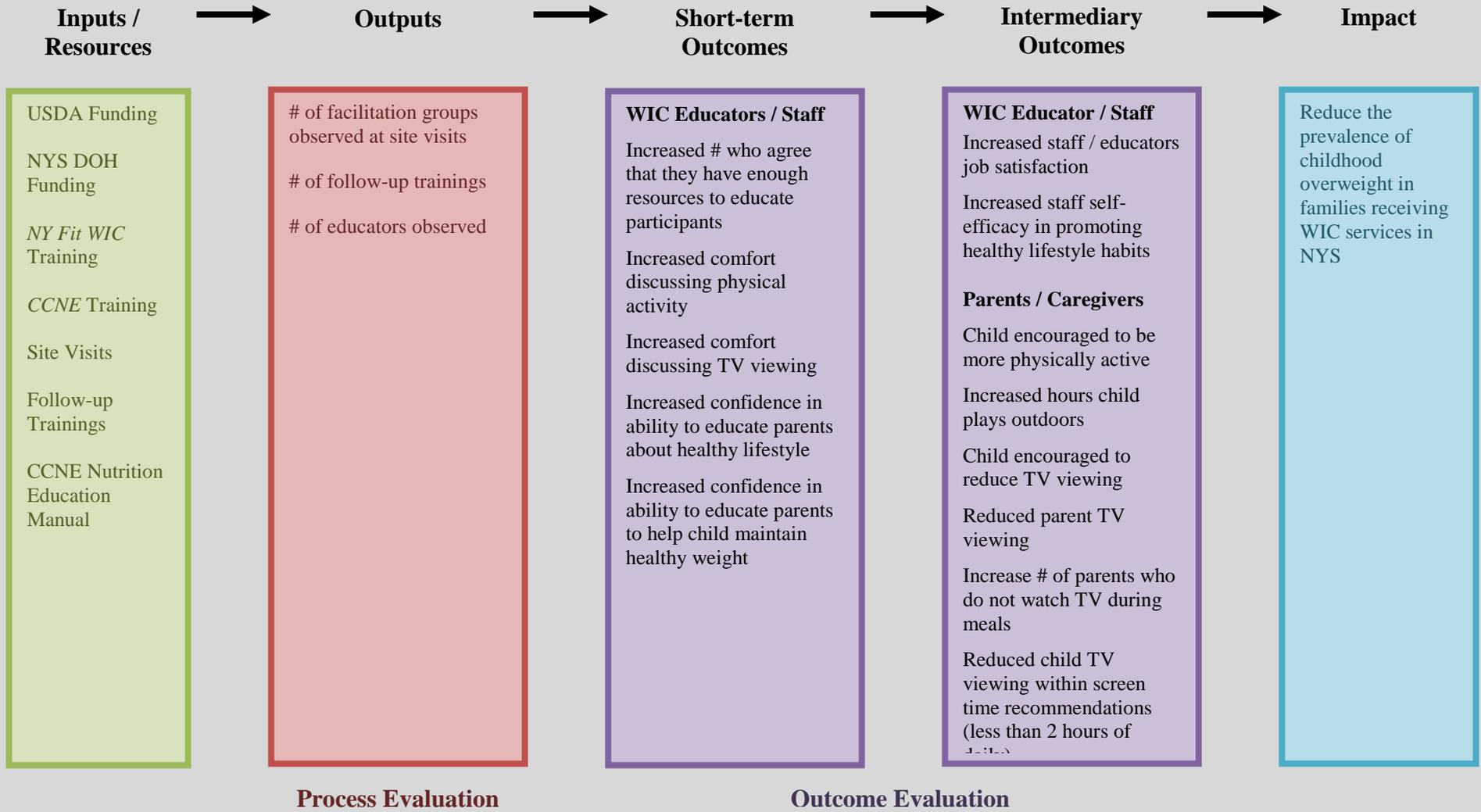
THANK YOU! Please share other comments about how you used the guide and ways it can be improved

IV. APPENDICES

WIC Special Project WISP-06-NY-1

APPENDIX IV-A	CCNE Logic Model
APPENDIX IV-B	Participant-Centered Nutrition Education Manual - Table of Contents
APPENDIX IV-C	CCNE Facilitated Group Discussion Observation Tool
APPENDIX IV-D	CCNE Pre-Intervention Staff Survey
APPENDIX IV-E	CCNE Post-Intervention Staff Survey
APPENDIX IV-F	CCNE Pre-Intervention Participant Survey
APPENDIX IV-G	CCNE Post-Intervention Participant Survey

CCNE Logic Model



NY Fit WIC and Other Healthy Lifestyle Interventions in WIC and New York State

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EVALUATION OF FACILITATED NUTRITION EDUCATION
CCNE PROCESS EVALUATION

