New Hampshire WIC Fit-N-Fun Project

WIC Special Project Grant FY 2006
Revitalizing Quality Nutrition Services in WIC
Final Report

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Executive Summary

Childhood obesity has reached epidemic proportions in the United States. The predicted consequences of this epidemic of obesity, both for the nation’s health and economy, have stimulated a concerted effort by health researchers to understand its causes and work toward its prevention.

In 1999, the Food and Nutrition Service (FNS) of the US Department of Agriculture (USDA) funded a childhood obesity prevention initiative called Fit WIC. The purpose of this initiative was to find ways in which the FNS-administered program, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), could respond to this epidemic. FNS recognized that WIC has widespread reach to young children from low-income families, a population at great risk for obesity, and that reaching young children is critical to prevent the problem before it begins.

Originally, five WIC State agencies were funded by FNS through a competitive grant process to participate in Fit WIC. The agencies were California, the Inter Tribal Council of Arizona, Kentucky, Vermont, and Virginia. Concerned and motivated staff in the State agencies partnered with social scientists from local universities to assess their WIC environments and to develop and pilot overweight prevention programs.

During the assessment phase, the five Fit WIC teams learned a great deal about how childhood obesity and related issues impact WIC participants, staff and their communities. Some important findings included:

- Many parents of overweight preschool children did not see their child as overweight, nor were they particularly concerned about their children’s weight.
- Parents were eager to receive information on how to promote healthy behaviors in their families.
- WIC staff members wanted to reach parents more effectively. They wanted new knowledge and skills to improve their education sessions with participants.
- Community groups were eager to work toward the prevention of obesity, but were sometimes uninformed about the issue of childhood overweight or about how the WIC program could complement their efforts.

The successes of these original five states indicate that WIC does have potential to impact national efforts to prevent childhood obesity. The Fit WIC teams recommended that the WIC program:

1. Develop and encourage the use of participant-centered assessment and education procedures.
2. Adopt physical activity as an essential element of nutrition assessment and education.
3. Foster the potential of WIC staff members to be role models for healthy behaviors.
4. Change the focus of participant education from weight to healthy lifestyle.
5. Expand and update training for WIC staff.
6. Provide wellness opportunities at work for WIC staff.
7. Establish partnerships with community agencies to develop community-wide interventions.
8. Receive additional funding for increased staffing levels in WIC so that more staff time can be devoted to individual counseling and group education.
9. Fund additional research to evaluate the impact of WIC obesity prevention initiatives.

The following report examines the impact of the NH Fit-N-Fun Project assessment findings and expands on the above recommendations for future action.
Introduction

Revitalizing Quality Nutrition Services (RQNS) in the WIC Program

WIC – the Special Supplemental Nutrition Program for Women, Infants, and Children – provides nutrition education, supplemental foods, and health referrals to almost eight million low-income pregnant women, infants and children (up to age five) each month.1 RQNS is an evolving process of continuous program improvement for better customer service at the Federal, State, and local levels of WIC that is refocusing attention on nutrition services as one of the fundamental benefits of WIC participation.2 WIC staffs excel in many aspects of nutrition services, but more can be done in order to deliver quality nutrition services that effectively have an impact on participant behavior change. This process grew out of the findings of several WIC studies that showed that WIC needs to:

1) strengthen its nutrition education component;
2) adopt a more behavioral approach in nutrition counseling;
3) be more client oriented; and
4) focus on healthy behavior for life.3

RQNS activities are designed to enhance and strengthen the effectiveness of WIC nutrition services in helping participants to achieve and maintain optimal nutritional status. WIC can have a positive impact on the health of program participants by providing participants with what they need, want and can use to meet the public health challenges of today. The process of RQNS can help WIC maintain its position as the premier public health nutrition program.

RQNS activities are critical to understanding and addressing issues related to optimal nutritional status in the WIC population. Some key insights learned from assessments of WIC participants, WIC staff members and the community at large are:

- Parents did not perceive overweight as a problem for their preschool children
- Parents were knowledgeable about WIC’s health messages, but they struggled with how to put that knowledge into practice
- Parents lacked information about desirable activity levels for their families
- WIC families face social and economic barriers to a healthy lifestyle
- WIC families receive conflicting information4

In 1999, USDA’s Food and Nutrition Service (FNS) launched its WIC Childhood Obesity Prevention Projects to identify and test ways to use the WIC Program to better address childhood overweight.5 Fit WIC, a collection of social-environmental strategies to promote healthy weight among children enrolled in WIC, was designed as an integral component to help the nation’s premier early childhood food and nutrition program work more effectively to reduce and prevent unhealthy weight among WIC children participants.6

Obesity is a serious health concern for children and adolescents. Data from the 2008 New Hampshire Pediatric Nutrition Surveillance (PedNSS) summary of trends (1984-2008) reveal that the prevalence of overweight and obesity has increased dramatically: for children aged 2–5 years, prevalence of overweight increased from 12.1% to 17.8%; and prevalence of obesity increased from 5.8% to 15.5%.7,8

Obese children and adolescents are at risk for health problems during their youth and as adults. For example, during their youth, obese children and adolescents are more likely to have risk factors associated with cardiovascular disease (such as high blood pressure, high cholesterol, and Type 2 diabetes) than are other children and adolescents.9

Obese children and adolescents are more likely to become obese as adults.10,11 For example, one study found that approximately 80% of children who were overweight at aged 10–15 years were obese adults at age 25 years.12
Another study found that 25% of obese adults were overweight as children. The latter study also found that if overweight begins before 8 years of age, obesity in adulthood is likely to be more severe.

Participating in physical activity is important for children and teens as it may have beneficial effects not only on body weight, but also on blood pressure and bone strength. Physically active children are also more likely to remain physically active throughout adolescence and possibly into adulthood.

Children spend a considerable amount of time with media. One study found that time spent watching TV, videos, DVDs, and movies averaged slightly over 3 hours per day among children aged 8–18 years. Several studies have found a positive association between the time spent viewing television and increased prevalence of obesity in children. Media use, and specifically television viewing, may displace time children spend in physical activities contribute to increased energy consumption through excessive snacking and eating meals in front of the TV influence children to make unhealthy food choices through exposure to food advertisements and lower children's metabolic rate.

In the development of obesity prevention strategies for early childhood, there are compelling reasons to focus on preschool children. It is early on in a child’s development that activity and dietary behaviors are shaped. Moreover, parents and other adults may influence young children’s weight through the types of eating behaviors that they model for children.

WIC is uniquely positioned to provide creative and effective strategies to prevent childhood overweight and obesity. WIC, with its almost one million low-income preschool children from diverse racial/ethnic backgrounds, is an ideal setting for developing and implementing obesity prevention efforts.

Creative approaches to obesity prevention have been implemented in WIC with a WIC Special grant titled: NH WIC Fit-N-Fun Project. This project has two goals: 1) Increase physical activity; decrease sedentary behaviors; slow upward progression of BMI of three and four year old NH WIC preschoolers; 2) increase and improve collaborations among community health and education programs that serve three and four year old WIC children in an effort to promote consistent age appropriate physical activity messages.

This document reports on the findings from the USDA WIC Special Project Grant FY 2006 Revitalizing Quality Nutrition Services in WIC, NH WIC Fit-N-Fun Project. The report begins with a description of the Fit WIC project and materials, implementation of the project for both intervention and comparison agencies, and the evaluation methodology and a description of the data analysis. It is followed by a description of the survey results, including the overall findings. It concludes with a summary of the key findings, implications for public policy and recommendations for WIC professionals.
The National Epidemic of Overweight and Obesity

WIC and Childhood Overweight and Obesity

The Surgeon General has determined that the United States is facing a national epidemic of obesity and overweight. This epidemic of overweight affects all Americans in all age/race/sex groups including children. The prevalence of overweight in America’s children ages 6-11 years has more than tripled in less than 30 years. During 1971-74 it was reported by the National Health and Nutrition Examination Survey (NHANES) that four percent (4%) of 6-11 year olds were overweight. In the 1999-2000 NHANES, this figure had risen to fifteen percent (15%).

The definition of overweight and obese is very specifically defined for children and is explained in the text box below.

**Definition of “Obese” in Children**

“The Body Mass Index (BMI) is the most widely accepted clinical measure of weight status and is calculated by dividing a child’s weight in kilograms by his/her height in meters squared. A child who has a BMI at or above the 95th percentile of his/her age and gender group (using standards established with national surveys) is considered by health professionals to be obese; if his/her BMI is at or above the 85th and below the 95th percentiles, the child is considered overweight.”

**Major Factors Contribute to Overweight**

The two major factors that contribute to overweight in children are poor nutrition and decreased energy expenditure.

Poor nutrition in today’s children has been associated with many changes in feeding and eating behaviors including insufficient infant breastfeeding; reductions in fiber, fruit, and vegetable intake; excessive consumption of oversized fast foods and soda; and greater availability of fast foods and soda at schools.

Decreased energy expenditure in children has been attributed to an increase in activities that are more sedentary such as “screen time activities” including: television viewing, watching videos, using computers and playing video games. It has been reported recently that twenty-six percent (26%) of American children (and up to 33% of Mexican American children and 43% of non-Latino Black children) watch four (4) hours of television per day. This “screen time” makes it less likely for these children to participate in physical activities and more likely to have higher BMI scores and be at risk for overweight or overweight.

**Why Should We Care About Overweight In Young Children?**

Childhood overweight is associated with increasing risk factors for poor health outcomes. For example: (a) a dramatic increase in the number of adolescents with type 2 diabetes, (b) a greater propensity to grow up an obese adult, (c) an increase in cardiovascular risks, and (d) lower health related quality of life and poor self esteem.

WIC and Childhood Overweight

WIC is a national nutrition program for low-income women, infants and children. WIC Childhood Obesity Prevention Projects, including the Fit WIC Program, were initiated in 1999 by the United States Department of Agriculture (USDA) Food and Nutrition Service (FNS) in an effort to become part of the solution for resolving the national crisis of childhood obesity. Four million American households are members of the WIC Program. Many of the mothers, other adult family members, and service providers of this program are themselves overweight as were 14.7% of WIC children.

WIC is the primary nutrition education program for almost one quarter of the nation’s one to five year old children. Thus, it is in the unique position of being able to influence family patterns of behavior, specifically eating habits and activity levels, which are associated with overweight in children and preschool children.
The National Fit WIC Program
USDA developed the Fit WIC Program as a way to provide WIC with the tools needed to respond to the epidemic of childhood obesity and overweight. Fit WIC services were developed to:

- improve eating behaviors in children,
- enhance feeding interactions with parents/caregivers,
- increase physical activity in its participant children, and
- achieve a healthy weight of its participant children.39

Selected risk factors which are associated with WIC Program participants, and with overweight, include low socioeconomic status, race, age, high birth weight, and parental obesity. Thus, WIC has the potential to reach many at risk very young children through Fit WIC and prevent the problem of overweight before it begins.

In summary, the Fit WIC Program is meant to enhance the WIC Program’s ability to address the epidemic of overweight in their participant child populations. Fit WIC recommends and supports the following four major changes are made within the current WIC Program structure:

1. Develop and encourage the use of participant-centered assessment and education procedures.
2. Adopt physical activity as an essential element of nutrition assessment and education.
3. Foster the potential of WIC staff members to be role models for healthy behaviors.
4. Change the focus of participant education from weight to healthy lifestyle.40

The Emerging Health Issue of Overweight and Obesity
New Hampshire is facing a crisis of childhood overweight. Similar to the crisis nationally, overweight has become a pressing health issue for New Hampshire’s children. As illustrated in the 2008 CDC Pediatric and Pregnancy Nutrition Surveillance System (PedNSS) data below, compared to WIC participants nationally, New Hampshire WIC participants have even higher rates of pediatric overweight.

- NH has a higher proportion of obese children aged 2 years to 5 years compared to the nation (14.4% NH vs. 13.9% US). [PedNSS 2008]

- The prevalence of obese children in NH is increasing.
  - Children ages 2-5 years with a BMI > 95th percentile for age rose from 14.4% in 2001 to 15.5% in 2008.
  - 16.8 % of NH WIC children between the ages of 36 and 47 months were obese, as defined by a BMI >95th percentile for age.
  - 16.2 % of NH WIC children between the ages of 48 and 59 months were overweight, as defined by a BMI >95th percentile for age.

- NH has a higher proportion of children who are overweight compared to the nation.
  - Compared to the rest of the United States, NH has a higher proportion of children ages 2 years to 5 years with a BMI 85th-<95th percentile for age (17.8% NH vs. 16.4% US).
  - 19.1% of NH WIC children between the ages of 36 and 47 months were found to be overweight as defined by a BMI 85th-<95th percentile for age.
  - 18.9% of NH WIC children between the ages of 48 and 59 months were found to be overweight, as defined by a BMI 85th-<95th percentile for age.41

Addressing the Crisis of Childhood Overweight for NH’s WIC Children
The justification for the New Hampshire Fit WIC Program (NH Fit WIC) was to revitalize quality nutrition programs in the State of New Hampshire as a response to the emerging health issue of overweight. The New
Hampshire WIC Nutrition Program joined with the United States Department of Agriculture (USDA) in its effort to revitalize quality nutrition services. The NH Fit WIC program addressed two challenges that were identified by the Government Accountability Office (GAO) as important issues for all states. The first challenge was to assess the effect of nutrition services in the nation and in states, and secondly it hoped to improve the nation’s/states’ ability to respond to the emerging health issue of overweight.

NH Fit WIC was designed by the NH WIC Program to address the emerging health issue of childhood overweight. Nutrition education revitalization addressed problem areas that were identified by USDA. Specifically, implementation of NH Fit WIC was intended to strengthen the nutrition education element of the WIC Program by implementing participant-centered nutrition counseling that is focused on “behavior change for life.”
The NH Fit WIC Program

NH Fit WIC Program Overview

The WIC Nutrition Program in the Division of Public Health Services, New Hampshire Department of Health and Human Services (DHHS) “provides nutrition education and nutritious foods to help keep pregnant women, new mothers, infants and preschool children healthy and strong.” (http://www.dhhs.state.nh.us/DHHS/WIC/default.htm.) Fit WIC is an initiative focused on the national crisis of childhood overweight and obesity.42

NH Fit WIC was a unique program of the NH WIC Nutrition Program. The primary goal of this program was to reduce the problem of childhood risk of overweight and overweight for New Hampshire WIC preschoolers, ages three to four years old. This goal was met by implementing specific tasks and activities to address the four major objectives of NH Fit WIC which are described below:

**NH Fit WIC Program Goals, Objectives and Activities**

- **Objective One**: Increase physical activity; decrease sedentary behaviors; slow upward progression of BMI of 3 to 4 year old NH WIC preschoolers.
  - Designed, printed and distributed the Fit WIC Activities Book and Fit WIC Kit. These books and kits were provided to all Intervention Agency parents of three and four year old WIC children and distributed during their initial WIC certification or second nutrition education contact.
  - Established and conducted playgroups (called Fit-N-Fun Playgroups) at each WIC Intervention Agency. These playgroups were conducted during second nutrition education contacts. The Fit-N-Fun Playgroups served as an essential link between the project materials and experiential learning for parents on how to use the Fit WIC Activities Book as well as the Fit WIC Kit.
  - The State Fit WIC Project Coordinator conducted trainings on Fit WIC Program concepts for WIC staff throughout the project period. These trainings focused on: (a) the overall program and concepts, (b) the materials, (c) the Fit-N-Fun Playgroups, (d) staff counseling skills, and (e) the importance of evaluation and monitoring of the program.
  - Concepts of Fit WIC Activities Book and Kit were reinforced during recertification and second nutrition education contact.

- **Objective Two**: Increase availability of culturally and linguistically appropriate physical activity education and opportunities to NH WIC Latino families.
  - The Fit WIC Activities Book was evaluated for cultural appropriateness and translated into Spanish, incorporating input from this evaluation.
  - The Latino Fit WIC Activities Book and Fit WIC Kit were distributed to three and four year old Latino WIC children in all NH WIC agencies with greater than ten percent Latino families.
  - The NH WIC program hired bilingual translators to assist with materials for Latino families.
  - The needs and perceptions of Latino WIC families were be gained by conducting two Latino participant focus groups.

- **Objective Three**: Increase the frequency of consistent physical activity messages among community partners through training, collaboration, expansion, and delivery of the Fit WIC concepts that result in more active play by preschoolers.
  - The NH Fit WIC program was administered by a Coordinator and Nutrition Educators.
  - WIC staffs were trained by the NH Fit WIC Coordinator to implement the NH Fit WIC program in other community sites. A training and implementation manual was developed at the beginning of the project and reviewed with Fit WIC educators.
  - Each local NH WIC agencies contacted other community partners (including MD offices and various media sources) to offer them the opportunity to be trained to implement the NH Fit WIC program through their agency (train the trainers’ concept).
The NH Fit WIC Coordinator monitored the implementation and outcomes of the NH Fit WIC program and its expansion into the larger community by making periodic educational and quality assurance visits to each WIC agency and community.