Clinic _____ Date _____ CPA _____

#of Participants _____ Length of session _____

1. Did the facilitator introduce him/herself?

YES _____ NO _____

EXPLAIN: _____

2. Did participants have a chance to introduce themselves?

YES _____ NO _____

EXPLAIN: _____

3. Did the facilitator use an ice breaker exercise at the beginning of the session?

YES _____ NO _____

EXPLAIN: _____

4. Did the facilitator use general open-ended questions to lead the discussion?

YES _____ NO _____

EXPLAIN: _____

5. Did the facilitator practice active listening?

YES _____ NO _____

Appendix IV-C: CCNE Facilitated Group Discussion Observation Tool

EXPLAIN: _____

6. Did the facilitator handle misinformation appropriately?

YES _____ NO _____

EXPLAIN: _____

7. Were all appropriate topics brought up by participants covered?

YES _____ NO _____

EXPLAIN: _____

8. Was the room setting:

Conducive to group interaction? YES NO EXPLAIN: _____

Comfortable? YES NO EXPLAIN: _____

Clear from Distractions? YES NO EXPLAIN: _____

9. Did the facilitator summarize the key point discussed at the end of the session?

YES _____ NO _____

EXPLAIN: _____

10. On average, what percent of the time did facilitator speak? _____

Comments:

PRE-TRAINING WIC STAFF SURVEY

Agency # _____

As part of the Client-Centered Nutrition Education (CCNE) pilot study, we are interested in your opinion and experience working with WIC families in providing information, education or counseling on achieving healthy lifestyles. We are also interested in your perceptions of CCNE, and, for those who have been trained, how the training has influenced your interaction with WIC caregivers and participants.

Your contribution to this survey is strictly confidential. The survey should take approximately 10 minutes to complete.

We value your opinion and thank you for taking the time to help us improve the New York State WIC program.



THE FIRST SET OF QUESTIONS ASK ABOUT YOU AND YOUR WORK POSITION.

1. How old are you? _____ years
2. Are you: Male Female
3. What is your staff position at WIC? (Check all that apply)
 - a. Coordinator b. Site Manager c. CPA d. Support Staff
 - e. Nutrition Assistant/Aide
4. How many years have you worked with WIC? _____ years
5. How satisfied are you with the work you do as a WIC employee?
 - a. Very satisfied
 - b. Satisfied
 - c. Neutral
 - d. Unsatisfied
 - e. Very unsatisfied
6. What is your level of education?
 - a. High school graduate/GED b. Certification school c. Some college
 - d. Associate degree e. Bachelor's degree f. Post bachelor's degree
 - g. Other _____
7. Are you Hispanic/Latino? YES NO
8. What is your race? (Check all that apply)
 - a. Black/African American b. Asian c. Pacific Islander
 - d. Native American/Alaskan Native e. White

THE NEXT SET OF QUESTIONS ASK ABOUT NUTRITION EDUCATION IN YOUR CLINIC. IF YOU DO NOT CONDUCT NUTRITION EDUCATION, PLEASE SKIP TO QUESTION 20 (page 5).

9. What type(s) of nutrition education tools are used at your WIC clinic? (check all that apply)
 - a. individual nutrition education (one-on-one counseling)
 - b. group lectures (You stand in front of participants and lecture about a topic)
 - c. group discussions (You discuss a topic with participants)
 - d. breastfeeding support groups
 - e. brochures, handouts
 - f. videos
 - g. food demonstrations
 - h. other, please list _____

10. What type(s) of nutrition education do you conduct at your WIC clinic? (check all that apply)

- a. individual nutrition education (one-on-one counseling)
- b. group lectures (You stand in front of participants and lecture about a topic)
- c. group discussions (You discuss a topic with participants)
- d. breastfeeding support groups
- e. food demonstrations
- f. other, please list _____

11. In an average week, how often do you talk to WIC parents/caregivers about the following?

	Very Often	Often	Sometimes	Never	Not Applicable
	1	2	3	4	5
a. Overweight/Obesity	<input type="checkbox"/>				
b. Physical Activity	<input type="checkbox"/>				
c. TV viewing	<input type="checkbox"/>				
d. Fruits	<input type="checkbox"/>				
e. Vegetables	<input type="checkbox"/>				
f. Low fat dairy	<input type="checkbox"/>				

12. How comfortable are you discussing the following with WIC parents/caregivers?

	Very Comfortable	Comfortable	Uncomfortable	Very Uncomfortable	Not Applicable
	1	2	3	4	5
a. Overweight/Obesity	<input type="checkbox"/>				
b. Physical Activity	<input type="checkbox"/>				
c. TV viewing	<input type="checkbox"/>				
d. Fruits	<input type="checkbox"/>				
e. Vegetables	<input type="checkbox"/>				
f. Low fat dairy	<input type="checkbox"/>				

13. I am satisfied with the WIC nutrition education I provide WIC participants:

- Strongly agree Agree No Opinion Disagree Strongly disagree

- 14.** During a typical one-on-one counseling session, please estimate the percent time you spend talking/advising the WIC participant. (e.g., I talk/advise approximately 85% of the time, and the client talks/asks questions the rest of the time.)

I talk/advise approximately _____% of the time, and the participant talks/asks questions the rest of the time.

- 15.** During a typical group session, please estimate the percent time you spend talking/lecturing to WIC participants. (If you do not conduct group lectures or discussions, skip this question)

I talk/lecture approximately _____% of the time, and participants talk/ask questions the rest of the time.

- 16. In terms of nutrition education, what do you believe are the most effective things WIC is doing to help children improve their dietary habits? (Check all that apply)**

- a. Integrate nutrition messages into individual counseling
- b. Integrate nutrition messages into WIC group classes
- c. Conduct food demonstrations
- d. Adopt client-centered nutrition education
- e. Other _____

17. Please check the response that best describes your level of agreement with the statements below:

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Applicable
	1	2	3	4	5
a. I have enough resources to effectively <u>educate</u> participants about healthy lifestyles	<input type="checkbox"/>				
b. I am confident in my abilities to <u>educate</u> participants about healthy lifestyles	<input type="checkbox"/>				
c. I am confident in my abilities to <u>influence</u> participants to change to a healthier lifestyle	<input type="checkbox"/>				
d. I am confident in my abilities to <u>educate</u> participants on helping their child achieve or maintain a healthy weight	<input type="checkbox"/>				
e. I am confident in my abilities to <u>influence</u> participants on helping their child achieve or maintain a healthy weight	<input type="checkbox"/>				

18. WIC participants are generally satisfied with the nutrition education I provide them:

- Strongly agree Agree No Opinion Disagree Strongly disagree

19. On the scale below, please indicate how effective do you believe YOU are at changing the habits (diet, physical activity, etc.) of your WIC participants? (circle the number that applies)

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
Not effective			Somewhat effective				Very effective		

IF YOU DO NOT CONDUCT NUTRITION EDUCATION, CONTINUE HERE

20. On the scale below, please indicate how effective do you believe one-one-one counseling is at changing the habits (diet, physical activity, etc.) of your WIC participants? (circle the number that applies)

1 2 3 4 5 6 7 8 9 10
 Not effective Somewhat effective Very effective

21. How effective do you believe group lectures are at changing the habits (diet, physical activity, etc.) of your WIC participants? (circle the number that applies)

1 2 3 4 5 6 7 8 9 10
 Not effective Somewhat effective Very effective

22. How effective do you believe group discussions are at changing the habits (diet, physical activity, etc.) of your WIC participants? (circle the number that applies)

1 2 3 4 5 6 7 8 9 10
 Not effective Somewhat effective Very effective

23. From the perspective of the WIC participant, would you describe nutrition education at your WIC clinic as:

	No/Never	Rarely	Sometimes	Frequently	NA/Don't Know
	1	2	3	4	5
a. Too Long	<input type="checkbox"/>				
b. Boring	<input type="checkbox"/>				
c. Repetitive	<input type="checkbox"/>				
d. Very Useful	<input type="checkbox"/>				

24. In general, WIC participants are satisfied with the nutrition education they receive from WIC:

Strongly agree Agree No Opinion Disagree Strongly disagree

QUESTION 25 ASKS FOR YOUR THOUGHTS ON THE CLIENT-CENTERED NUTRITION EDUCATION INITIATIVE.

25. The Client-Centered Nutrition Education (CCNE) initiative strives to teach staff how to use facilitation and motivational counseling to help WIC participants achieve or maintain a healthy weight/lifestyle. How do you feel about including concepts of CCNE at your agency? (Check all that apply)

- a. Enthusiastic
- b. Interested
- c. Already include aspects of CCNE
- d. Indifferent
- e. Too much additional work for staff
- f. Lack of resources
- g. Not willing to include CCNE in agency
- h. Not aware of CCNE concepts
- i. Don't know
- j. Other _____

26. **Have you attended any of the following training sessions?**

- | | | |
|----------------------------------|------------------------------|-----------------------------|
| a. Three Step Counseling | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| b. Facilitated Group Discussion | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| c. Fit WIC Training | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| d. Counseling with Both I's Open | <input type="checkbox"/> YES | <input type="checkbox"/> NO |

27. Do you believe today's training session will change the way you interact with WIC participants in your agency?

- YES NO Don't Know

28. Please share any comments, suggestions, or ideas on how you feel about Client-Centered Nutrition Education and this training.

Thank you for being a part of Client-Centered Nutrition Education, and providing ideas on how to improve the initiative while at the same time helping to reduce the childhood overweight problem.

FOLLOW-UP WIC STAFF SURVEY

Agency # _____

As part of the Client-Centered Nutrition Education (CCNE) pilot study, we are interested in your opinion and experience working with WIC families in providing information, education or counseling on achieving healthy lifestyles. We are also interested in your perceptions of CCNE, and, for those who have been trained, how the training has influenced your interaction with WIC caregivers and participants.