- **Objective Four:** Improve WIC staff competencies to address overweight issues with WIC families.
  - Annual trainings of NH Fit WIC staff were conducted by the NH Fit WIC Coordinator.
  - Staff focus group and participant focus groups were conducted to assess the effectiveness of the NH Fit WIC program (staff training, program tools and activities, program implementation).
  - Training materials and NH Fit WIC tools were improved based on input from the staff and participant focus groups.

**NH Fit WIC Approach and Activities**

The aim of NH Fit WIC was to strengthen the nutrition education element of the NH WIC Program by implementing participant-centered nutrition counseling that is focused on “behavior change for life.” Many community groups, including health care providers, schools, non-profit organizations, and private citizens are concerned about the issue of childhood overweight. Community groups nationally, and in New Hampshire, are working to address overweight through specific programs and individual counseling. Thus, families may find themselves receiving a multitude of advice from various sources. NH Fit WIC conducted outreach as well as “train-the-trainer” opportunities to community partners that provided a framework of consistent messages for the community regarding overweight in preschool children.

NH Fit WIC supports the following approach to participants and physical activities: (a) participant-centered nutrition counseling, (b) culturally sensitive project tools and program, (c) demonstration and use of Fit WIC Activities Book and Kit, and (d) Fit-N-Fun Playgroups (Fit-N-Fun).

**Participant-Centered Nutrition Counseling**

NH Fit WIC dovetails well with the Food and Nutrition Service USDA Value Enhanced Nutrition Assessment (VENA) initiative in the area of staff training. VENA provides a positive approach to nutrition services based on desired health outcomes rather than on deficiencies. It complements participant-centered nutrition services by creating a partnership with the parent/participant in goal setting. The traditional approach to nutrition counseling in WIC has been very logical and based on the transference of information from nutrition professionals to parents and caregivers. The staff training component of NH Fit WIC strengthened competencies in nutrition assessment and counseling. New skills for WIC staff, such as expertise in conducting facilitated discussion groups, were developed in an effort to increase staff comfort levels in discussions with WIC participants about overweight. It is assumed that this increased comfort level will help WIC nutritionists and staffs became more effective in facilitating behavior changes with WIC participants.

**Culturally Sensitive Project Tools and Programs for Participants**

NH is a fairly homogeneous state, however, the Latino population is growing and the WIC Program and NH Fit WIC need to develop quality cultural and linguistically appropriate materials to meet the needs of this population. Since 1998, the number of Latino children enrolled in WIC in NH has increased from one percent (1%) to almost seven percent (7%) in 2008. The Fit WIC project puts a focus on the ability to tailor materials and activities to meet the specific cultural and language needs of this growing Latino population. NH Fit WIC offered Fit-N-Fun Playgroups that were culturally sensitive and developed and provided materials which were translated into Spanish. By considering the needs of specific population subgroups, NH Fit WIC was more able to effectively facilitate positive behavior changes. NH Fit WIC will also share these Spanish materials on the USDA WIC Works website (http://www.nal.usda.gov/wicworks/Sharing_Center/statdev_FIT.html) in an effort to benefit other WIC Programs.
Demonstration and Use of the Fit WIC Activities Book and Kit

During routinely scheduled nutrition counseling sessions, parents/caregivers received the Fit WIC Activities Book. This book helped foster the child’s health and development through active physical play. The book provided ideas for playing actively every day, building physical skills, and identifying resources within the community for active play with children. The Fit WIC Activities Book is divided into five user-friendly sections that build on the theme of reducing barriers to and increasing opportunities for active play:

Section 1 - Parent’s Pages: describes what is appropriate physical activity for preschoolers and includes a preschoolers’ “Activity Pyramid;”

Section 2 - Quiet Times: describes ways to aid transition and settle children after they have played actively;

Section 3 - Everyday Activities and Play: offers ideas for unstructured playtime;

Section 4 - Skill-building Physical Play: outlines skill-building activities and games in five major categories that parents can use for more structured play; and

Section 5 - Special Outings and Exploring: lists community facilities that families can utilize for active play.

The intention was for parents to read through all sections, but sections were designed to also stand alone.

In addition to the Fit WIC Activities Book, parents/caregivers received the Fit WIC Kit. The Kit provides a grab bag of play activities to be used by the parent/caregiver with their child/children in any setting. Kit items are packaged in a purple mesh bag with a draw string tie. Included in this bag are: A children’s book: The Bernstein Bears and Too Much TV or the Florida WIC 5-A-Day Book; a parent/caregiver book on pre-school nutrition: Children Growing Healthy; two to three primary colored bean bags; an inflatable beach ball; a CD of play time favorite songs and dances; a Play Everyday refrigerator magnet; and a roll of masking tape for outlining game parameters. The Fit WIC Kit has been modified for Hispanic audiences and is distributed with the Fit WIC Activities Book in Spanish.

The Fit WIC Activities Book and Kit provide resources that help with the difficult task of planning what to do with young children when it is cold outside, or when there is no adequate play space such as a playground nearby. This innovative and creative tool, in combination with the availability of Fit-N-Fun Playgroups, provides a multitude of ideas for parents/caregivers in an easy to use format.

Fit-N-Fun Playgroups

Parents of three and four year old children face situational obstacles to providing opportunities for physical activity for their children. Weather, safety issues, and lack of ideas were frequently voiced as reasons described by parents/caregivers for why their children are not physically active. WIC Fit-N-Fun playgroups addressed these concerns by providing parents/caregivers many easy physical activity options appropriate for inside and outside. Fit-N-Fun playgroups were held at community-based WIC sites and scheduled in tandem with the second nutrition education contact or recertification visits to the site. During Fit-N-Fun playgroups, lessons and ideas from the Fit WIC Activities Book were reinforced. Additionally, parents/caregivers became better acquainted with the materials in the Fit WIC Kit while participating in the Fit-N-Fun Playgroups.

Although a huge success with parents and their pre-school children, implementation of the Fit-N-Fun playgroups proved to be difficult at some WIC agency sites. Some sites did not have appropriate space to conduct playgroups. Some made the best of a difficult situation by using hallways or going outside in good weather. Space seemed to be the most difficult barrier for physical activities at WIC agencies.
Evaluation Plan Overview

The evaluation planning process CHI used in the development of the NH Fit WIC evaluation plan was framed by the approach proposed by the Institute of Medicine for evaluation of a community health improvement process. There were five steps or phases to the evaluation planning process: (1) a comprehensive literature review of the resources upon which the NH Fit WIC evaluation plan might be based; (2) an assessment of and development of criteria and tools that would become part of the evaluation strategy; (3) a summary of the evaluation strategy and how it will be used to enhance project implementation; (4) a pilot testing of evaluation tools and protocols for their effectiveness for monitoring the implementation of the NH Fit WIC Program; and (5) the submission of a final evaluation plan report.

There were three major components to the evaluation: feasibility analysis; fidelity analysis; and outcome analysis. In this comprehensive evaluation, the outcome data was interpreted in concert with the process evaluation and focus group data in order to contextualize the outcome results. Below is a description of the process that was used to develop the evaluation plan and the theoretical framework for the plan.

Step One: A Comprehensive Review of the Implementation Strategies
As the first step to help develop an effective and dynamic evaluation plan, a comprehensive review of the implementation strategies of NH Fit WIC was conducted. Grant specific information and web-based resources were supplemented with a literature review of related strategies and data to provide an historical perspective of the project. The comprehensive review compared programs and research studies with a focus on evaluation implementation strategies.

The review was framed within the context of other states and/or national strategies of a similar nature and focused on developing a review of the program based on the Seven P’s of project infrastructure: policy, population, purpose, processes, patterns, professionals and partners. Each of these domains as described below is essential for measurement development as they incorporate the context within which this public health program is framed.

- **Policy/Justification** clarifies the funding streams and regulations surrounding the work and offers insights into opportunities for standardization across populations and at the same time “a place where innovation opportunities might occur.”
- **Population/People to be served**, when clearly articulated, provides the central focus of policy/program/project development.
- **Purpose/Aim** incorporates an understanding of how the microsystem (system of care closest to the patient), mesosystem (in this case the management system), and macrosystems (in this case, community collaborations) relate to outcomes of the work.
- **Processes** identify the activities essential for connecting the patterns and structures to create output and work.
- **Patterns of ordered relationships** define the relationships between and among people organized around the care and work processes and how these connect to the structures of the microsystem.
- **Professionals** are one of the most interesting concepts in the work of public health because of the large variation across and between professional groups who provide leadership in this field.
- **Partners** are also a uniquely important concept for public health especially in regard to building roles for community and private organizations in partnership with government to create healthy public policy and healthy public.

NH Fit WIC site visits were conducted as part of this comprehensive review in order to contextualize the NH Fit WIC strategies. These site visits were central to development of the evaluation criteria, tools and overall plan.

Step Two: Development of Evaluation Criteria
The next step in the evaluation planning process was to establish the evaluation criteria to be used to guide the evaluation design. It was determined in advance that all tools and measures used to guide the evaluation plan needed to be incorporated into the highly effective Plan-Do-Study-Act cycle of continuous improvement. Measures
developed to guide the evaluation plan were developed based on a review of the WIC Special Project Grants Evaluation Technical Assistance Guide as well as a review of benchmark data from sources such as the CDC Pediatric Nutrition Surveillance System (CDC PedNSS). A population-based approach in the development of the criteria and base benchmarks on the NH Fit WIC target population was used.

**Step Three: Development of Evaluation Tools and Logic Model**

Once the criteria for evaluation were established, existing evaluation tools of the NH Fit WIC Program including the Fit WIC survey and the StarLINC system were assessed. The initial task was to define key processes and outcome measures while simultaneously reviewing evaluation tools that had been previously validated and could be utilized for the NH Fit WIC evaluation.

In order to have successful site visits and to ensure that all elements of the evaluation plan were covered, a site visit protocol was developed to guide the interviews and help compile information on each site’s experience with the NH Fit WIC Program to date. (See Appendix A: Site Visit Protocol.) It was vital for the evaluation plan to be informed by the real experiences of WIC staff in implementing NH Fit WIC and in using data collection tools and systems. Feedback from WIC staff and participants has been essential to the development of successful evaluation tools and plan.

Key informant interviews were held with WIC staff involved in the NH Fit WIC Program at the Intervention Agencies. Site visits were conducted at Coos County Family Health Services on April 9, 2007; Ammonoosuc Community Health Services on April 10, 2007; Southern NH Services on April 25, 2007; and CAP Belknap-Merrimack Counties on April 27, 2007. (See Appendix B: Site Visit Summary.)

A logic model was developed that was responsive to the target population, program implementation strategies and the established evaluation criteria and timeline. The logic model acts as a road map for evaluation activities and provided an ongoing feedback mechanism for program oversight and quality improvement. (See Appendix C: Logic Model.)

**Step Four: Pilot Test and Redesign of the Evaluation Plan**

A participant survey was developed based on review of the evaluation criteria, previously used forms, as well as survey tools developed for other similar programs. The survey questions were pilot tested in the field for two weeks. Two of the three active Fit WIC sites participated in the pilot test. Results of the pilot test data were reviewed for consistency, completeness, and general usability.

Based on the results of the pilot test, the evaluation plan was modified to reflect recommended changes and adjustments. The participant survey was further revised to reflect these changes and to simplify and shorten the survey. The pilot test findings were used to inform the designs of the final evaluation plan. In addition, a Microsoft Access database was developed to be used by the Fit WIC Coordinator to compile the participant survey results and generate site-level reports from the data. (See Appendix D: Participant Survey-English and Appendix E: Participant Survey-Spanish.)

**Step Five: Written Evaluation Plan**

The evaluation plan was developed based on the findings and data collected throughout the planning process. These findings and information were crucial to a successful evaluation planning process. Meetings and presentation of the evaluation plan were coordinated with DHHS and stakeholders throughout the planning process to ensure that the plan meets the needs of the project. A draft evaluation plan was submitted to DHHS and WIC staff for review, comment and feedback, which was incorporated into the final evaluation plan.

**Theoretical Framework**

The Fit WIC Evaluation Plan was developed to help WIC measure progress toward reaching its objectives for the NH Fit WIC Program. The plan provided a systematic method for collecting, analyzing, and using information to
answer basic questions about the program as it was being developed and after it was implemented. The Fit WIC Plan also provided a method for continuous evaluation and on-going improvements to NH Fit WIC.

In general, the questions that the Plan answered for NH Fit WIC included:
1. What are the expectations of the NH Fit WIC sites?
2. What is actually happening at the NH Fit WIC sites?
3. Is the NH Fit WIC Program achieving the outcomes it hoped for?
4. How can WIC improve NH Fit WIC so that it gets better outcomes?

The Fit WIC Evaluation Plan incorporated the Plan-Do-Study-Act cycle of continuous improvement as illustrated below:

The underlying theoretical framework for the Fit WIC Book and Kit was the Social Cognitive Theory. This theory describes personal behavior as a dynamic interaction between environment, the behavior of others and personal factors. According to Social Cognitive Theory, people learn not only through their own experiences but also by observing the actions of others and the results of those actions. This theory is often used as the underpinning of behavioral interventions. The table below outlines the concepts of Social Cognitive Theory and how the NH Fit WIC Book and Kit addressed each of them.
### Social Cognitive Theory Concepts and New Hampshire Fit WIC Project Materials

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Objectives/Activities</th>
<th>New Hampshire Fit WIC Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environment – Factors physically external to</strong>&lt;br&gt;the person</td>
<td>Provide specific information and suggestions for activities for children in the community; support and encourage physical activity in WIC sites</td>
<td>- Fit WIC Activities: Special Outings and Exploring&lt;br&gt;- Calendar of local activities&lt;br&gt;- Community playgroups&lt;br&gt;- WIC Quarterly Newsletter – Fit WIC insert&lt;br&gt;- Second Nutrition Contacts&lt;br&gt;- Office displays and changed environment to encourage physical activity&lt;br&gt;- State Park Passes</td>
</tr>
<tr>
<td><strong>Situation – Person’s perception of the environment</strong></td>
<td>Promote physical activity as inexpensive and something that can be planned ahead or done at the spur of the moment, something that can be short or longer in duration, something that does not require special sports equipment.</td>
<td>- Fit WIC Activities: Parent’s Pages, Everyday Play, Skill-Building Play, Special Outings and Exploring&lt;br&gt;- <em>Playtime Favorites</em> music CD&lt;br&gt;- Fit WIC Activity Kit: beach ball, bean bags, masking tape</td>
</tr>
<tr>
<td><strong>Behavioral Capability – Knowledge and skill to perform a given behavior</strong></td>
<td>Provide detailed descriptions of how to do age-appropriate physical activity skill.</td>
<td>- Fit WIC Activities: Skill-building play&lt;br&gt;- Fit WIC Activity Kit: Masking tape, beach ball and bean bags</td>
</tr>
<tr>
<td><strong>Expectations – Anticipated results or outcomes of a behavior</strong></td>
<td>Model positive outcomes of physical activity for active families.</td>
<td>- <em>Berenstain Bears and Too Much TV</em> book&lt;br&gt;- Florida “<em>Give Me 5</em>”</td>
</tr>
<tr>
<td><strong>Expectancies – The values that the person places on a given outcome, incentives</strong></td>
<td>Explain benefits and value of physical activity for young children; provide incentives.</td>
<td>- Fit WIC Activities: Parent’s Pages&lt;br&gt;- <em>Children Growing Healthy</em> booklet&lt;br&gt;- Participants keep all Fit WIC Activity Kit contents</td>
</tr>
<tr>
<td><strong>Self-control – Personal regulation of goal directed behavior or performance</strong></td>
<td>Provide chart for planning and logging activities.</td>
<td>- Fit WIC Activity Calendar&lt;br&gt;- Fit WIC Activity Sheet</td>
</tr>
<tr>
<td><strong>Observational Learning- Adoption of a behavior that occurs by watching the actions and outcomes of others’ behavior</strong></td>
<td>Provide opportunity to see active kids in a positive light.</td>
<td>- second nutrition education contacts&lt;br&gt;- Office Displays&lt;br&gt;- Fit WIC Playgroups</td>
</tr>
<tr>
<td><strong>Reinforcements – Responses to a person’s behavior that increase or decrease the</strong></td>
<td>Promote self-initiated rewards and provide external reinforcement.</td>
<td>- Fit WIC newsletter&lt;br&gt;- Second Nutrition Education Contacts</td>
</tr>
</tbody>
</table>
likelihood of re-occurrence

| Self-efficacy – The person’s confidence in performing a particular behavior | Increase parental confidence in teaching their children to be physically active | • Fit WIC Playgroups  
• Activity Calendar |

| Emotional Coping Responses-Strategies or tactics that are used by a person to deal with emotional stimuli | Provide parents problem solving and stress management skills | • Fit WIC Activities: Parent’s Pages, Skill-building play, Quiet Times  
• Modeling provided at the Fit WIC playgroups |

| Reciprocal Determinism – The dynamic interaction of the person, the behavior and the environment in which the behavior is performed | Provide multiple avenues to behavioral change | • The entire Fit WIC Activity Kit package  
• Fit WIC playgroups |

Evaluation Assumptions

Participation is Voluntary
Participation in all aspects of the evaluation study was completely voluntary and in no way affected the availability of WIC services. A participant could refuse any or all components of the evaluation study and still receive the full breadth of eligible WIC services. Similarly, a participant could withdraw from the evaluation study and still continue receiving WIC services as eligible.