Your contribution to this survey is strictly confidential. The survey should take approximately 10 minutes to complete.

We value your opinion and thank you for taking the time to help us improve the New York State WIC program.



THE FIRST SET OF QUESTIONS ASK ABOUT YOU AND YOUR WORK POSITION.

1. **How old are you?** _____ years
2. **Are you:** Male Female
3. **What is your staff position at WIC? (Check all that apply)**
 a. Coordinator b. Site Manager c. CPA d. Support Staff
 e. Nutrition Assistant/Aide
4. **How many years have you worked with WIC?** _____ years
5. **How satisfied are you with the work you do as a WIC employee?**
 a. Very satisfied
 b. Satisfied
 c. Neutral
 d. Unsatisfied
 e. Very unsatisfied
6. **What is your level of education?**
 a. High school graduate/GED b. Certification school c. Some college
 d. Associate degree e. Bachelor's degree f. Post bachelor's degree
 g. Other _____
7. **Are you Hispanic/Latino?** YES NO
8. **What is your race? (Check all that apply)**
 a. Black/African American b. Asian c. Pacific Islander
 d. Native American/Alaskan Native e. White
9. **Do you believe the training you received on Client-Centered Nutrition Education was useful to your job at WIC?**
 YES NO Don't Know

Please explain your answer: _____

10. Do you believe the training you received on Client-Centered Nutrition Education changed the way you interact with WIC participants at your clinic?

- YES, made interactions easier NO, did not change interactions
 YES, made interactions more difficult Don't Know

THE NEXT SET OF QUESTIONS ASK ABOUT NUTRITION EDUCATION IN YOUR CLINIC. IF YOU DO NOT CONDUCT NUTRITION EDUCATION, PLEASE SKIP TO QUESTION 19 (page 4).

11. How satisfied are you with the current Client-Centered Nutrition Education method you are using?

- Very satisfied Satisfied Neutral Dissatisfied Very dissatisfied

12. How comfortable are you discussing the following with WIC parents/caregivers?

	Very Comfortable	Comfortable	Uncomfortable	Very Uncomfortable	Not Applicable
	1	2	3	4	5
a. Overweight/Obesity	<input type="checkbox"/>				
b. Physical Activity	<input type="checkbox"/>				
c. TV viewing	<input type="checkbox"/>				
d. Fruits	<input type="checkbox"/>				
e. Vegetables	<input type="checkbox"/>				
f. Low fat dairy	<input type="checkbox"/>				

13. Do you believe the Client-Centered Nutrition Education training facilitated your interaction with participants during:

- a. Individual Nutrition Education YES NO Not Applicable
b. Group Sessions YES NO Not Applicable

14. WIC participants are generally satisfied with the nutrition education I provide them:

- Strongly agree Agree No Opinion Disagree Strongly disagree

15. Please check the response that best describes your level of agreement with the statements below:

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Applicable
	1	2	3	4	5
a. I have enough resources to effectively <u>educate</u> participants about healthy lifestyles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. I am confident in my abilities to <u>educate</u> participants about healthy lifestyles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. I am confident in my abilities to <u>influence</u> participants to change to a healthier lifestyle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. I am confident in my abilities to <u>educate</u> participants on helping their child achieve or maintain a healthy weight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. I am confident in my abilities to <u>influence</u> participants on helping their child achieve or maintain a healthy weight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16. During a typical individual nutrition education session (one-on-one counseling session), please estimate the percent time you spend talking/advising the WIC participant. (e.g., I talk/advise approximately 50% of the time, and the client talks/asks questions the rest of the time.)

I talk/advise approximately _____% of the time, and the participant talks/asks questions the rest of the time.

17. During a typical group session, please estimate the percent time you spend talking/lecturing to WIC participants. (If you do not conduct group lectures or discussions, skip this question.)

I talk/lecture approximately _____% of the time, and participants talk/ask questions the rest of the time.

18. On a scale of 1 (Not effective) to 10 (Very effective) please indicate how effective do you believe YOU are at changing the habits (diet, physical activity, etc.) of your WIC participants? (circle the number that applies)

1 2 3 4 5 6 7 8 9 10
 Not effective Somewhat effective Very effective

19. On a scale of 1 (Not effective) to 10 (Very effective) please indicate how effective do you believe individual nutrition education (one-one-one counseling) is at changing the habits (diet, physical activity, etc.) of your WIC participants (circle the number that applies)

1 2 3 4 5 6 7 8 9 10
 Not effective Somewhat effective Very effective

20. How effective do you believe group lectures (where educator lectures most of the time) are at changing the habits of your WIC participants? (circle the number that applies)

1 2 3 4 5 6 7 8 9 10
 Not effective Somewhat effective Very effective

21. How effective do you believe group discussions (CCNE) are at changing the habits of your WIC participants? (circle the number that applies)

1 2 3 4 5 6 7 8 9 10
 Not effective Somewhat effective Very effective

22. How does the current Client-Centered Nutrition Education method compare with the previous education methods (When lectures and/or one-on-one counseling was used during check pick-up nutrition education appointments.)? DK = Don't Know

a. In terms of helping change participants' behavior?

Much better Better The same Worse Much worse DK

b. In terms of participants' satisfaction with nutrition education?

Much better Better The same Worse Much worse DK

c. In terms of participants' engagement during nutrition education?

Much better Better The same Worse Much worse DK

23. **In general, WIC participants are satisfied with the nutrition education they receive from WIC:**

- Strongly agree Agree No Opinion Disagree Strongly disagree

24. **From the perspective of the WIC participant, would you describe nutrition education at your WIC clinic as:**

	No/Never	Rarely	Sometimes	Frequently	NA/Don't Know
	1	2	3	4	5
a. Too Long	<input type="checkbox"/>				
b. Boring	<input type="checkbox"/>				
c. Repetitive	<input type="checkbox"/>				
d. Very Useful	<input type="checkbox"/>				

25. **What are the barriers to conducting Client-Centered Nutrition Education at your clinic? (Check all that apply)**

- a. We did not receive enough training
- b. We need stronger leadership and support at the clinic level
- c. We need stronger leadership and direction at the state level
- d. Scheduling difficulties
- e. Interrupts clinic flow
- f. Lack of control of discussion (misinformation, etc.)
- g. Other _____

Please explain your answer: _____

26. **Please share any comments, suggestions, or ideas on how you feel about Client-Centered Nutrition Education.**

Thank you for participating in this survey.

2007 WIC PARTICIPANTS

NUTRITION EDUCATION SURVEY

We want to know how you feel about nutrition and physical activity. We also want to know how WIC helps people reach a healthy lifestyle, and whether changes need to be made to the WIC program. The survey takes about 10-15 minutes to complete.

We appreciate your taking the time to help us improve the New York State WIC program.

Today's Date: _____ / _____ / _____ 2007
 month day year

WIC Agency: _____

WIC Clinic: _____

PLEASE ANSWER THE QUESTIONS BASED ON YOUR OLDEST CHILD (OVER THE AGE OF 2) ENROLLED IN THE WIC PROGRAM.

1. LAST 5 DIGITS OF THIS CHILD'S WIC ID: _____

2. Child's Date of Birth: _____ / _____ / _____
month day year

3. This child is a: Girl Boy

THE NEXT QUESTIONS ARE ABOUT YOU.

4. What is YOUR age? _____

5. Are YOU Hispanic/Latino? YES NO

6. What is YOUR race? (Check all that apply)

- a. Black or African American b. White c. Pacific Islander
 d. Native American/Alaskan Native e. Asian

7. What is the highest level of school YOU completed? (Check only one)

- a. No schooling completed b. Nursery school to 4th grade
 c. 5th, 6th, 7th, or 8th grade d. 9th, 10th, 11th, or 12th grade, No diploma
 e. High school graduate or GED f. Some college or beyond

THE NEXT TWO QUESTIONS ASK ABOUT THIS CHILD'S EATING HABITS.

8. Over the last 7 days, on average, how many times each day did this child have the following?

Fruit	0	1	2	3	4	5 or more
Vegetables	0	1	2	3	4	5 or more
100% fruit juice	0	1	2	3	4	5 or more
Soda/sweetened beverages	0	1	2	3	4	5 or more
Plain milk	0	1	2	3	4	5 or more
Flavored milk	0	1	2	3	4	5 or more
Water	0	1	2	3	4	5 or more

9. What kind of milk does this child drink most often?

- a. Fat-free (skim) b. Low-fat (1%) c. Reduce fat (2%) d. Whole e. Other

THE NEXT FOUR QUESTIONS ASK ABOUT YOUR NUTRITIONAL BELIEFS.

10. Not counting juice, how many servings of fruits do you BELIEVE <u>this child</u> should eat daily?	0	1	2	3	4	5 or more
11. How many servings of fruit juice do you BELIEVE <u>this child</u> should drink daily?	0	1	2	3	4	5 or more
12. How many servings of vegetables do you BELIEVE <u>this child</u> should eat daily?	0	1	2	3	4	5 or more

13. What type of milk do you BELIEVE this child should drink? (Check all that apply)

- a. Fat-free (skim) b. Low-fat (1%) c. Reduce fat (2%) d. Whole e. Other

THE NEXT FOUR QUESTIONS ASK ABOUT TELEVISION VIEWING

14. On an average day, how much time does this child spend watching TV? _____ hours _____ minutes

15. On an average day, how much time do YOU spend watching TV? _____ hours _____ minutes

Appendix IV-F: CCNE Pre-Intervention Participant Survey

16. Do YOU watch TV during meals?

- Always Usually Sometimes Rarely Never

17. I am confident in my ability to reduce this child's TV viewing time.

- Strongly agree Agree Don't know Disagree Strongly disagree

THE NEXT QUESTIONS ASK ABOUT THIS CHILD'S PHYSICAL ACTIVITY.