Information was Private and Confidential
All WIC participants completed the Rights & Rules form upon enrollment into the WIC program which states that any information provided is confidential and that the local agency may use information about the participant or their child in reports or publications without names. In the event that an agency wants to use a participant’s name, they must obtain written approval to do so. Approval is not needed for filing mandatory reports if child abuse is suspected or seen. This form also discloses the participant/applicant's rights under the program and the rules that they must follow.

In addition to this over-arching consent, all Fit WIC participants were reassured that any information gathered about them or their children would be kept private and confidential. Each WIC participant received a unique WIC ID number and this was the only identifying information on the survey forms that was used to match cases over multiple data points. This ID was not used for any other purposes by the evaluators. All data reports and findings were summarized in aggregate and no names or identifiers were used to highlight the results of any individuals or families.

Data were collected, entered and stored by NH Fit WIC staff using secure facilities that included locked cabinets, password protected databases and a plan for safeguarding or destroying the data once the study was complete.

Standardized Forms and Protocols
In order to ensure the collection of high quality data, all evaluation data were collected using standardized forms and protocols. The Participant Survey was designed as a self-administered form; however some participants needed assistance completing the form due to literacy or language barriers. Therefore, all staffs were trained in the proper administration of the survey forms, including techniques for ensuring respondent privacy while answering the questions, and assisting the respondent with any questions in an objective manner.
Framework of the Evaluation Design

The NH Fit WIC evaluation included two major components. The first component was an on-going process and implementation evaluation of the program. This first component provided feasibility and fidelity analysis, and tools for continuous quality improvement of the program. The second component was an observational outcome study of an intervention and comparison cohort during a discrete eighteen month study period (from October 1, 2007 through March 31, 2009).

Process and the Implementation Evaluation

The process and implementation evaluation provided site specific data for the NH WIC sites that agreed to implement NH Fit WIC. These data provided a basis for feasibility and fidelity analysis of the program.

- **Feasibility analysis**: centered around process data regarding the implementation of the NH Fit WIC program at the five (5) participating sites.
- **Fidelity analysis**: measured the ability of the WIC Programs to implement NH Fit WIC as the developers intended.

Methods

The five NH Fit WIC Intervention Agencies that participated in the study were:
- Ammonoosuc Community Health Services
- Coos County Family Health Services
- Community Action Program Belknap-Merrimack Counties
- Rockingham Community Action
- Southern New Hampshire Services

All parents/caregivers of three to four year old children who receive WIC services at a participating NH Fit WIC site were eligible to participate in the NH Fit WIC program.

This process evaluation was designed to be used by the State, the Fit WIC Coordinator and NH Fit WIC staff to assess, review and improve NH Fit WIC based on the data that were summarized quarterly and annually.

**Tools and Measures**: *The Logic Model* is a program evaluation tool that was designed to provide a roadmap for program development and monitoring. The Logic Model, as designed, details several activities and corresponding measures, regarding the implementation and standardization of the NH Fit WIC program at the five participating sites.

In addition to the Logic Model, process measures were captured through completion of the *Program Evaluation Form* which summarized counts of NH Fit WIC activities at the site level. These counts were aggregated by the Project Coordinator to provide baseline averages for reporting purposes. Data were summarized as aggregate totals (counts), means and proportions as appropriate. (See Appendix F: Program Evaluation Form.)

*Participant and Staff Focus Groups* provided qualitative data that contextualized the feasibility of NH Fit WIC and developed a platform for improvement.
The Participant Survey (which was also a cornerstone of the cohort study) provided descriptive population-based data on key outcome indicators of the program. This also provided a feedback mechanism to the sites from participants regarding the feasibility and fidelity of the program.

Analysis

For the five Intervention Agencies, qualitative data were collected and summarized from both the Staff and Participant Focus Groups. (See Appendix G: Fit WIC Staff Focus Group Protocol; Appendix H: Staff Focus Group Analysis Report; Appendix I: Participant Focus Group Protocol; Appendix J: Participant Focus Group Analysis Report.) Information from these focus groups provided sites the ability to assess the effectiveness of: (a) staff capacity, (b) staff training, (c) staff perceptions of overweight issues, and (d) improvement in reading level/translation of Fit WIC Activities Book. Additionally, quantitative data from the Program Evaluation Form was summarized (univariate descriptive analysis) regarding number of Activities Books distributed, and the number of and attendance at Fit-N-Fun Playgroups conducted. All of these data helped create a description of the feasibility of implementing the NH Fit WIC Program.

Fidelity refers to the ability of the WIC programs to implement NH Fit WIC as the developers intended and related to feasibility, but goes deeper, exploring exactly what occurred during contacts with clients. It is important to examine fidelity from both the staff and client perspectives. For the five Intervention Agencies, data from the process evaluation (See Appendix H: Program Evaluation Form) on the number of the Fit WIC Activities Books distributed and Fit-N-Fun Playgroups conducted has been informative, as has the data collected from the client surveys. Specifically, responses to questions regarding whether or not participants were given a Fit WIC Activities Book, whether their 3-4 year old child participated in a Fit-N-Fun Playgroup, and if they used the Activities Book and Kit were summarized as part of the descriptive analysis of the program.

Fit WIC Observational Outcome Study Time Line Flowchart

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Expected Sample Size</th>
<th>10/01/07</th>
<th>1/01/08</th>
<th>4/1/08</th>
<th>7/1/08</th>
<th>10/1/08</th>
<th>1/01/09</th>
<th>4/1/09</th>
<th>7/1/09</th>
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<tr>
<td>Intervention Site</td>
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<tr>
<td>3-&lt;4 yr. olds</td>
<td>935</td>
<td></td>
<td>12-mo.</td>
<td>3/31/08</td>
<td>6/30/08</td>
<td>9/30/08</td>
<td>12/31/08</td>
<td>3/31/09</td>
<td>6/30/09</td>
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<tr>
<td>12-month cohort</td>
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<td>cohort</td>
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<td></td>
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<td></td>
<td>12-month follow-up</td>
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<td>Data analysis</td>
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<tr>
<td>4-4.5 yr olds</td>
<td>780</td>
<td></td>
<td>6-mo.</td>
<td>3/31/08</td>
<td>6/30/08</td>
<td>9/30/08</td>
<td>12/31/08</td>
<td>3/31/09</td>
<td>6/30/09</td>
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<tr>
<td>6-month cohort</td>
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<td>6-month follow-up</td>
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<td>Data analysis</td>
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<tr>
<td>Comparison Site</td>
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<tr>
<td>3-&lt;4 yr. olds</td>
<td>308</td>
<td></td>
<td>12-mo.</td>
<td>3/31/08</td>
<td>6/30/08</td>
<td>9/30/08</td>
<td>12/31/08</td>
<td>3/31/09</td>
<td>6/30/09</td>
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<tr>
<td>12-month cohort</td>
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<td>12-month follow-up</td>
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<tr>
<td>4-4.5 yr olds</td>
<td>252</td>
<td></td>
<td>6-mo.</td>
<td>3/31/08</td>
<td>6/30/08</td>
<td>9/30/09</td>
<td>12/31/08</td>
<td>3/31/09</td>
<td>6/30/09</td>
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<tr>
<td>6-month cohort</td>
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<td>cohort</td>
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<td>6-month follow-up</td>
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Observational Outcome Study

The observational outcome study was designed as a longitudinal study of two cohorts of clients – the intervention cohort and the comparison cohort. The intervention cohort was comprised of 3- to 4.5-year-old children who received NH Fit WIC services at a participating WIC site. (NOTE: This was a subset of the total Fit WIC population of 3 to 4 year olds because some children aged out of the study before we had adequate follow-up data.) The
comparison cohort consisted of 3- to 4.5- year old children who receive WIC services at sites not participating in NH Fit WIC.

**Methods**

The outcome evaluation was a longitudinal, observational study of two cohorts of clients. The first cohort, the intervention cohort, consisted of all parents/caregivers with their 3- to 4.5-year old children who received WIC services at one of the five Fit WIC sites. The second cohort, the control cohort, consisted of all parents/caregivers with their 3- to 4.5-year olds who received WIC-services at one of the three sites not participating in Fit WIC.

**Participant Enrollment:** The participants were enrolled during the months of October 1, 2007 through March 31, 2008 so that there was enough time to gather a complete set of follow-up data during the evaluation year ending on September 30, 2009. At both the intervention and control sites, enrollment took place during a certification visit for families with children between 3- to 4.5-years old. Once enrolled, participants were followed for up to 12 months. All participants were tracked based on a unique identification number which is assigned during initial WIC enrollment. Baseline data were collected by the nutritionist when a participant was enrolled during a certification visit as described below.

**Evaluation Cohorts:** The flow chart below summarizes the creation of the evaluation cohorts.

### Fit WIC Program Evaluation Time Line Flowchart

<table>
<thead>
<tr>
<th>Program Evaluation</th>
<th>Age Group</th>
<th>Annual Enrollment</th>
<th>7/01/07</th>
<th>10/01/07</th>
<th>1/01/08</th>
<th>4/1/08</th>
<th>7/1/08</th>
<th>10/1/08</th>
<th>1/01/09</th>
<th>4/1/09</th>
<th>7/1/09</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All 3-4 yr. olds</td>
<td>4,547</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>6/30/08</td>
<td>9/30/08</td>
<td>12/31/08</td>
<td>3/31/09</td>
<td>6/30/09</td>
</tr>
<tr>
<td></td>
<td>Program evaluation follow-up</td>
<td>–</td>
<td>–</td>
<td>–</td>
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<td>–</td>
<td>–</td>
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</table>

**Intervention 12-month cohort:** Population: Children enrolled between the ages of 3.0 years to < 4.0 years: Baseline (BL), physical activity, TV/video viewing, and use of the Fit WIC kit and book were ascertained on the surveys. These same data elements were collected at the subsequent 3-month voucher visit or second nutrition education contact and 6- and 12-month re-certification visits. BMI were ascertained at the 6-month, and 12-month certification visits.

**Intervention 6-month cohort:** Population: Children aged 4.0 to 4.5 years: Baseline (BL), physical activity, TV/video viewing, and use of the Fit WIC kit and book were collected at 3- and 6-months. However, no data was collected at the 12-month mark because most of the children would have aged out from Fit WIC before their 12-month follow-up date.

The rationale for the timing of the follow-up assessments was to measure immediate- and long- term effects of the intervention on behaviors and BMI. To make the study more robust for the immediate measures (activity measures) we increased the sample size by including 4 to 4.5 year olds in the study.

**Baseline Data:** Once a family agreed to participate in the NH Fit WIC Program at an Intervention Agency, they were given a Fit WIC Activities Book and Kit. The Fit WIC or nutrition coordinator reviewed the purpose of the program and the contents of the Kit. If time permitted, the nutrition coordinator also reviewed some of the activities in the Fit WIC Activities Book or Kit. This was considered the baseline (BL) visit and participants were asked to complete Section A of the Fit WIC Participant Survey before they left the site.
At the control sites, eligible participants (all parents/caregivers receiving WIC services with children between the ages of 3 to 4.5 years old) were asked to complete Section A of the Fit WIC Participant Survey during a certification visit.

**Data Collection:** The intervention cohort completed both sections A and B of the Fit WIC Participant Survey during subsequent visits. Voucher or second nutrition education contact visits took place every three months and provided the WIC staff with the opportunity to review the Fit WIC Activities Book or Kit with participants and demonstrate some of the activities in the book. Re-certification visits take place every six months and include a visit with the health technician during which time an updated BMI is calculated. Participants completed both sections of the survey during these re-certification visits as well.

The control cohort completed a WIC Participant Survey at each second nutrition education contact and re-certification visit. This survey was comprised of the same questions asked of the Fit WIC participants about general characteristics of their children and activity levels and excludes all questions specific to Fit WIC.

**Outcome Measures**

Ultimately, the goal of the intervention was to help improve activity habits (immediate outcomes) to increase the likelihood that the children will be on a healthy BMI trajectory (long-term outcomes).

The data source for intermediate outcome measures was the Fit WIC Participant Survey. The immediate outcome measures are:

- prevalence of participating in active play >= 1 hour/day;
- prevalence of spending 30-60 minutes/day teaching child active skills;
- prevalence of family outings to parks, playgrounds, playgroups, libraries, museums; and
- prevalence of amount of TV/video viewing per day.

Key stratification, or explanatory, variables are:

- treatment/control site;
- gender;
- age; and
- Latino/not-Latino origin.

In order to obtain longer-term measures, Body Mass Index (BMI) and BMI percentile-for-age was collected and computed at the baseline and 6-month follow-up visits for all children in the treatment and control groups (and at 12-months for children enrolled when they were 3 years old).

For the intervention group, we also obtained information on use of the Fit WIC Activities Book and participation in playgroups. Although the primary analyses were under the “intent-to-treat” paradigm, we examined whether outcomes were greater among those more adherent to the intervention.

**Sample Size/Power**

Annual enrollment in the WIC Program among families with 3- to 4.5- year olds is approximately 3,428 at the treatment sites and 1,119 at the control sites. All Fit WIC Participants were included in the study sample. This allowed for highly accurate data as the findings were based on the entire population. It was anticipated that there would be up to 50% attrition over time, therefore the final sample sizes are 1,715 in the intervention group and 560 in the control group. It was assumed that the loss to follow up will be random and not associated in any way with the Fit WIC Program (for example, people have missing data for random reasons such as relocation or aging out rather than choosing to leave the program). Only matched cases were included in the final dataset.
<table>
<thead>
<tr>
<th>Study group</th>
<th>Age</th>
<th>Population Estimate</th>
<th>Expected Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>intervention group</td>
<td>Total</td>
<td>3,428</td>
<td>1,715</td>
</tr>
<tr>
<td></td>
<td>3-&lt;4 year olds</td>
<td>1,869</td>
<td>935</td>
</tr>
<tr>
<td></td>
<td>4-4.5 year olds</td>
<td>1,559</td>
<td>780</td>
</tr>
<tr>
<td>control group</td>
<td>Total</td>
<td>1,119</td>
<td>560</td>
</tr>
<tr>
<td></td>
<td>3-&lt;4 year olds</td>
<td>615</td>
<td>308</td>
</tr>
<tr>
<td></td>
<td>4-4.5 year olds</td>
<td>504</td>
<td>252</td>
</tr>
</tbody>
</table>
Evaluation Tools and Protocols

Evaluation Tools

The Evaluation Tools needed to implement the evaluation process are outlined in the table below, summarized by the domains of the Plan-Do-Study-Act cycle of continuous improvement.

<table>
<thead>
<tr>
<th>EVALUATION STAGE</th>
<th>EVALUATION QUESTION</th>
<th>EVALUATION TOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>What are the expectations of the Fit WIC sites?</td>
<td>● Logic Model</td>
</tr>
<tr>
<td>Doing</td>
<td>What is actually happening at the Fit WIC sites?</td>
<td>● Program Evaluation Form</td>
</tr>
</tbody>
</table>
| Studying         | Is the Fit WIC Program achieving the outcomes it hoped for? | ● Participant Survey  
                  |                     | ● Staff Focus Groups  
                  |                     | ● Participant Focus Groups  
                  |                     | ● Program Evaluation Form |
| Acting           | How can WIC improve Fit WIC so that it gets better outcomes? | ● Annual Evaluation Report  
                  |                     | ● Summary of “next steps” which address barriers identified in the Evaluation Report |

Logic Model

In order to conduct an effective program evaluation it was critical to generate a roadmap for the program. This roadmap is called a logic model which is a visual illustration of how a program works, the activities that need to take place and what the desired outcomes are for the program. It clearly defines the assumptions and expectations of the program and describes how the program would address a problem in the target population. CHI developed an outcome approach model that highlights activities, program implementation and the intended results of NH Fit WIC.51

The logic model essentially answers the “if...then” statements one needs to ask about a program. It is read from left to right, starting with a description of the planned initiative. In the case of NH Fit WIC, the inputs included items such as funding through the USDA WIC Special Project Grant and the NH DHHS WIC staff. These inputs or resources were used to implement the NH Fit WIC Program activities which generated certain outputs measured as process measures. By putting into place a continual review process of these first three items, the NH Fit WIC Program staffs were able to determine if they were delivering the program as planned. The following types of questions were answered: Is NH Fit WIC reaching the number of participants anticipated? How many WIC staffs are getting trained? Are Latino families receiving Fit WIC Kits and participating in Fit-N-Fun Playgroups?