18. On a typical day, how much time does this child spend playing outdoors?

Waking up until noon:

- none 1-15 minutes 16-30 minutes 31-60 minutes over 60 minutes

Noon until 6 pm:

- none 1-15 minutes 16-30 minutes 31-60 minutes over 60 minutes

6 pm until bedtime:

- none 1-15 minutes 16-30 minutes 31-60 minutes over 60 minutes

19. I am confident in my ability to encourage this child to be physically active.

- Strongly agree Agree Don't know Disagree Strongly disagree

THE NEXT QUESTIONS ARE ABOUT WIC NUTRITION EDUCATION.

20. In the past 12 months, have YOU received WIC nutrition education counseling?

(PROBE: Did any WIC nutritionist talk to you about this child's diet, weight or exercise?)

- YES NO If YES, how many times? _____

→ *If the answer is NO, SKIP to Question 23. If YES, ask:*

Appendix IV-F: CCNE Pre-Intervention Participant Survey

21. Did WIC staff discuss the following with **YOU**? (Check all that apply)
- a. Fruits and vegetables YES NO
 - b. Low-fat dairy YES NO
 - c. Physical activity YES NO
 - d. TV viewing YES NO
22. Did **YOU** learn something new from WIC staff about: (Check all that apply)
- a. Fruits YES NO
 - b. Vegetables YES NO
 - c. Low-fat dairy YES NO
 - d. Physical activity YES NO
 - e. TV viewing YES NO
23. a. Are you offering fruits or encouraging this child to eat fruits? YES NO
Are you doing that because of something you heard at WIC within the last 12 months? YES NO
- b. Are you offering vegetables or encouraging this child to eat vegetables? YES NO
Are you doing that because of something you heard at WIC within the last 12 months? YES NO
- c. Are you offering low fat dairy or encouraging this child to eat or drink low-fat dairy? YES NO
Are you doing that because of something you heard at WIC within the last 12 months? YES NO
- d. Are you encouraging this child to switch to low-fat milk? YES NO Already do
Are you doing that because of something you heard at WIC within the last 12 months? YES NO
- e. Are you encouraging this child to be physically active? YES NO
Are you doing that because of something you heard at WIC within the last 12 months? YES NO
- f. Are you encouraging this child to reduce TV viewing time? YES NO
Are you doing that because of something you heard at WIC within the last 12 months? YES NO

24. Would you describe WIC nutrition education as:

a. too long	No/Never	Rarely	Sometimes	Frequently	NA/DK*
b. boring	No/Never	Rarely	Sometimes	Frequently	NA/DK
c. repetitive	No/Never	Rarely	Sometimes	Frequently	NA/DK
d. very useful	No/Never	Rarely	Sometimes	Frequently	NA/DK

*NA/DK = Not Applicable/Don't Know

25. PLEASE ANSWER THE FOLLOWING STATEMENT:

I am satisfied with WIC nutrition education:

- Strongly agree Agree Don't know Disagree Strongly disagree

THE NEXT QUESTIONS ASK ABOUT YOUR HABITS.

26. PLEASE ANSWER THE FOLLOWING STATEMENTS:

- a. I am trying to eat more fruits YES NO ALREADY DO
 If "ALREADY DO," did you make this change within the last 12 months? YES NO
- b. I am trying to eat more vegetables YES NO ALREADY DO
 If "ALREADY DO," did you make this change within the last 12 months? YES NO
- c. I am trying to eat or drink more dairy (cheese, yogurt, milk) YES NO ALREADY DO
 If "ALREADY DO," did you make this change within the last 12 months? YES NO
- d. I am trying to switch to low-fat milk (1%, skim) YES NO ALREADY DO
 If "ALREADY DO," did you make this change within the last 12 months? YES NO
- e. I am trying to be more physically active YES NO ALREADY DO
 If "ALREADY DO," did you make this change within the last 12 months? YES NO
- f. I am trying to reduce TV viewing time YES NO ALREADY DO
 If "ALREADY DO," did you make this change within the last 12 months? YES NO

Appendix IV-F: CCNE Pre-Intervention Participant Survey

27. Do YOU plan to (*intend to, in the future*):
- a. Eat more fruits YES NO ALREADY DO
 - b. Eat more vegetables YES NO ALREADY DO
 - c. Eat or drink more low-fat dairy YES NO ALREADY DO
 - d. Switch to Low-fat milk YES NO ALREADY DO
 - e. Be more physically active YES NO ALREADY DO
 - f. Reduce TV viewing time YES NO ALREADY DO