The outcomes and impact of a program were measured based on the assumption that the program was being implemented as planned. If this was the case, then it was assumed that the NH Fit WIC participants benefited in certain ways. The outcomes can be immediate or intermediate depending on the rate of change that can be accomplished with the target population and the intended effect. For example, increasing the physical activity level of children participating in NH Fit WIC is an immediate outcome; while changing knowledge or behaviors about the relationship between physical activity and weight will take more time to show change, and is therefore considered an intermediate outcome.
There are five sections to the NH Fit WIC logic model. The first section addresses the overall problem of pediatric overweight and associated risks and the broader NH Fit WIC initiative. Subsequent sections of the logic model address the four program objectives and how the NH Fit WIC Program will address each of these objectives.

The logic model was used throughout the NH Fit WIC Program to continually clarify, refine and redefine the problem and needs of the community. It provided the basis for showing the program’s progress and success and it contributed to the feedback loop of the Plan-Do-Study-Act approach to program management.

**Program Evaluation Form – Process Measures**

Process measures were compiled by each of the NH Fit WIC sites on a quarterly basis using the Program Evaluation Form throughout the duration of the Fit WIC Program. The months included in each quarter were as follows:

- **Quarter 1:** July 1 – September 30
- **Quarter 2:** October 1 – December 31
- **Quarter 3:** January 1 – March 31
- **Quarter 4:** April 1 – June 30

It was the responsibility of the NH Fit WIC Coordinator to ensure that these data were collected, recorded and submitted no later than the 15th day of the month following the end of the quarter. For example, the Quarter 1 report is due by October 15th. The same form was used for individual site reports and a statewide aggregate report. It was the responsibility of the State Fit WIC Coordinator to compile the aggregate statewide results, analyze these data, and use these data to provide the NH DHHS WIC Staff with current information about each individual site initiative as well as the statewide program. This form was central to the plan-do-study-act model of program evaluation. All data analyzed with this form was descriptive in nature.

**Participant Survey**

The Fit WIC Participant Survey was administered in NH Fit WIC intervention and comparison sites per the protocol below. The participant survey was designed as a self-administered survey that is completed by Fit WIC participants (parent or caregiver) every three months while their 3-4 year old child is enrolled in NH Fit WIC. The survey was designed as a baseline and follow-up survey that was completed by the participant every three months at certification or re-certification and second nutrition contact visits.

The baseline survey was collected at the WIC clinic site when the participant was recruited into NH Fit WIC and given the Fit WIC Activities Book and Kit. This occurred during a certification or second nutrition education contact visit. The WIC nutritionist or a designated Fit WIC staff person was responsible for having the participant complete the survey.

The survey contains two sections - Section A: Fit WIC Participant Information, is completed by the participant (parent or caregiver) at each second nutrition education contact or recertification visit. Section B: Fit WIC Activity Kit Questions, asks specific questions about the participant’s experience with the Kit. If the participant had just been recruited and received the Fit WIC Kit that day, they only completed the first section on the front page of the survey. If they were returning for a follow-up visit, they completed both sections on the front and back of the survey.

It was important for the NH Fit WIC staff to ensure that the answers on the survey were kept private and confidential and informed participants that their answers would not affect their WIC participation in any way. The Nutritionist or staff were in the room while the participant completed the survey, however, they respected the participant’s need for privacy when answering the questions so that they could feel comfortable answering honestly.

The completed original surveys were submitted at the end of each month to the State Fit WIC Coordinator who oversaw entry of the survey data into the MS Access database. Timely submission of the surveys ensured that sites...
received timely feedback on how their site was doing and also allowed the Fit WIC Coordinator to provide quality assurance feedback if there were problems with the survey data or questions not being recorded correctly. The Fit WIC Coordinator reviewed the surveys for completeness or problems and addressed issues directly with the NH Fit WIC staff at the site level or across all sites if there was a common problem.

The Participant Survey Data were tabulated and compiled using a Microsoft Access Database. A date-delimited quarterly report, *Participant Survey Summary*, was generated for site- and state-level data. This report included cumulative, aggregated data for the selected fiscal year from the Participant Surveys. These data were also used for case-level, pre-post or trend analysis and provided the sample for the comparison study design. (See Appendix K: Participant Survey Summary.)

Frontline staff provided a unique perspective on the program and were essential to the ongoing evaluation of the program effectiveness. The Fit WIC Coordinator reviewed the Participant Survey Data on a quarterly basis and provided the staff an opportunity to see how, across sites, this information was being used and provided insight into interpreting trends at the site and statewide. Summaries of the Participant Survey Data were generated using the MicroSoft Access Database and were an essential tool for ongoing evaluation. (See Appendix L: Participant Survey Data Entry Screen Shots.)
Outcomes

Staff Focus Group Analysis Report Summary

As part of the evaluation of the Fit WIC Project, focus groups were conducted with 31 staff from the five participating WIC agencies. Focus groups were conducted in late January, 2008, in Concord, Littleton, Exeter, and Manchester.

The purpose of the focus groups was to assess: (a) how Fit WIC staff perceived their skill levels and the effectiveness of staff training; (b) Fit WIC staff’s acceptance of Fit WIC nutrition and physical activity messages; and (c) Fit WIC staff perception of their ability to affect change in participant behavior regarding nutrition and physical activity. Findings will be used to improve Fit WIC staff training.

Conclusions:

- Staff seemed very knowledgeable about the causes and risks of overweight in preschool children, as well as what interventions could help mitigate it. They discussed the physical, psychological, and social effects of overweight and recognized the barriers, both internal and external, to its prevention. While internal factors were parent-centered, external barriers included the stress of working, lack of time to plan healthy meals, the cost of healthy foods, unsafe play areas, lack of control over the food given by child care providers, and counterproductive cultural messages.

- Overall, the staff demonstrated their acceptance of nutrition and physical activity messages, offering sound suggestions about what parents could do, but with an awareness of the obstacles parents face. In one group there appeared to be less empathy towards parents and a higher level of frustration towards their behavior, but most seemed to understand these difficulties. Urban and rural differences were noted, in terms of levels of physical activity due to living conditions and other environmental factors.

- Staff expressed caution about their ability to effect change in parent behavior. While confident in their abilities, knowledge, resources, and counseling skills, they did not have as much confidence in parent willingness to change. Some felt they could be a resource but not the direct agents of change. On the other hand, many had a variety of strategies for approaching parents about overweight, including a sensitive approach, client-focused assessment (Value Enhanced Nutrition Assessment or VENA), objectivity, stressing weight as a health issue, using charts and other visual aids, building rapport with clients, avoiding offensive terminology, encouraging small, incremental changes/attainable goals, and offering on-going reinforcement and support. Many staff have used their personal experiences and problems as a “point of connection” with parents.

- Staff suggestions included having more time with clients, seeing the same client consistently, having on-going training and feedback, more staff, more space, and consistent funding. The staff would also like to see consistent messages about overweight from physicians and other health care providers. (See Appendix H: Staff Focus Group Analysis Report)

Participant Focus Group Analysis Report Summary

As part of the evaluation of the Fit WIC project, focus groups were conducted with Latino and non-Latino groups at two WIC Intervention agencies in Hillsborough County. This report was based on three focus groups with 31 participants conducted in March and April, 2008. Two groups were Latino and one was non-Latino.

The purpose of the participant focus groups was to “assess participant knowledge, perception, barriers, and receptivity to education on overweight and physical activity.” (Fit WIC Evaluation Plan). Data obtained from the focus groups will be used to help WIC staff develop appropriate materials and to find out how participants can be made comfortable in talking to WIC staff and their families about weight and physical activity.
Questions were framed in order to assess participant comfort with their knowledge about overweight in children and adults; availability of food resources; comfort with physical activity and play skill knowledge; comfort with talking to WIC staff about overweight; and confidence to change behavior. (See Appendices of Evaluation Plan for participant focus group guidelines, questions, and protocol.)

Conclusions:

- Latinos seemed to have more confidence in medical opinions on overweight.
- All groups seemed to have general knowledge of what causes overweight, but non-Latinos had a much wider view of where responsibility lies. Latinos cited mothers as responsible for food control, while non-Latinos cited parents, the child, and outside influences, such as lifestyle, television messages, school responsibility, and societal norms.
- Latinos mentioned difficulty adjusting to lack of community, transportation problems, and severe climate which limits outdoor play.
- Latinos did not express a clear idea of how much a child should play and were more likely to mention sedentary activities, perhaps because of the way the question was interpreted. (i.e., play being not limited to physical activity)
- Latinos did not discuss play skills.
- Barriers to curbing overweight included the expense of healthy foods and problems getting children to eat them.
- Latinos expressed more specific needs for new ideas/techniques, such as types of indoor activities, where to go for cheaper programs, and more information (especially in Spanish) about what is out there. They would like informational seminars and discussion groups.
- Non-Latinos expressed comfort with WIC staff, but Latinos seemed less so in that while they were glad to have a place to get advice, they requested specific types of information, such as diet plans, nutrition and activity guidelines, and parenting help.
- Non-Latinos seemed more rule-oriented in controlling food, while Latinos were more apt to express guilt.
- Latinos were either more open about overweight in their own children, or this is, in fact, more of a problem in Latino children.
- Latinos appear to be far less confident when it comes to behavior change. They seem to require more guidance on how to accomplish this in a positive way.

Overall, cultural differences between Latinos and non-Latinos came into play in terms of who is responsible for overweight, understanding play skills, types of activities, family dynamics and the role of motherhood, parenting skills in relation to behavior change, acceptance of authority, difficulties with a perception of lack of community, transportation problems, perceived limitations of the climate, and language barriers. (See Appendix J: Participant Focus Group Analysis Report).

Quantitative and Qualitative Analysis of Study Outcomes

Purpose

The primary purpose of the outcome evaluation was to provide the NH WIC Program with results of the Fit WIC Participant Survey. More specifically, the research aims to:

2. Determine preliminary effectiveness of the Fit WIC Activities Book and Kit among Intervention Agency respondents.
Methodology

The results of this research are based on a survey commissioned and administered by the NH WIC Program. Surveys were administered at five WIC Intervention Agencies, which included: 1) Ammonoosuc Community Health Services; 2) Coos County Family Health Services; 3) Community Action Program Belknap-Merrimack Counties; 4) Southern New Hampshire Services; and 5) Rockingham Community Action. Surveys were administered at three WIC Control Agencies, which included: 1) Avis Goodwin Community Health Center; 2) Ossipee Concerned Citizens; and 3) Southwestern Community Services.

It is important to note the limitations of this evaluation. First, comparisons between respondents from the Intervention Agencies and the Control Agencies are limited in scope to respondents’ most recent visit, or most recent survey completion. Second, only respondents who have visited an agency more than once were analyzed. Intervention Agencies yielded a total of 2,804 surveys, or the first and most recent visits of approximately 1,402 respondents. Control Agencies yielded a total of 1,000 surveys, or the first and most recent visits of approximately 500 respondents. Surveys were collected from October 1, 2007 through March 31, 2009.

The full Fit WIC Impact Report - Quantitative and Qualitative Analysis of Fit WIC Survey can be found on the Fit WIC CD of Project Deliverables. This full report includes: a descriptive narration of substantive findings organized into chapters; the narrative section of the report is followed by a summary and analysis chapter that can be used to quickly identify the most important findings; a graphic illustration of the findings in PowerPoint; additional graphics comparing individual intervention agencies; a detailed cross-tabulation tables with appropriate statistical tests; and finally the respondents’ verbatim response for open-ended questions. See Appendix M of this report for: Fit WIC Impact Report – Graphic Presentation of Individual Intervention Agencies; and Appendix N of this report for: Fit WIC Impact Report – Responses to Open-Ended Questions.

Agency Type

Some characteristics of the Intervention Agency children appear to differ from those of the Control Agency children.

The research suggests that children served by the WIC Intervention Agencies differ systematically from the children served by the WIC Control Agencies. Only differences that are statistically significant at the 95 percent confidence interval are discussed.

Intervention Agency children are more likely to be of Hispanic origin than Control Agency children.

Respondents were asked if their child is of Hispanic origin. In general, the majority of children from both the Intervention and Control Agencies are not of Hispanic origin. However, the data indicate that a slightly higher percentage (12%) of Intervention Agency children are of Hispanic origin than Control Agency children (7%).

From the outset, Intervention Agency respondents were more likely to think that their child was – or was at-risk of becoming – overweight, and less likely to spend time teaching their child physical play skills, than Control Agency respondents.

Respondents were asked if they think their child is, or is at-risk of becoming, overweight. At their first visit, seven percent of Intervention Agency respondents indicated that they thought their child was, or was at-risk of becoming, overweight, compared to only three percent of Control Agency respondents.

Respondents were also asked if, on a typical day, they spend 30-60 minutes teaching their three to four year old child physical play skills. At their first visit, 90 percent of Control Agency respondents said that they do
spend 30-60 minutes teaching their three to four year old child physical play skills on a typical day, compared to 85 percent of Intervention Agency respondents.

These results indicate that, at their first visit, Intervention Agency respondents were more likely to express concerns about their child’s weight, and less likely to report spending time teaching their child physical play skills, than Control Agency respondents.

**BMI Status**

**Children’s BMI status varies by their gender and age.**

As Table 1 shows below, the BMI (Body Mass Index) status of respondents’ children as underweight, healthy weight, overweight or obese was determined using the child’s reported BMI and grouped according to their gender and age.

Table 1.

<table>
<thead>
<tr>
<th></th>
<th>BOYS</th>
<th></th>
<th></th>
<th>GIRLS</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Underweight</td>
<td>Healthy weight</td>
<td>Overweight</td>
<td>Obese</td>
<td>Underweight</td>
<td>Healthy weight</td>
</tr>
<tr>
<td>3 Years</td>
<td>≤ 14.3</td>
<td>14.4 - 17.3</td>
<td>17.4 - 18.1</td>
<td>&gt; 18.2</td>
<td>≤ 13.9</td>
<td>14.0 - 17.1</td>
</tr>
<tr>
<td>4 Years</td>
<td>≤ 13.9</td>
<td>14.0 - 16.9</td>
<td>17.0 - 17.7</td>
<td>≥ 18.0</td>
<td>≤ 13.7</td>
<td>13.8 - 16.7</td>
</tr>
</tbody>
</table>


The BMI status of both Control and Intervention Agency respondents remained relatively stable from their first to their most recent visit.

At their first visit, 64 percent of Intervention Agency respondents’ children were at a healthy weight, 32 percent were overweight (15%) or obese (17%) and three percent were underweight. At their most recent visit, 62 percent of Intervention Agency respondents’ children were at a healthy weight, 34 percent were overweight (15%) or obese (19%) and four percent were underweight. This represents a minor increase in the percentage of underweight children, a slight increase in the percentage of obese children, a minor decrease in the percentage of overweight children and a slight decrease in the percentage of healthy weight children.

At their first visit, approximately two-thirds (67%) of Control Agency respondents’ children were at a healthy weight, 30 percent were overweight (14%) or obese (16%) and three percent were underweight. At their most recent visit, 66 percent of Control Agency respondents’ children were at a healthy weight, 30 percent were overweight (16%) or obese (14%) and four percent were underweight. This represents a slight increase in the percentage of underweight and overweight children, and a slight decrease in the percentage of healthy weight and obese children.

Table 2.

<table>
<thead>
<tr>
<th>BMI Status:</th>
<th>Control Agency</th>
<th>Intervention Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First visit</td>
<td>Most recent</td>
</tr>
<tr>
<td>Underweight</td>
<td>2.54 %</td>
<td>3.78 %</td>
</tr>
<tr>
<td>Healthy weight</td>
<td>67.37</td>
<td>66.22</td>
</tr>
<tr>
<td>Overweight</td>
<td>13.98</td>
<td>15.56</td>
</tr>
<tr>
<td>Obese</td>
<td>16.10</td>
<td>14.44</td>
</tr>
</tbody>
</table>
Relatively few respondents have been told by a healthcare provider that their child is overweight.

There was no change in the percentage of Intervention Agency respondents (7%), or Control Agency respondents (5%), who have been told by a healthcare professional that their child is overweight from their first to most recent visit.

The percentage of Control Agency respondents who think their child is, or is at-risk of becoming, overweight slightly increased.

While the percentage of Intervention Agency respondents who think that their child is, or at-risk of becoming, overweight did not change from their first (7%) to most recent (7%) visit, the percentage of Control Agency respondents who think so made a marginal two-point increase from their first (3%) to most recent (5%) visit.

The percentage of Intervention Agency respondents who spend time teaching their child physical play skills on a typical day significantly increased.

The percentage of Intervention Agency respondents who spend 30 to 60 minutes a day teaching their child physical play skills significantly increased six points from their first (85%) to most recent (91%) visit. In contrast, the percentage of Control Agency respondents who spend 30 to 60 minutes a day teaching their child physical play skills increased by only three points from their first (90%) to most recent (93%) visit.

Approximately three-fourths of both Intervention and Control Agency respondents report that their families have visited a public place in the past week.

The percentage of Intervention Agency respondents who reported that their family visited a public place like parks, playgrounds, playgroups, libraries or museums in their community increased from 75% at their first visit to 77% at their most recent visit, while the percentage of Control Agency respondents marginally decreased from 77% at their first visit to 76% at their most recent visit.

Among both the Intervention and Control Agencies, the time respondents’ children spent watching television decreased from their first to their most recent visit.

The percentage of Intervention Agency children who spend less than one hour watching television/videos increased by three points from their first (24%) to most recent (27%) visit, while the percentage who spend more than three hours decreased by four points from their first (17%) to most recent (13%) visit. Among Control Agency children, the percentage who spend less than one hour sitting and watching television/videos increased by five points from the first (21%) to most recent (26%) visit, while the percentage who spend more than three hours decreased by three points from the first (19%) to most recent (16%) visit.

Fit WIC Activities Book and Kit

The more often respondents use the Fit WIC Activities Book and Kit the more likely they are to do the activities recommended in the book.

Among Intervention Agency respondents, the results indicate that more than one-half (61%) of respondents used the book and kit one to two (39%) or three or more (22%) times in the past two weeks, while an additional 21 percent have used the book and kit, but not in the past two weeks. Eighteen percent of Intervention Agency respondents reported that they have never used the book and kit as of their most recent visit.
Use of Fit WIC Activities Book and Kit:

At their last visit, Intervention Agency respondents were asked whether, in the past two weeks, they: 1) did any of the Fit WIC activities; 2) played one or more of the games described in the book; 3) made one or more of the homemade play objects in the book; 4) did at least one exploring or outing activity described in the book; 5) did one or more of the indoor or outdoor helping activities; or 6) used one or more of the toys from the Fit WIC kit. Overall, the results indicate that 57 percent of respondents did the Fit WIC activities, 33 percent used toys from the kit, 29 percent played games described in the book, 29 percent did indoor or outdoor helping activities, 16 percent did exploring or outing activities and 15 percent made homemade play objects from the book.

When compared by usage of the book and kit in the past two weeks, the results indicate that respondents who used the book and kit three or more times were more likely to do the activities (98%), use the toys (69%), do the helping activities (62%), play the games (57%), do the exploring or outing activities (34%) and make the homemade play objects (34%) than those who used it once or twice (91%, 45%, 40%, 44%, 22% and 19%, respectively).

Overall, over one-third of respondents have used Quiet Time suggestions from the Fit WIC Activities Book.

Intervention Agency respondents were asked if they have used any of the Quiet Time suggestions from the Fit WIC Activity Book. At their most recent visit, more than one-third (37%) said that they did use the Quiet Time suggestions from the Fit WIC Activity Book.

Among respondents who have used the Fit WIC Activities Book and Kit three or more times in the past two weeks, 58 percent have used the Quiet Time suggestions from the Fit WIC Activities Book. Among respondents who have used the book and kit one or two times in the past two weeks, 45 percent have used the Quiet Time suggestions. Finally, among respondents who have used the Fit WIC Activities Book and Kit, but not in the past two weeks, 33 percent have used the Quiet Time suggestions.

These results suggest that the more a respondent uses the Fit WIC Activities Book and Kit, the more likely they are to have used the Quiet Time suggestions.
Did you use any of the Quiet Time suggestions from the Fit WIC Activities Book?

The more often Fit WIC Intervention Agency respondent children use the Fit WIC Activities Book and Kit, the more likely they are to have participated in a Fit WIC activity playgroup since their last visit.

Intervention Agency respondents were asked if their child has participated in a Fit WIC activity playgroup since their last visit. At their most recent visit, roughly one-fourth (24%) said that their child has participated in a Fit WIC activity playgroup since their last visit.

Thirty-one percent of respondents who have used the Fit WIC Activities Book and Kit three or more times, and 25 percent of respondents who have used the book and kit one or two times, in the past two weeks reported that their child participated in a Fit WIC activity playgroup since their last visit. Fewer respondents who have used the book and kit, but not in the past two weeks (17%) or have never used the Kit (19%) reported that their child participated in a Fit WIC activity playgroup since their last visit.

These results suggest that the more a respondent uses the Fit WIC Activities Book and Kit, the more likely they are to report that their child has participated in a Fit WIC activity playgroup since their last visit.

Did your child participate in a Fit WIC activity playgroup since your last visit?
While the majority of respondents find that participating in the Fit WIC program helps them to learn about the importance of physical activity in keeping their child healthy, respondents are more likely to find it helpful if they have used the Activities Book and Kit.

Intervention Agency respondents were asked if participating in the Fit WIC program helped them learn about the importance of physical activity in keeping their child healthy. Overall, 43 percent of respondents said at their most recent visit that their participation in the program helped them learn about the importance of physical activity in keeping their child healthy a lot (9%) or quite a bit (34%), while 49 percent said that it helped them some and significantly fewer said that it did not help at all (8%).

The large majority of respondents who have used the Fit WIC Activities Book and Kit three or more times in the past two weeks (75%) reported that participating in the program helped them learn about the importance of physical activity in keeping their child healthy a lot (17%) or quite a bit (48%), while 31 percent said that it helped some and very few said that it did not help at all (4%). Among respondents who have used the Fit WIC Activities Book and Kit one or two times in the past two weeks, 43 percent said that participating in the program helped them a lot (7%) or quite a bit (36%), while an additional 53 percent said that it helped some and very few said that it did not help at all (4%). Among respondents who have used the book and kit, but not in the past two weeks, 25 percent said that it helped them a lot (6%) or quite a bit (19%), 62 percent said that it helped them some (62%) and 13 percent said that it did not help at all. Finally, among respondents who have never used the Fit WIC Activities Book and Kit, 17 percent said that participating in the program helped them a lot (6%) or quite a bit (11%), while 41 percent said that it helped some and 41 percent said that it did not help at all.

These results suggest that those who use the Fit Activities Book and Kit are more likely to find participation in Fit WIC helpful than those who rarely or never use the book and kit.

How much did participating in the Fit WIC program help you learn about the importance of physical activity in keeping your child healthy?
Among the respondents who commented on the Fit WIC Activities Book and Kit, most implied having used the book and kit and remarked something positive about it.

Intervention Agency respondents were asked to comment on what they like or dislike about the Fit WIC Activities Book and Kit. Among the one-half of respondents who provided a response, the vast majority (94%) expressed that they like the information and ideas (33%) like the activities (21%), like the book and kit in general (18%) or described a positive experience using the book and kit, while very few said something negative about the book and kit (2%) or remarked that they did not use the book and kit (2%).

What do you like or dislike about the Fit WIC Activities Book and Kit?

Compared by use of the Fit WIC Activities Book and Kit:
Among the respondents who shared something about their experience with the Fit WIC program, the majority said something positive.

Intervention Agency respondents were asked to provide any ideas that they would like to share about their experience with the Fit WIC program. Fourteen percent of respondents provided a response. Among these respondents, about one-third (35%) commented something generally positive, while others mentioned that they like the items (15%), like the activities (10%), had a positive experience (10%) or like the ideas and information (8%). Ten percent of respondents made suggestions or ideas for improvement.

Please provide us with any ideas you would like to share about your experience with the Fit WIC program.

Compared by use of the Fit WIC Activities Book and Kit:

Among Intervention Agencies most recent visit

<table>
<thead>
<tr>
<th>Suggestion/Improvement</th>
<th>Used book/kit 3+ times in past 2 weeks</th>
<th>Used book/kit 1-2 times in past 2 weeks</th>
<th>Used book/kit more than 2 weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generally positive comment</td>
<td>41%</td>
<td>83%</td>
<td>28%</td>
</tr>
<tr>
<td>Like the ideas / info</td>
<td>7%</td>
<td>8%</td>
<td>10%</td>
</tr>
<tr>
<td>Like the activities</td>
<td>17%</td>
<td>12%</td>
<td>7%</td>
</tr>
<tr>
<td>Like the items</td>
<td>16%</td>
<td>16%</td>
<td>14%</td>
</tr>
<tr>
<td>Positive experience</td>
<td>10%</td>
<td>8%</td>
<td>10%</td>
</tr>
<tr>
<td>Suggestions / Improvements</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Other</td>
<td>8%</td>
<td>12%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Percent
Summary Analysis

From the outset, Intervention Agency children may be more at-risk than Control Agency children.

At their first visit, the results indicate that Intervention Agency and Control Agency respondents’ children were relatively similar in terms of their BMI status, likelihood to be told by a healthcare provider that they are overweight, being active for at least an hour of active play a day, likelihood to visit public places and the time they spend watching television. However, it is important to note that there are three significant differences between Intervention Agency and Control Agency respondents. First, Intervention Agency children are slightly more likely to be of Hispanic origin than Control Agency children. Second, Intervention Agency respondents were more likely to think their child is, or is at-risk of becoming, overweight than Control Agency respondents at their first visit. Finally, Intervention Agency respondents are less likely than Control Agency respondents to report at their first visit that they spend 30 to 60 minutes teaching their child physical play skills on a typical day. These results suggest the possibility that children served by an Intervention Agency may have background characteristics that create challenges for serving them as effectively as children served by a Control Agency.

Significant differences between Intervention Agencies and Control Agencies:

From their first to their most recent visit, Intervention Agency respondents are significantly more likely to report that they typically spend time teaching their child physical play skills. In addition, it appears that – among both Intervention and Control Agencies – the time children typically spent watching television decreased.

Results from respondents’ first visit were compared to results from their most recent visit. The percentage of Intervention Agency respondents who reported spending time teaching their child physical play skills on a typical day significantly increased six points from 85 percent at their first visit to 91 percent at their most recent visit. In addition, the percentage of children who typically spend more than three hours watching television decreased among both Intervention Agency (17% to 13%) and Control Agency (19% to 16%) respondents.
The percentage of Intervention Agency respondents who have been told by a healthcare professional that their child is overweight (7%), and the percentage who think their child is, or is at-risk of becoming, overweight (7%), did not change from their first to their most recent visit. In addition, the BMI status of respondents from both agencies remained relatively stable from their first to their most recent visit.

Key measures, by agency type and visit:

<table>
<thead>
<tr>
<th>Measure</th>
<th>Control Agencies</th>
<th>Intervention Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEEN TOLD BY HEALTH PRO. CHILD IS OVERWEIGHT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First visit</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Most recent visit</td>
<td>97</td>
<td>77</td>
</tr>
<tr>
<td>Diff.</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>THINK CHILD IS, OR AT-RISK OF BEING, OVERWEIGHT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First visit</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Most recent visit</td>
<td>97</td>
<td>77</td>
</tr>
<tr>
<td>Diff.</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>TEACH CHILD PHYSICAL PLAY SKILLS DAILY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First visit</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Most recent visit</td>
<td>93</td>
<td>85</td>
</tr>
<tr>
<td>Diff.</td>
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<td>2</td>
</tr>
<tr>
<td>FAMILY VISITED PUBLIC PLACES IN PAST WEEK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First visit</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Most recent visit</td>
<td>77</td>
<td>75</td>
</tr>
<tr>
<td>Diff.</td>
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<td>2</td>
</tr>
<tr>
<td>HOURS CHILD SPENDS WATCHING TV</td>
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<td></td>
</tr>
<tr>
<td>Less than one hour</td>
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<tr>
<td>First visit</td>
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</tr>
<tr>
<td>Most recent visit</td>
<td>76</td>
<td>86</td>
</tr>
<tr>
<td>Diff.</td>
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<td>1 – 2 hours</td>
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<tr>
<td>First visit</td>
<td>95</td>
<td>94</td>
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<tr>
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<td>95</td>
</tr>
<tr>
<td>Diff.</td>
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<td>+1</td>
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<tr>
<td>More than 3 hours</td>
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<td></td>
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<tr>
<td>First visit</td>
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<td>76</td>
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<tr>
<td>Most recent visit</td>
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<td>80</td>
</tr>
<tr>
<td>Diff.</td>
<td></td>
<td>-3</td>
</tr>
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</table>

Among all respondents | compared by agency type and visit

The more often respondents reported using the Fit WIC Activities Book and Kit, the more likely they are to have engaged in positive behaviors and benefited from the program.

Among Intervention Agency respondents, the results indicate that – as of their most recent visit – more than one-half (61%) of respondents used the Fit WIC Activities Book and Kit one to two (39%) or three or more (22%) times in the past two weeks, while an additional 21% have used the book and kit, but not in the past two weeks and only 18% reported that they have never used the book and kit. The more often respondents used the book and kit, the more likely they are to have done the Fit WIC activities, played one or more of the games, made the homemade play objects, done the exploring or outing activities, done the helping activities and used the toys from the kit with their child. Respondents who have used the book and kit regularly are also more likely to have used the Quiet Time suggestions and report that their child had participated in a Fit WIC activity playgroup since their last visit. When asked how participating helped to learn about the importance of physical activity in keeping their child healthy, almost two-thirds of respondents who used the book and kit three or more times (65%) and almost one-half of respondents who used the book and kit one to two times (43%) said quite a bit or a lot, compared to only 25% of respondents who used the book and kit over two weeks ago and only 17% of respondents who have never used the book and kit.

These results suggest that the more often respondents reported using the Fit WIC Activities Book and Kit, the more likely it is that they engaged in positive behaviors and benefited from the program. Also, the vast majority of respondents who commented on the book and kit (94%) said something positive about using the book and kit.
Data Analysis

The results presented in the cross-tabulation tables include univariate and bivariate analyses of the data. A frequency distribution for each individual item, or descriptive statistic, is shown in the “total” column. Frequency distributions for each item included on the questionnaire are shown in the tables. In all cases, cross-tabulation results are also shown. This type of bivariate analysis examines differences between subgroups of the overall population. In cases where cross-tabulation results are presented, a chi-square test, an independent t-test for means, or a Z-test for independent percentages is shown. In most cases, a chi-square test is used where Controls are made for categorical and ordinal variables. A t-test (or means test) is used in cases where Controls are made for measurement variables. A Z-test is used in cases where Controls are made between independent population percentages (i.e., multiple response options).

The purpose of these statistical tests is to determine whether or not the observed difference between subgroups in the sample is due to sampling error or whether it is due to a real difference in the population. When the results are statistically significant, it strongly suggests that the observed difference between sub-groups is due to a real difference in the population, and not due to sampling error.

A chi-square significance level of .05 indicates significance at the 95% level. It is 95% likely that the results are due to a real difference between Control subgroups. A chi-square significance level of .01 indicates significance at the 99 percent level. When a t-test or a Z-test is shown, lower- and upper-case letters indicate significance at the 90 and 95 percent levels, respectively.
Lessons Learned

Projects of this magnitude always provide ample opportunity for learning and this project is no exception. There were many lessons learned, starting at the beginning with a revised evaluation plan and ending with lessons learned from the final data analysis.

1. Need to provide for other options for playgroups if clinic areas/offices do not allow adequate space for playgroups. This was a challenge for some agencies.
2. Investigate further the differences between parents who attend playgroups and those who did not. Our student intern working in Manchester conducted a small study to investigate this and found that obese parents were less likely to attend playgroups with their children. This lesson learned leads to more questions about why parents/caregivers may or may not engage in activities such as playgroups. (See Appendix N: Fit WIC: Addressing Overweight Among Preschoolers)
3. Work with WIC staff to more effectively address issues related to overweight and obesity, by increasing and strengthening skills related to counseling. The use of patient centered education techniques (PCE) may be helpful in strengthening skills.
4. Strengthen referrals to and from health care providers as a best practice. Referrals increase the likelihood that families will receive the best variety of services to meet their needs.
5. Increase networking efforts to get the Fit WIC message out to community agencies and organizations, building on the Social Cognitive Theory. When agencies and organizations understand the Fit WIC message (and the importance of the message), they are more likely to support and reinforce that message. Families, then, are more likely to hear the same message from other agencies.
6. Use focus group interviews with both staff and participants to learn critical information about knowledge, thoughts, feelings and perceptions.
7. Use focus group findings to address parents’ perceptions about overweight and obesity.
8. Ensure that the intervention implementation is consistent with the evaluation plan at all of the Intervention Agencies.
9. Institute bi-monthly conference calls to help facilitate closer monitoring and assistance from the State WIC office to Intervention Agencies.
10. Collaborate more effectively between Fit WIC and the Head Start I Am Moving, I Am Learning initiative. This new initiative was introduced to NH Head Start agencies during the implementation of Fit WIC in NH.
11. Strengthen validity of the survey questions when designing future surveys.
12. Use scan-ready surveys to lessen the burden of data entry.
13. Collect all of the data points necessary for analysis ahead of time. This will limit the burden of going back into the database to obtain missing data.
14. Order books and supplies at the beginning of the project, in order to maximize prices available through bulk purchases, rather than smaller orders through the time of the project.