FOR THE NEXT SET OF QUESTIONS, PLEASE TELL ME HOW STRONGLY YOU AGREE WITH EACH STATEMENT.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
28. I am confident in my ability to offer <u>this child</u> more fruits:	5	4	3	2	1
29. I am confident in my ability to offer <u>this child</u> more vegetables:	5	4	3	2	1
30. I am confident in my ability to offer <u>this child</u> low fat milk:	5	4	3	2	1
31. I am comfortable talking to WIC staff about any health-related issues:	5	4	3	2	1
32. As a result of WIC nutrition education, I have started to set my own goals to improve my health:	5	4	3	2	1

THE LAST TWO QUESTIONS ARE ABOUT VEGETABLE AND FRUIT CHECKS.

33. Have you received WIC checks for vegetables and fruits?

YES NO

→ if "Yes," ask:

34. How many of the WIC checks have you used?

All Most Some A few None

Thank you for taking part in this survey.

2009 WIC PARTICIPANTS
NUTRITION EDUCATION SURVEY

We want to know how you feel about nutrition and physical activity. We also want to know how WIC helps people reach a healthy lifestyle, and whether changes need to be made to the WIC program. The survey takes about 10-15 minutes to complete.

We appreciate your taking the time to help us improve the New York State WIC program.

Today's Date: _____ / _____ / _____ 2009
 month day year

WIC Agency: _____

WIC Clinic: _____

PLEASE ANSWER THE QUESTIONS BASED ON YOUR OLDEST CHILD (OVER THE AGE OF 2) ENROLLED IN THE WIC PROGRAM.

1. LAST 5 DIGITS OF THIS CHILD'S WIC ID: _____

2. Child's Date of Birth: _____ / _____ / _____
month day year

3. This child is a: Girl Boy

THE NEXT QUESTIONS ARE ABOUT YOU.

4. What is YOUR age? _____

5. Are YOU Hispanic/Latino? YES NO

6. What is YOUR race? (Check all that apply)

- a. Black or African American b. White c. Pacific Islander
 d. Native American/Alaskan Native e. Asian

7. What is the highest level of school YOU completed? (Check only one)

- a. No schooling completed b. Nursery school to 4th grade
 c. 5th, 6th, 7th, or 8th grade d. 9th, 10th, 11th, or 12th grade, No diploma
 e. High school graduate or GED f. Some college or beyond

THE NEXT TWO QUESTIONS ASK ABOUT THIS CHILD'S EATING HABITS.

8. Over the last 7 days, on average, how many times each day did this child have the following?

Fruit	0	1	2	3	4	5 or more
Vegetables	0	1	2	3	4	5 or more
100% fruit juice	0	1	2	3	4	5 or more
Soda/sweetened beverages	0	1	2	3	4	5 or more
Plain milk	0	1	2	3	4	5 or more
Flavored milk	0	1	2	3	4	5 or more
Water	0	1	2	3	4	5 or more

9. What kind of milk does this child drink most often?

- a. Fat-free (skim) b. Low-fat (1%) c. Reduce fat (2%) d. Whole e. Other

THE NEXT FOUR QUESTIONS ASK ABOUT YOUR NUTRITIONAL BELIEFS.

10. Not counting juice, how many servings of fruits do you BELIEVE <u>this child</u> should eat daily?	0	1	2	3	4	5 or more
11. How many servings of fruit juice do you BELIEVE <u>this child</u> should drink daily?	0	1	2	3	4	5 or more
12. How many servings of vegetables do you BELIEVE <u>this child</u> should eat daily?	0	1	2	3	4	5 or more

13. What type of milk do you BELIEVE this child should drink? (Check all that apply)

- a. Fat-free (skim) b. Low-fat (1%) c. Reduce fat (2%) d. Whole e. Other

THE NEXT FOUR QUESTIONS ASK ABOUT TELEVISION VIEWING

14. On an average day, how much time does this child spend watching TV? _____ hours _____ minutes

15. On an average day, how much time do YOU spend watching TV? _____ hours _____ minutes

Appendix IV-G: CCNE Post-Intervention Participant Survey

16. Do YOU watch TV during meals?

- Always Usually Sometimes Rarely Never

17. I am confident in my ability to reduce this child's TV viewing time.

- Strongly agree Agree Don't know Disagree Strongly disagree

THE NEXT QUESTIONS ASK ABOUT THIS CHILD'S PHYSICAL ACTIVITY.

18. On a typical day, how much time does this child spend playing outdoors?

Waking up until noon:

- none 1-15 minutes 16-30 minutes 31-60 minutes over 60 minutes

Noon until 6 pm:

- none 1-15 minutes 16-30 minutes 31-60 minutes over 60 minutes

6 pm until bedtime:

- none 1-15 minutes 16-30 minutes 31-60 minutes over 60 minutes

19. I am confident in my ability to encourage this child to be physically active.

- Strongly agree Agree Don't know Disagree Strongly disagree

THE NEXT QUESTIONS ARE ABOUT WIC NUTRITION EDUCATION.

20. In the past 12 months, have YOU participated in a group discussion where you sat with a WIC nutritionist and other parents and talked about parenting, nutrition and/or health issues?

- YES NO If YES, how many times? _____

→ If the answer is NO, SKIP to Question 23. If YES, ask:

Appendix IV-G: CCNE Post-Intervention Participant Survey

21. Did any of the following topics get discussed in these groups? (Check all that apply)

- a. Fruits and vegetables YES NO
- b. Low-fat dairy YES NO
- c. Physical activity YES NO
- d. TV viewing YES NO

22. Did **YOU** learn something new from these groups about: (Check all that apply)

- a. Fruits YES NO
- b. Vegetables YES NO
- c. Low-fat dairy YES NO
- d. Physical activity YES NO
- e. TV viewing YES NO

23. Would you describe these WIC group sessions as:

a. too long	No/Never	Rarely	Sometimes	Frequently	NA/DK*
b. boring	No/Never	Rarely	Sometimes	Frequently	NA/DK
c. repetitive	No/Never	Rarely	Sometimes	Frequently	NA/DK
d. very useful	No/Never	Rarely	Sometimes	Frequently	NA/DK

*NA/DK = Not Applicable/Don't Know

24. PLEASE ANSWER THE FOLLOWING STATEMENT:

a. Are you offering fruits or encouraging this child to eat fruits? YES NO

Are you doing that because of something you heard at WIC within the last 12 months? YES NO

b. Are you offering vegetables or encouraging this child to eat vegetables? YES NO

Are you doing that because of something you heard at WIC within the last 12 months? YES NO

c. Are you offering low fat dairy or encouraging this child to eat or drink low-fat dairy? YES NO

Are you doing that because of something you heard at WIC within the last 12 months? YES NO

d. Are you encouraging this child to switch to low-fat milk? YES NO Already do

Are you doing that because of something you heard at WIC within the last 12 months? YES NO

e. Are you encouraging this child to be physically active? YES NO

Are you doing that because of something you heard at WIC within the last 12 months? YES NO

f. Are you encouraging this child to reduce TV viewing time? YES NO

Are you doing that because of something you heard at WIC within the last 12 months? YES NO

25. I am satisfied with WIC nutrition education, in general:

Strongly agree Agree Don't know Disagree Strongly disagree

26. I am satisfied with the WIC group sessions where we get together with other parents:

Strongly agree Agree Don't know Disagree Strongly disagree

THE NEXT QUESTIONS ASK ABOUT YOUR HABITS.

27. PLEASE ANSWER THE FOLLOWING STATEMENTS:

- a. I am trying to eat more fruits YES NO ALREADY DO
 If "ALREADY DO," did you make this change within the last 12 months? YES NO
- b. I am trying to eat more vegetables YES NO ALREADY DO
 If "ALREADY DO," did you make this change within the last 12 months? YES NO
- c. I am trying to eat or drink more dairy (cheese, yogurt, milk) YES NO ALREADY DO
 If "ALREADY DO," did you make this change within the last 12 months? YES NO
- d. I am trying to switch to low-fat milk (1%, skim) YES NO ALREADY DO
 If "ALREADY DO," did you make this change within the last 12 months? YES NO
- e. I am trying to be more physically active YES NO ALREADY DO
 If "ALREADY DO," did you make this change within the last 12 months? YES NO
- f. I am trying to reduce TV viewing time YES NO ALREADY DO
 If "ALREADY DO," did you make this change within the last 12 months? YES NO

28. Do YOU plan to (*intend to, in the future*):

- a. Eat more fruits YES NO ALREADY DO
- b. Eat more vegetables YES NO ALREADY DO
- c. Eat or drink more low-fat dairy YES NO ALREADY DO
- d. Switch to Low-fat milk YES NO ALREADY DO
- e. Be more physically active YES NO ALREADY DO
- f. Reduce TV viewing time YES NO ALREADY DO

Appendix IV-G: CCNE Post-Intervention Participant Survey

FOR THE NEXT SET OF QUESTIONS, PLEASE TELL ME HOW STRONGLY YOU AGREE WITH EACH STATEMENT.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
29. I am confident in my ability to offer <u>this child</u> more fruits:	5	4	3	2	1
30. I am confident in my ability to offer <u>this child</u> more vegetables:	5	4	3	2	1
31. I am confident in my ability to offer <u>this child</u> low fat milk:	5	4	3	2	1
32. I am comfortable talking to WIC staff about any health-related issues:	5	4	3	2	1
33. As a result of WIC nutrition education, I have started to set my own goals to improve my health:	5	4	3	2	1

Thank you for taking part in this survey.