As the project progressed, the project team made appropriate adjustments to strengthen the project.
Study Limitations

As with any study, there are always limitations that are not planned for initially, but become readily apparent after the study begins. When considering this study and its contribution to the body of literature about obesity prevention in preschool children, some of these limitations can be seen as fruitful avenues for future research. Some of the limitations of this study include:

1. Inconsistencies in project implementation due to differing staff abilities and turnover;
2. Limited number of play groups held in some sites due to space and logistical issues;
3. Delay in translating and printing the Fit WIC Activities Book in Spanish;
4. Limited literacy activities included in the implementation of Fit WIC at some agencies;
5. The implicit bias of self-reported surveys;
6. The implementation of the Head Start I am Moving, I am Learning project in Intervention Agency client areas;
7. The study subjects were not randomly selected, nor were the Control and Intervention Agencies randomly selected;
8. Outcomes from respondents from the Intervention and the Control Agencies are limited in scope to respondents’ most recent visit, or most recent survey completed. Surveys among the most recent visit or survey completion of Intervention Agency respondents yielded a total of 2,804 surveys or the first and most recent visits of approximately 1,402 respondents. Control Agencies yielded a total of 1,000 surveys, or the first and most recent visits of approximately 500 respondents; and
9. The results of this study cannot be generalized beyond the study sample to a larger population. In spite of several factors that made implementation, at times, challenging we feel Fit WIC is a model worth replicating for further study.
Sustainability and Transferability

Sustainability

As described in earlier sections of this report, implementation of the NH Fit WIC project at local WIC agencies requires an intense effort. The participating agencies need motivated staff willing to invest the time and energy to be trained in and practice this new approach to the promotion of physical activity for pre-school children and their parents/caregivers. Agency management must be committed as well and willing to provide the resources needed to initiate and maintain Fit WIC. At the state level, leadership is essential to obtain funding for this obesity prevention intervention and assist with and support the implementation of Fit WIC. Dovetailing Fit WIC activities into the regular clinic routine can justify the efforts with regard to participant satisfaction and potential for behavior change.

In addition to commitment and effort, sustainability also includes financial support. During the last three years, this project was successful in receiving funding from several sources including private foundations, the CDC Obesity Grant and a community Healthy Eating, Active Living (HEAL) grant. The total grant funding received to support/supplement the Fit WIC project was $27,137.56. This funding supported both Intervention and Control Agency activities. Intervention Agencies received funding to support the purchase of supplies and materials to promote physical activity. Control Agencies received funding to support the promotion of nutrition education. This funding for Control Agencies was seen as an incentive for participation in the Fit WIC project. A grant proposal was submitted by the NH Department of Health and Humana Services to the WellPoint Foundation in December 2009 to continue to fund the Fit WIC project in counties identified to have the highest rates of childhood obesity.

Project Transferability

The Fit WIC interventions can be added to the traditional nutrition interventions available at WIC agencies. Many of the training resources developed at the State level can be adapted for use in other states. The Fit WIC Activities Book and Kit in English and Spanish have been designed to be used in other states with minor modifications and are available as PDF documents as part of this report. Materials will be posted to the NH Department of Health and Human Services, Nutrition and Health Promotion Section, and the USDA Food and Nutrition Service WIC Works.

Letters will be sent to all State WIC directors describing the project findings and related websites. The NH WIC Program has already begun sharing highlights of our results at WIC-related local, state and national venues, including the NH Local WIC Directors meeting, NH DHHS Public Health seminar, and other NH events.

A web-based Fit WIC resource kit will be available on both the NH WIC and national WIC Works Resource web sites. Other state WIC Programs can adapt New Hampshire’s implementation strategies and training materials to match their programs’ needs. Programs and agencies serving similar populations (such as Head Start, Supplemental Nutrition Assistance Program [SNAP], Cooperative Extension and school-based preschool nutrition programs) can utilize the Fit WIC approach in their own health activities.

The transferability of the evaluation design may be of special interest to other states. We believe New Hampshire’s experience conducting an outcome/impact evaluation will be a helpful resource to other state programs wishing to evaluate aspects of their educational programs, specifically: information on the evaluation design, parameters measured, tools developed and the process of recruiting, selecting and retaining control and Intervention Agencies and participants. In addition, the process evaluation tools can be adapted for use in program evaluation activities both at the state and national levels.

Recommendations for Transitioning to Other States

• Develop a fully generic Fit WIC Activities Book and kit for use by states.
• Develop implementation models that can be adapted by states.
• Develop evaluation strategies for use by states.
• Make partner and library collaborative strategies available for use by states.
Discussion

Physical activity can significantly improve motor skills but has not been proven to reduce body mass index in young children. In one robust trial the physical activity intervention did not reduce body mass index. This intervention was considered intense, so more would not necessarily have been better. As with so many other health consequences of environmental and social living conditions, simple or single health promotion interventions are not effective on their own. In fact, we should not be surprised that a health-based intervention delivered to preschool-aged children does not mitigate the pervasive influences of the food industry, globalized business, advertising, TV/computer game domination of leisure time and the overwhelming dependence on cars. The most positive outcome is that young children are generally active and encouraging physical activity can only be a good thing, even if their body mass index does not change.

Implications for Public Policy

The promotion of physical activity for children enrolled in WIC has public health implications due to their large number and because the eligibility period of WIC for children and infants includes the period of adiposity rebound, which is a critical time to deal issues on incipient obesity which could be present in young children. Recent research has shown that the age when adiposity rebound occurs may be a critical period in childhood for the development of obesity as an adult. An early adiposity rebound, occurring before ages 4 to 6, is associated with obesity in adulthood. In research conducted by Amhad, et al, adiposity rebound occurred at around age 3. BMI reached the lowest point at 32 months (2 years 8 months) and then began to increase. However, studies have yet to determine whether the higher BMI in childhood is truly adipose tissue versus lean body mass or bone. Additional research is needed to further understand the impact of early adiposity rebound on adult obesity.

Research also suggests that reducing childhood obesity requires a dual strategy of a healthful diet and increased physical activity. Diet by itself is unlikely to bring about the desired result. Increasing physical activity not only provides the potential for getting at the root causes of childhood obesity but is a positive message to parents – “Be more active,” rather than “Eat less food,” or “Eat less of these foods.”

Home, child care, school, and community environments can influence children’s behaviors related to food intake and physical activity.

Within the home: Parent-child interactions and the home environment can affect the behaviors of children and youth related to calorie intake and physical activity. Parents are role models for their children who are likely to develop habits similar to their parents.

Within child care: Almost 80% of children aged 5 years and younger with working mothers are in child care for 40 hours a week on average. Child care providers are sharing responsibility with parents for children during important developmental years. Child care can be a setting in which healthy eating and physical activity habits are developed.

Within schools: Because the majority of young people aged 5–17 years are enrolled in schools and because of the amount of time that children spend at school each day, schools provide an ideal setting for teaching children and teens to adopt healthy eating and physical activity behaviors. According to the Institute of Medicine (IOM), schools and school districts are, increasingly, implementing innovative programs that focus on improving the nutrition and increasing physical activity of students.

Within the community: The built environment within communities influences access to physical activity opportunities and access to affordable and healthy foods. For example, a lack of sidewalks, safe bike paths, and parks in neighborhoods can discourage children from walking or biking to school as well as from participating in physical activity. Additionally, lack of access to affordable, healthy food choices in neighborhood food markets can be a barrier to purchasing healthy foods.
Recommendations for WIC Professionals

RQNS is an evolving process of continuous program improvement for better customer service at the Federal, State, and local levels of WIC. This major initiative refocuses attention on nutrition services as one of the fundamental benefits of WIC participation. WIC staffs excel in many aspects of nutrition services, but more can be done in order to deliver quality nutrition services that effectively have an impact on participant behavior change. Included in quality nutrition services is the promotion of physical activity for WIC children, especially those between the ages of three and five.

RQNS activities enhance and strengthen the effectiveness of WIC nutrition services in helping participants to achieve and maintain optimal nutritional status. WIC can have a positive impact on the health of program participants by providing participants with what they need, want and can use to meet the public health challenges of today. The process of RQNS can help WIC maintain its position as the premier public health nutrition program.

As mentioned earlier in this report USDA Food and Nutrition Service (FNS) launched its WIC Childhood Obesity Prevention Projects to identify and test ways to use the WIC Program to better address childhood overweight. Fit WIC, a collection of social-environmental strategies to promote healthy weight among children enrolled in WIC, was designed as an integral component to help the nation’s premier early childhood food and nutrition program work more effectively to reduce and prevent unhealthy weight among WIC children participants.

Our NH Fit-N-Fun Project revealed that the more often respondents used the Fit WIC Activities Book and Kit, the more likely they were to have done the book’s activities, played one or more of the games, made the homemade play objects, done the exploring or outing activities, done the helping activities and used the toys from the kit with their child. Results from the NH Fit-N-Fun Project show it to be successful at reaching families with preschoolers and helping parents understand the important role of physical activity and play for young children in preventing childhood overweight.
ENDNOTES

8. Ibid.
13. Ibid.
30. Ibid.
31. Ibid.
40. Ibid.
49. Ibid.
52. RKM Research and Communication, Inc. 1039 Islington Street, Portsmouth, NH 03801.
55. Ibid.
57. Ibid.
59. Ibid.
60. Ibid.
61. Ibid.
Appendices

A. Site Visit Protocol
B. Site Visit Summary
C. Fit WIC Logic Model
D. Fit WIC Survey – English
E. Fit WIC Survey – Spanish
F. Program Evaluation Form
G. Fit WIC Staff Focus Group Protocol
H. Fit WIC Staff Focus Group Analysis Report
I. Fit WIC Participant Focus Group Protocol
J. Fit WIC Participant Focus Group Analysis Report
K. Participant Survey Summary
L. Participant Survey Data Entry Screen Shots
M. Fit WIC Impact Report – Graphic Presentation of Individual Intervention Agencies
N. Fit WIC Impact Report – Responses to Open-Ended Questions
O. Fit WIC: Addressing Overweight Among Preschoolers
SITE VISIT PROTOCOL

As part of a comprehensive review of current Fit WIC implementation strategies at each the four participating Fit WIC agencies, one site visit was made to the agencies in April, 2007. The site visit team consisted of two representatives from the Community Health Institute (CHI) Evaluation Planning Team. During the visit the team met with the WIC Director, Nutrition Coordinator and when possible one or two of the WIC staff. In addition, the evaluation planning team met the staff during regular operating hours.

Goals for the First Site Visit: (Purpose and Policy)

After the first site visit the evaluation planning team was able to describe:
• the agency and clinics and placement of Fit WIC in agency context
• the implementation strategy of Fit WIC
• the target population for the agency
• data gathering and computer systems in use at the agency and clinic sites

Overall Agency Description: (Professionals)

• What is the history of the WIC agency in the community?
  o For example, how long has it been in this community? How long has it been at its current location? etc…
• What is the agencies mission?
• What is the Fit WIC mission?
• What services or programs are offered by the agency?
  o What other WIC services or programs are offered by your agency for the same Fit WIC target population?
  o Can you describe your opportunities and process for networking with other programs within the agency? How about outside of the agency?
• What are the funding needs for Fit WIC?
  o Are you receiving funding for Fit WIC from multiple sources?
• How would you describe the Fit WIC staff at your agency?
  o Background, work experience, etc…
  o What training have they received specific to Fit WIC? Were there specific materials used for training?
  o What are the training needs of your staff? (For example, do they need training in understanding of obesity and overweight? Are the staff comfortable in talking about obesity with participants?)
  o Do they have sufficient time to devote to Fit WIC?
• How would you describe your target population for Fit WIC?
  o How long (on average and how many generations back) have clients been coming to the WIC program? (a participant, family, and community picture of use of the services)
  o How would you describe their family structure and living situation? (#married/unmarried, income, education, # kids, living conditions, access to gym/exercise, neighborhood safe, etc.)
  o How do they compare to the broader service area? (Service area income, jobs, etc.)

Planning Stage of Fit WIC Program: (Community Partnerships)

• What is the history of WIC prevention efforts in this community?
What organizations are you currently working with? What outside organizations would you like to work with?

Describe the physical activity options in the community (i.e., NH Walks) and schools (i.e. PE class requirements)

Are there athletic facilities or gyms in the community? Are they open to the public or private/membership driven?

Do you think your clients have access to transportation to community and physical activity opportunities?

Do you think that your community is safe (i.e., for walking during the day – how about during the night? And what about in the neighborhoods where your clients might live?)

How does your agency network and share information and collaborate with other organizations in the community in an on-going way (monthly meetings of executive directors? Community collaborative? Sustainability of partnerships – process?)

How engaged is the community in Fit WIC? What is the level of community “buy-in” for the program?

**Implementation Stage of Fit WIC Program: (Patterns)**

- Please describe the Fit WIC intervention as it is implemented in your agency.
- What are the goals and objectives for Fit WIC? (start goal, end goal) - What are the desired impact/outcomes you hope to see as a result of Fit WIC? Over what time period to you hope to see these occur?
  - What is the number of sessions for participants (adults, children)?
  - Describe the Fit WIC setting and structure (staff involved, timeframe, etc.).
  - What is the process for distributing physical activity kits?
  - How are Fit-N-Fun Playgroups structured?
- When did you begin implementing Fit WIC?
- Did you make any adaptations of the Fit WIC program to fit your particular setting?
- Have you made any changes in program implementation since you started Fit WIC?
- What are the criteria for participating in Fit WIC? (Is it offered throughout the service area, is there variation by clinic site?)
- What are the participant recruitment procedures?
  - Do participants have an opportunity to provide input into the program? How is this input used? (Are you collecting any outcome measures of satisfaction or perception change?)
- What is your assessment of what is working well and challenges so far?
  - Are there staff you would like to add? Are current staff being used efficiently?
  - Are there staff that we should talk to specifically?

**Evaluation:**

- Describe any evaluation activities you are currently using.
  - For example, process evaluation; implementation monitoring, including fidelity to original intervention; tracking participation; client-specific information and outcomes, data collection, analysis, and reporting.
- What tools are being used for this evaluation?
  - For example, paper pencil forms, electronic database, meetings, reports, etc.
- What is the reporting protocol for State/Feds?
  - What information are you required to report to whom? How is this done?

**Materials to Be Collected On Site:**

- All tools being used for data collection and evaluation
- Written protocols for implementation
- Promotional materials, descriptions of program
- Training materials
- Contact list of staff
Appendix B: Site Visit Summary
SITE VISIT SUMMARY

The site visit team met with the following sites: Coos County Family Health Services, April 9, 2007; Ammonoosuc Community Health Services, April 10, 2007; Southern New Hampshire Services, Inc., April 25, 2007 and Community Action Program Belknap-Merrimack Counties, April 26, 2007. Below is the summary from all four site visits.

Overall Agency Description:

• What is the history of this WIC agency in the community?
  o Was established in 1980. The agency has been at its present location for 19 years. Shares the location with several other agencies.
  o Started out with the Tri-County CAP Program. In 1986 joined Ammonoosuc Community Health Services.
  o The WIC Program has always been with Southern NH Services. They have multiple sites. The agency was established in the early 1980’s. It’s been in the current Manchester location for 6-7 years. They purchased the building. Site in Nashua is a newer site. They have 8 sites for the clinics in the Hillsborough County.
  o This WIC Program is one of the first programs in the state. It was established under CAP back in the 1970’s. It’s been in the current Concord location for roughly 15 years. There are 10 clinic sites around the Belknap/Merrimack Counties and Southeastern Grafton County. On July 1st, this site will be taking over the Lebanon area covering the majority of the Grafton County. This WIC Program covers the largest area in NH of all WIC agencies.

• What is the agency’s mission?
  o Coos County Family Health Services is a community-based organization providing innovative, personalized, comprehensive health care and social services of the highest quality to everyone, regardless of economic status.
  o At Ammonoosuc Community Health Services their mission is to offer a stable network of affordable primary health care services and information to individuals throughout our communities.
  o The mission is to provide activities designed to assist low-income participants including the elderly poor, to secure and retain meaningful employment, attain an adequate education, and make better use of available income; to ameliorate the causes of poverty within the community; to meet urgent and immediate individual and family needs; including health, nutrition, housing and employment-related assistance; and to address the problems and barriers which block the achievement of self-sufficiency.
  o To provide services to people in need within the state and in particular the Belknap and Merrimack Counties.

• Does Fit WIC work into your agency’s mission?
  o Yes, works very well.

• What is the Fit WIC mission?
  o Encourage physical fitness and activity. This dovetails well with their primary healthcare setting.
  o Physical activity needs to be integrated into everyday life. This works well with the overall mission of the agency. This program makes the agency look at Community programs.
  o “It just fits in with what we do” and provides a way to keep people engaged and interested in what they do.
• What other WIC services or programs are offered by your agency for the same, Fit WIC target population?
  o There are no other programs specifically for 3-4 year olds. Within the agency they do the Live Fit NH program and the farmers’ market nutrition program.
  o Partners for Health and the home visiting program.
  o The agency is participating in Live Fit NH.
  o Multivitamin distribution program.
  o Commodity Supplemental Food Program (CSFP), Step 4 childcare program, Head Start, Fuel assistance, etc. There are a total of 80 programs offered through the agency.
  o This site offers nutrition education and counseling programs as well as dental care.

• Can you describe your opportunities and process for networking with other programs within the agency? How about outside of the agency?
  o They work with Weeks Medical Center. Increasingly, doctors are more willing to say a child is overweight, than in the past.
  o They also participate in local health fairs and make referrals to other programs and agencies in the area.
  o They meet with other agencies in the area at the Caregivers meeting in Littleton on a monthly basis. The also have a Social Services networking meeting.
  o A lot of resources are put into networking within the agency across programs and with a broad range of programs outside of the agency.
  o They plan to work with the Concord Recreation Department more and have the city include information regarding Fit WIC in their activities brochure. They also want to work with Head Start. Their main concern is that they cannot “go further” with Fit WIC outside the WIC Program until they have funding for another staff person.

• What are the funding needs for Fit WIC?
  o The state provides the materials. So, no funding needs in terms of the materials.
  o Funding is needed for staffing.
  o The goal is to receive enough funding to hire a full-time Fit WIC staff member.

• Are you receiving funding for Fit WIC from multiple sources?
  o All sites replied “no”.
  o They may apply for more funding besides what the state offers them at some point in the future.
  o They are not receiving any funding at this time to implement Fit WIC. They plan to hire someone in the near future to do Fit WIC activities, so they need funding for that position.

• How would you describe the Fit WIC staff at your agency?
  o They have an Intake person, 2 Breastfeeding Peer Counselors – one travels (Certified Lactation Counselor) and one is only in Colebrook, a Health Tech (LPN), a Nutritionist and a Voucher clerk. The Voucher person has been with the agency for 20 years. The Peer Counselors have been at the agency for 10 years and 8 years. Director has been at the agency for 13 years. Intake staff person has been at the agency for 4 years.
  o They have an Intake person, a Breastfeeding Peer Counselor, a Health Tech (formerly a school nurse), a Nutritionist and a Voucher person (formerly the health tech at previous site).
  o Two staff were former WIC recipients.
  o They have nutritionists who do the certification. At that time, the nutritionist will offer the client Fit WIC. If client is interested, the nutritionist will counsel them on the program. Fit WIC activities are scheduled for 2nd nutrition education contact days. The Health Tech usually is the one to organize the activity, however, all staff get involved.
• **What training have they received specific to Fit WIC? Were there specific materials used for training?**
  
  o Director went to the one-day state training in March 2006. She received the activities kits and the manual for implementation.
  o Nutritionist has been trained and one other staff member.
  o Nutritionist participated in the training last year with the state. They plan to hire someone, preferably bilingual with physical fitness background or training to do the majority of the Fit WIC Program including the recruitment. Would like that person to do 90% of the activity planning for the sites. The Nutritionist Coordinator will oversee this position. Other staff from the agency will provide voucher, health tech and nutrition services. This full-time position will rotate among all of the sites and will facilitate the playgroups and will relieve the burden on the current staff.
  o All staff received training last year from the state. They received the Fit WIC Activities Book and Kit for implementation.

• **Was training adequate for the needs of your staff?**
  
  o Yes.
  o Yes, the in-service last year was very helpful.
  o Have not thought about this yet. The state is training the staff on June 5, 2007.

• **Do you want more training?**
  
  o Doesn’t know. If it is any training, than yes, wants more training on the computer program StarLINC.
  o Director thinks that training is always good, especially on obesity. She recommends the state have trainings twice a year for new staff. This training can even be done with a training video if the state is unable to do it twice a year.

• **Do they have sufficient time to devote to Fit WIC?**
  
  o No, not really. The agency is small and it takes the staff a lot of time to travel to different clinics. Would be great to have extra staff to work on Fit WIC and be a floater person.
  o The particular challenge is travel time to clinics.
  o No, not at all. They are short on time and the space is very limited.
  o No, that is why they were waiting to do this program until they had enough staff people to do the work. Currently, they are 10% over their caseload. They are concerned with scheduling the activities, flagging Fit WIC participants and getting their target percentage of the population enrolled. Because of the heavy volume of participants, it will be important for them to be well organized with this.
  o No, the staff has limited time for this program. Susan explains that is why they are hiring someone for Fit WIC.

• **How would you describe your target population for Fit WIC?**
  
  o As the demographics verify, some people are on WIC for a short amount of time, while a parent is unemployed, maybe only a few months. Then there are families that are on WIC for the long term.
  o They are having a hard time figuring out how many children will be enrolling in the program. They have about 1,500 in that age group per month.

• **Is the Fit WIC population different from the WIC population?**
  
  o No apparent difference.
  o No, they have a good mix of people using the program.
• About the same. They may have a higher non-English speaking population in the cities.
  o No, all children ages 3-4 are invited to participate in Fit WIC. The agency does not target a specific group of children and they do not exclude anyone.

• How long (on average and how many generations back) have clients been coming to the WIC program?
  o Yes, they have some multi-generational families. Lately, it seems like more grandparents are coming in with a child.
  o They have some multi-generational families in their agency but the Nutritionist does not think it’s a majority of the people they see.
  o Not really sure, but they would say about 20%-30% are multi-generational. It’s not something they ask. It seems to them that the towns are higher in the multi-generations than Manchester or Nashua.

• How would you describe their family structure and living situation?
  o The average size of the family is about 2 children. Majority are unmarried with a father, mother and children.
  o The agency has no way of knowing this. They used to collect the data on this but no longer do.
  o Mostly mothers attend, but there are also a good number of fathers participating. They often attend as a family.

• How do they compare to the broader service area? (Service area income, jobs, etc.)
  o Typical of this area.
  o It depends on which town, the profile varies across the service area.
  o Not much difference than the rest of the population in general, but there is some variation from town to town.
  o Pretty similar, especially in the surrounding towns. Concord is the most diverse population. The agency’s clients are 90% white.

• Planning Stage of Fit WIC Program: (Community Partnerships)

• What is the history of WIC prevention efforts in this community?
  o WIC is not seen as connected to Ammonoosuc CHS. WIC has been around for a long time but not affiliated with any agencies.

• What organizations are you currently working with? What outside organizations would you like to work with?
  o The Head Start Program knows about Fit WIC. The agency is not really working with any other agencies on this program.
  o Would like to work with an AmeriCorps volunteer.
  o No, the state has not given them the task to work with other organizations in the community. They are implementing within the CAP Program initially.
  o In the future they would like to work with the Concord Parks and Recreation Department. However, they haven’t really thought about it until they can hire someone to do the work.

• Are doctors aware of Fit WIC?
  o Very little knowledge of it.

• Describe the physical activity options in the community (i.e., NH Walks) and schools (i.e. PE class requirements)
  o There are a lot of walking trails in the area. The schools all have playgrounds and there are parks.
o There is a lot of hiking people can do in this area, along with a lot of outdoor activities. The community has a walking map and activity newsletter.
o There is a large community playground just down the street.
o It depends on the community. There is probably more opportunity in Manchester and Nashua; however, each town has some sort of community activities they offer. The agency hasn’t really looked at this.
o Other physical activity options include: Girls, Inc., Boys & Girls Club, running groups, recreational/park areas, neighborhood open space, Crown Hill pool, public pocket parks, etc…
o Doesn’t really know this, yet. They are doing this assessment now. They liked the state park passes the state gave them last year to raffle off. They know that towns have some programs but don’t really have a sense of what they are.

• Are there athletic facilities or gyms in the community? Are they open to the public or private/membership driven?
  o Very small amount. Berlin has a Recreation Center. Plenty of health clubs but you have to pay to join.
o Yes, but doesn’t have a list.
o The agency knows there are facilities in the communities but they don’t have a list of them.

• Do you think your clients have access to transportation to community and physical activity opportunities?
  o Transportation can be tough without a car. There is a trolley available but this is not accessible to everyone as you need to pay to use it. Some clients have to walk to the clinics.
o Most clients have transportation in this area.
o It depends on the community. Towns probably have more children on bikes than in the inter-city. They think transportation can be an issue for the population they serve.
o Some do, depending on their location.

• Do you think that your community is safe (i.e., for walking during the day – how about during the night? And what about in the neighborhoods where your clients might live?)
  o No issues.

• How does your agency network and share information and collaborate with other organizations in the community in an on-going way (monthly meetings of executive directors? Community collaborative? Sustainability of partnerships – process?)
  o The WIC agency is in a shared building with Prenatal and Family Planning Programs.
o Participate in monthly caregivers meetings and try to network with other agencies through referrals.
o The agency has a good structure to meet with other programs and they are working on a computer system called CSST that is a system-wide shared database. This system will be able to tell someone in the Fuel Assistance Program that the client is also eligible for TANF, WIC or CSFP. The agency would also like to work with the Housing program.

• How engaged is the community in Fit WIC? What is the level of community “buy-in” for the program?
  o The community is probably not aware of the program. Nancy will bring information to health fairs. They are not doing a lot of promotion at this point but are planning on ramping up that effort in the future.
o They do participate in Family Fun Day with a booth set up with information on the WIC Program.
o The community does not know about Fit WIC.
The communities do not know about the program. However, participants seem pretty happy and like the Fit WIC Program.

**Implementation Stage of Fit WIC Program: (Patterns)**

**Please describe the Fit WIC intervention as it is implemented in your agency.**

- Fit WIC kit is given to a family at certification appointment. It is briefly described to the parent(s). They always ask about TV time and video time and the likelihood of their using the kit. They are also told about seasonal activities/given ideas for activities based on the season – such as planting seeds for a garden. Seed packs are given to those expressing an interest in gardening.
- Currently, the agency is giving out kits and counseling the families. They do not offer the activities, as there is no room since they moved to their new building back in September 2006. They are hoping to add the activities as the weather improves.
- The Fit WIC Program is targeting the family through the 3-4 year olds. They are looking forward to using this with the Latino population, as they see many grandparents caring for children during the day and they usually give them sweets, let them watch TV all day and play video games.
- It is part of a broader family-focused effort to get families physically active together. For example, they have a parent walking program where they give the family a pedometer.

**What are the goals and objectives for Fit WIC? (start goal, end goal) - What are the desired impact/outcomes you hope to see as a result of Fit WIC? Over what time period do you hope to see these occur?**

- Increasing activity levels.
- Likes that the program gives parents age appropriate activities for the children to play. Likely to help increase awareness for needing to be more active.
- They want to increase the activities of children in the age range of 3-4 but also the activity levels of other members of the family. The program needs to be an extension of a life-style change for the families.
- The agency would also like to model the behavior with a walking club for staff, maybe with a competition between programs within the agency.
- The goal of Fit WIC is to increase physical activity among families not just the children. The agency would like to also offer a walking program for parents. They want the parents to be active themselves, in turn, the children will be active.

**What is the number of sessions for participants (adults, children)?**

- Certification is every six months and vouchers are given out every three months.

**Describe the Fit WIC setting and structure (staff involved, timeframe, etc.)**

- Currently, during voucher days, the activity is set up. Scheduled at the certification day. A phone call is done a few days before the activity. Maybe two of the families come to the activity but they usually do not bring their child during a voucher day. Return rate is low for activities.
- The WIC Program shares a building with other agencies and has a common entrance area. This is the only area that can be used for play space at the main office location.
- Currently, it is just the nutritionist. However, when they offered activities most staff were involved in the activities.
- Space limitations are real for this site. However, staff are invested in the program and are trying to figure out creative ways to demonstrate the activities without taking up too much room.
- Currently, during voucher days, the activity is set up. A letter is sent out to 4-5 families. Maybe two of the families come to the activity. They are planning to change the structure of the
activities. They want to encourage more families to join the activities, so they are going to offer it at a less busy time.

- **What is the process for distributing Fit WIC Activities Book and Kit?**
  - Give out kit during the certification.
  - Chad will ask the parent if they are interested in being a part of this program. If the parent says “yes”, he gives them the kit and has them fill out the survey.
  - The nutritionist meets with the family and offers those with children 3 – 4 years old a kit.
  - Participants are sent a reminder letter a week before their next voucher appointment.
  - All 3 -4 year olds are eligible.

- **How are Fit-N-Fun Playgroups structured?**
  - Playgroups are informally set up during the last ½ hour of the voucher session. Families are “scheduled” for the playgroup though most do not bring children to the voucher clinic because it is during the Head Start Program time.
  - There are currently no playgroups being conducted.
  - Blocks of time are designated specifically to Fit WIC activities on voucher days.

- **When did you begin implementing Fit WIC?**
  - The agency started implementing the program in June/July 2006.
  - They offer activities but few people come.
  - The agency started implementing the program in May 2006. They offered activities until September 2006, when they moved to the new location.
  - They will begin implementation of Fit WIC in July 2007.
  - The agency started implementing the program in May 2006. They have offered a Fit WIC class since September in Concord. They are only offering the activities at the Concord site right now.

- **Did you make any adaptations of the Fit WIC program to fit your particular setting?**
  - No.
  - No, not able to offer playgroups or demonstrate activities in this setting.

- **Have you made any changes in program implementation since you started Fit WIC?**
  - No, people are willing to try the program.
  - None, except the activities part.
  - Yes, again they plan to change when they offer the activities. The tape needs to be changed to a CD.

- **What are the criteria for participating in Fit WIC? (Is it offered throughout the service area, is there variation by clinic site?)**
  - All families with 3-4 year old children are given a kit.

- **What are the participant recruitment procedures?**
  - There does not appear to be a formalized recruitment process. Families are given a kit and then asked to complete the survey.
  - Most families are interested and willing to participate.
  - All families with children 3-4 are offered the opportunity to participate.

- **Do participants have an opportunity to provide input into the program? How is this input used? (Are you collecting any outcome measures of satisfaction or perception change?)**
  - Participants are asked to complete the Fit WIC survey.
  - Other anecdotal feedback is informal and not documented.
People are happy with the kits and contents. Most say they are using the kits.

“The children get into it.”

Participant survey and anecdotal conversations with staff.

Parents provide feedback on what they do but this is not recorded formally.

**What is your assessment of what is working well and challenges so far?**

- Biggest challenge is staffing – they would prefer to have a staff person dedicated to doing the Fit WIC Program.
  - This person would be in charge of scheduling families and general coordination of playgroups.
- They would like to expand the activities to other age groups if older kids are present during a voucher session.
- StarLINC was mentioned as a particular challenge. They are recording activities in the notes only.
  - There are growth charts and figures they review with the family that appear on the screen only – there is no way to print them and this would be very helpful to reinforce the information. Also, it would be easier if it was on paper to look at with the family.
- A major challenge is getting families to bring their kids back because of Head Start Program, weather, scheduling, etc…
- The surveys are tough. Doesn’t think it is possible to distinguish between the activity level increasing due to the program or because the child is growing older. It’s a fun program but the goals are broad and no real way to track the progress of the child. The agency wants to know if the program made a difference with children and the parents.
- Space is a challenge.
- They are working on changing the schedule of the playgroup to find a time that works for this group.
- The tape needs to be a CD.

**Are there staff you would like to add? Are current staff being used efficiently?**

- Would like to add a part-staff member to implement the program fully with activities and playgroups.
- The agency plans to hire a person to implement Fit WIC. They are waiting for the funding to come in to do this.

**Are there staff that we should talk to specifically?**

- We spoke with all staff that were present at time of the meeting and were able to get the information we needed.

**Evaluation:**

**Is there any other any mechanism to capture who comes in with the child?**

- Yes, StarLINC can be used to flag a child.
- No, they can only flag the file if the child is a foster child.

**Describe evaluation activities you are currently using.**

- They collect the Fit WIC Participant survey at the initial certification then every three months at the voucher sessions.
- They conduct Head Start-driven organizational assessments.
• **What tools are being used for this evaluation?**
  - They use an index card and put a star in the corner if the child is using Fit WIC. They also have StarLINC.
  - StarLINC
  - Participant survey

• **What is the reporting protocol for State/Feds?**
  - StarLINC

• **Are you happy with Fit WIC?**
  - Yes, it’s a nice program for the community.

• **Is there a way to capture on StarLINC the activities you do?**
  - No, but that would be helpful. It should include these fields:
    - Scheduled and came.
    - Scheduled and didn’t attend.
    - Scheduled and brought child.
  - They also suggested adding a checklist of activities to StarLINC.

• **Anything else?**
  - People are really happy with the kits. Very rarely does she have someone that doesn’t like it. The older siblings like to play, too.
  - Many people do not have tape players. The kits should include a CD instead.
  - Want more activities to do in a limited amount of space during the winter.
  - Eating habits also need to be addressed.
  - Would like to see more gardening tools from the state. People really like those.
  - Yes, they want more structure. The Fit WIC Program is very broad right now. There’s no real firm guidelines for the program. They want all the information up front so they can prepare to the best of their ability. They also want to know the goal of the program so they can get the numbers the state wants. [INTERVIEWER NOTE: This site has not received the State Fit WIC training which is scheduled for June 5, 2007.]
  - The state should to set up an advisory committee with local agencies on the committee. The state needs to have input from the people implementing the program and this would be a good forum to provide feedback to the state.
  - Fit WIC Staff could meet following the Nutritionist Quarterly Meetings, maybe twice a year to gain input from staff and participants. This would work best if it was designed as a facilitated discussion with targeted topics/questions.
Appendix C: Fit WIC Logic Models
The Hispanic population in NH is growing and we lack quality, culturally and linguistically appropriate materials to address need for increased childhood physical activity.

Diagram:
- Input: Materials
- Activities: Implement NH Fit in WIC
- Outcome: Participation in NH Fit
- Intermediate: Increase NH Fit participation
- Long-term: Improve NH Fit outcomes, influence policy
NH Fit WIC Program Logic Model (Objective 3)

Many community groups, including health care providers, schools, non-profit organizations, and private citizens are concerned about the issue of childhood overweight.

- Inputs
  - NH Fit WIC Program (Teachable Moments)
  - Increase awareness of overall/adolescent health through partnerships through public education, community programs, and schools to promote physical activity and weight loss goals.

- Activities
  - Provide resources:
    - NH Fit WIC, health care providers, school teachers, and community leaders.
    - Promote healthy eating and physical activity through fitness and nutrition workshops.

- Outputs
  - Increase awareness of overall/adolescent health through partnerships.
  - Encourage health care providers to incorporate physical activity and nutrition education into their practices.

- Outcomes
  - Increase awareness of overall/adolescent health through partnerships.
  - Encourage health care providers to incorporate physical activity and nutrition education into their practices.

- Impacts
  - Increase awareness of overall/adolescent health through partnerships.
  - Encourage health care providers to incorporate physical activity and nutrition education into their practices.

Fit WIC Evaluation Plan
NH Fit WIC Program Logic Model (Objective 0)

WIC is the primary nutrition education program for almost 90% of US children and has the unique opportunity to reach many families whose children are in the preschool years through increased staff training and improved competencies.

Inputs
- NH Fit WIC Program
- National NH Fit WIC Initiative

Outputs
- Improved WIC staff competencies to address the nutritional needs of children
- Improved WIC staff knowledge of childhood obesity and strategies to combat it
- Improved WIC staff ability to evaluate the impact of their efforts on childhood obesity

Innovations
- Increased staff awareness of childhood obesity and strategies to combat it
- Improved WIC staff ability to evaluate the impact of their efforts on childhood obesity

Impact
- Increased staff awareness of childhood obesity and strategies to combat it
- Improved WIC staff ability to evaluate the impact of their efforts on childhood obesity

Stakeholders
- WIC staff
- WIC participants
- Community partners
Fit WIC is a program for 3 and 4 year old children on the WIC Program. Please take a few minutes to answer some questions about you and your 3 – 4 year old child. This survey will help us so we can learn how we are doing and how to make Fit WIC better. Your answers will be kept private and will not affect your WIC participation. Thank you.

If Fit WIC is new to you, answer the questions on page 1. If you are not new to Fit WIC, answer all of the questions on pages 1-2.

Section A: Fit WIC Participant Information

1. Is your child: 3 years old 4 years old
2. Is your child: Male Female
3. Is your child of Hispanic origin? Yes, child is Hispanic No, child is not Hispanic
4. What is your relationship to the child? Parent Grandparent Other family member Other (specify)
5. Have you ever been told that your child is overweight by any healthcare provider? Yes No
6. Do you think your child is overweight or at risk of becoming overweight? Yes No
7. On a typical day, is your 3 – 4 year old child active in 1 or more hours of active play? (Active play takes a lot of energy, like walking, running, jumping rope, skipping and climbing. Active play uses the legs and arms and gets heart rates pumping) Yes No
8. On a typical day, do you spend 30 – 60 minutes teaching your 3 – 4 year old child physical play skills? (Physical play skills include throwing and catching a ball; kicking a ball; balancing on one foot; somersaults; hopscotch; or walking and balance on a beam) Yes No
9. In the past week, did your family visit public places like parks, playgrounds, playgroups, libraries, or museums in your community? Yes No
10. About how many hours does your child sit and watch television or videos on a typical day? None less than 1 hour 1 – 2 hours 3 – 4 hours 5 or more hours
11. Did you receive a Fit WIC Activity Kit today? Yes No
Section B: Fit WIC Activity Kit Questions

1. Did you ever use the Fit WIC Activity Kit, or any part of the kit?  Yes No
   If no, why not?  No time
                  Not interested
                  Lost it
                  Didn’t see it as useful
                  Other reason ____________________________________________

2. In the past two weeks, about how many times did you use the items, activities or ideas from the kit with your child?
   None  1 – 2 times  3 – 4 times  5 or more times

3. In the past two weeks, did you do any of the following activities from the Fit WIC Activities book with your 3 – 4 year old child? (Check all that apply).
   We did not do any Fit WIC Activities
   Played one or more of the games described in the book
   Made one or more of the homemade play objects in the book
   Did at least one exploring or outing activity described in the book
   Did one or more of the indoor or outdoor helping activities (like picking up toys, caring for a pet, or helping in the garden)
   Used one or more of the toys from the Fit WIC kit (like the bean bags, beach ball or cassette tape)

4. Did you use any of the Quiet Time suggestions from the Fit WIC Activity Kit?  Yes No

5. Did your child participate in a Fit WIC activity playgroup since your last visit?  Yes No

6. How much did participating in the Fit WIC Program help you learn about the importance of physical activity in keeping your child healthy?
   Not at all   Some   Quite a bit   A lot

7. What do you like or dislike about the Fit WIC Activity kit and book? __________________________________________________________

8. Please provide us with any ideas you would like to share about your experience with the Fit WIC program. __________________________________________________________

THANK YOU!
NH Fit WIC Encuesta al Participante

NH WIC es un programa para niños de 3 a 4 años de edad del programa. Por favor tómese algunos minutos para contestar preguntas acerca de usted y sus niño(a) de 3 – 4 años de edad. Esta encuesta nos ayudará a saber cómo lo estamos haciendo y cómo hacer mejor Fit WIC.

Sus respuestas serán confidenciales y no afectará su participación en WIC. Gracias.

Si Fit WIC es nuevo para usted, conteste las preguntas de la página 1 solamente.

SI no es nuevo en Fit WIC, conteste todas las preguntas de las páginas 1 y 2.

Sección A: Fit WIC Información del Participante

11. Su niño tiene de: 3 a 4 años de edad

12. Su niño(a) es: Niño Niña


14. Cuál es su relación con el niño(a)? Padre Abuelo(a) Otro miembro familia Otro (especificar)

15. Un proveedor de salud le han dicho alguna vez que su niño(a) está pasado de peso? Sí No

16. Usted cree que su niño(a) está pasado de peso o está en riesgo de serlo? Sí No

17. En un día típico, su niño(a) de 3 – 4 años de edad está activo en el juego por 1 hora o más? (Juego activo toma mucha energía, caminada libre, correr, saltar a la cuerda, brincar y escalar. En el juego activo se usan las piernas y brazos y hace que el corazón palpite) Sí No

18. En un día típico, usted gasta de 30 – 60 minutos enseñando a su niño(a) de 3 – 4 años de edad habilidades de juego físico? (Habilidades de juego físico incluye tirar y coger una pelota; balanceo en un pie; vuelta canela; rayuela; o caminar y balanceo en una viga) Sí No

19. En la pasada semana, su familia visitó un lugar público como parques, área de juegos (adentro o afuera), grupos de juegos, librerías, o museos en su comunidad? Sí No

20. Acerca de cuántas horas su niño(a) está sentado mirando la televisión o videos en un día típico? Ninguna Menos de 1 hora 1 – 2 horas 3 – 4 horas 5 o más horas

Recibió hoy un paquete actividades del Fit WIC? Sí No
Sección B: Preguntas de las actividades del paquete de Fit WIC

9. Alguna vez usó las actividades del paquete de Fit WIC, o alguna parte del paquete?
   Sí       No
   Si no, por qué no?
   No tengo tiempo
   No estoy interesado(a)
   Lo perdí
   No lo vi de utilidad
   Otra razón ________________________________
   (especificar)

10. En las dos semanas pasadas, acerca de cuántas veces usó con su niño(a) las cosas, actividades o ideas del paquete?
    Ninguna   1 – 2 veces   3 – 4 veces   5 o más veces

11. En las dos semanas pasadas, usted y su niño(a) de 3 – 4 años de edad siguieron alguna de las siguientes del libro del paquete de Fit WIC? (Chequear todas las que apliquen).
    . Nosotros no hicimos ninguna de las Actividades de Fit WIC
    Jugamos una o más juegos descritos en el libro
    Hicimos uno o más objetos caseros del libro
    Hicimos al menos una explorando o haciendo una actividades afuera descrita en el libro
    Hicimos al menos una actividad de adentro o afuera de las actividades de ayudar (como recoger los juguetes, cuidar a la mascota, o ayudando en el jardín
    Usó uno o más juguetes del paquete de Fit WIC (como la bolsa, la pelota de playa o el cassette)

12. Usó alguna de las sugerencias de Tiempo Quieto de las Actividades del paquete de Fit WIC?    Si       No

13. Usted o su niño(a) participaron en las actividades del Area de Juego del programa Fit WIC desde la última visita?    Si       No

14. Cuanto le ha ayudado a aprender de la importancia de la actividad de juego físico para mantener a su niño(a) saludable desde su participación en el Programa Fit WIC?
    No en absoluta    Todo    Algo    Mucho    Muchísimo

15. Que le gusto o disgustó acerca de las Actividades del Libro y Paquete de Fit WIC?
    __________________________________________
    __________________________________________
    __________________________________________
    __________________________________________

16. Por favor proveernos de algunas ideas que quiera compartir acerca de su experiencia con el Programa de Fit WIC. __________________________________________
Appendix F: Program Evaluation Form
## PROGRAM EVALUATION FORM

<table>
<thead>
<tr>
<th>Process Evaluation Measures</th>
<th>Site</th>
<th>Fiscal Year</th>
<th>Quarter 1</th>
<th>Quarter 2</th>
<th>Quarter 3</th>
<th>Quarter 4</th>
<th>Annual Total</th>
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<td><strong>Local-level Evaluation Measures</strong></td>
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<td>WIC agency fully implementing Fit WIC Program</td>
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**State-level Evaluation Measures**

Conduct Fit WIC Staff focus groups (Y/N) |           |           |           |           |              |
Conduct Fit WIC Participant focus groups (Y/N) |           |           |           |           |              |
Number of seasonal inserts in statewide newsletter |           |           |           |           |              |
Number of staff participating in targeted counseling techniques training (e.g., motivational interviewing, facilitated discussions, etc…) |           |           |           |           |              |
Number of Latino version of Fit WIC Parent book distributed |           |           |           |           |              |
Number Fit WIC staff trained for Train the Trainer |           |           |           |           |              |
Development and distribution of education and skill enhancement materials |           |           |           |           |              |
Appendix G: Fit WIC Staff Focus Group Protocol
STAFF FOCUS GROUPS PROTOCOL

One Staff Focus Group is to be administered after the 12-month cohort enrollment is completed in March 2008. A second Staff Focus Group will be conducted in March 2009. Focus group participants will include at least 2 staff members from each intervention site, up to a total of 12 participants, who provide nutrition or physical activity education through Fit WIC to Fit WIC participants (e.g. nutritionists). These focus groups may be held in a central location such as the NH DHHS WIC office.

The purpose of the focus group is to assess: (a) how Fit WIC staff perceive their skill levels and effectiveness of staff training; (b) Fit WIC staff’s acceptance of Fit WIC nutrition and physical activity messages; and (c) Fit WIC staff perception of their ability to effect change in participant behavior regarding nutrition and physical activity. Information from the focus groups will be used by Fit WIC leadership to improve staff training so that staff needs are continuously met in a timely manner and to improve Fit WIC messaging.

The focus group basics, guide, protocols and questions have been designed to facilitate the administration of these groups by Fit WIC leadership or by a trained facilitator.

Focus Group Basics

The focus group basics below have been designed to facilitate the administration of all focus groups by Fit WIC leadership or by a trained facilitator. Specific targeted questions have been designed for each staff and participant focus group.

Focus groups are a powerful means to evaluate services or test new ideas. Basically, focus groups are interviews of 6-10 people at the same time in the same group. One can get a great deal of information during a focus group session.

Preparing for the Session
1. Identify the major objective of the meeting.
2. Carefully develop five to six questions (see below).
3. Plan your session (see below).
4. Call potential participants to invite them to the meeting. Send them a follow-up invitation with a proposed agenda, session time and list of questions the group will discuss. Plan to provide a copy of the report from the session to each participant and let them know you will do this.
5. About three days before the session, call each member to remind them to attend.

Developing Questions
1. Develop five to six questions - Session should last one to 1.5 hours -- in this time, one can ask at most five or six questions and conduct a discussion based on issues and themes that arise.
2. First ask yourself what problem or need will be addressed by the information gathered during the session, e.g., examine if a new service or idea will work, further understand why a program is faltering, etc.
3. Focus groups are essentially multiple interviews. Therefore, many of the same guidelines for conducting focus groups are similar to conducting interviews.
**Planning the Session**

1. **Scheduling** - Plan meetings to be one to 1.5 hours long. Over lunch or in the early evening can be good times for participants to attend. However, the time of day should to accommodate the needs of the participants.

2. **Setting and Refreshments** - Hold sessions in a conference room or other setting with adequate air flow and lighting. Configure chairs so that all participants can see each other. Provide name tags for members as well. Provide refreshments or box lunches, if the session is held over lunch.

3. **Ground Rules** - It's critical that all participants are given a chance to speak and be heard. It is the facilitator’s job to guide the discussion in order to generate useful information. Because the session is often a one-time occurrence, it's useful to have a few, short ground rules that sustain participation, yet do so with focus. Consider the following three ground rules: a) keep focused, b) maintain momentum and c) get closure on questions.

4. **Agenda** - Consider the following agenda: welcome, review of agenda, review of goal of the meeting, review of ground rules, introductions, questions and discussion, wrap up.

5. **Participants** - Focus groups are usually conducted with 6-10 participants who have some similar nature, e.g., similar age group, status in a program, etc. Select members who are likely to be participative and reflective. Attempt to select participants who don't know each other.

6. **Plan to record the session** with either an audio or audio-video recorder. Don't count on your memory. If this isn't practical, involve a co-facilitator who is there to take notes. Make sure that participants are comfortable with being tape or video recorded and be prepared for the group to decide against it. Always include a co-facilitator/note taker in your focus group plan.

**Facilitating the Session**

1. The major goal of facilitation is collecting useful information to meet goal of meeting.

2. Introduce yourself and the co-facilitator, if used.

3. Review out the agenda and purpose of the focus group.

4. Explain the means to record the session and obtain consent from the group to tape or video record the session.

5. Carefully word each question before that question is addressed by the group. Allow the group a few minutes for each participant to provide their answers. Then, facilitate discussion around the answers to each question, one at a time.

6. Ensure even participation. If one or two people are dominating the meeting, then call on others. Consider using a round-table approach, including going in one direction around the table, giving each person a minute to answer the question. If the domination persists, note it to the group and ask for ideas about how the participation can be increased.

7. After each question is answered, carefully reflect back a summary of what you heard.

8. Closing the session - Tell members that they will receive a copy of the report generated from their answers, thank them for coming, and adjourn the meeting.

**Immediately After Session**

1. Verify that the tape recorder, if used, worked throughout the session.

2. Make any notes on your written notes, e.g., to clarify any scratching, ensure pages are numbered; fill out any notes that don't make senses, etc.

3. Write down any observations made during the session. For example, where did the session occur and when, what was the nature of participation in the group? Were there any surprises during the session? Did the tape recorder break?
Appendix H: Fit WIC Staff Focus Group Analysis Report
EXECUTIVE SUMMARY

Fit WIC Project Evaluation - Staff Focus Groups
Prepared by Mary Anne Wichroski, PhD
February, 2008

As part of the evaluation of the State of New Hampshire Fit WIC Project, focus groups were conducted with 31 staff from the five participating WIC agencies. Focus groups were conducted in late January, 2008, in Concord, Littleton, Exeter, and Manchester.

The purpose of the focus groups was to assess: (a) how Fit WIC staff perceived their skill levels and the effectiveness of staff training; (b) Fit WIC staff’s acceptance of Fit WIC nutrition and physical activity messages; and (c) Fit WIC staff perception of their ability to effect change in participant behavior regarding nutrition and physical activity. Findings will be used to improve Fit WIC staff training.

Findings

(a) Participants seemed very knowledgeable about the causes and risks of overweight in preschool children, as well as what interventions could help mitigate it. They discussed the physical, psychological, and social effects of overweight and recognized the barriers, both internal and external, to its prevention. While internal factors were parent-centered, external barriers included the stress of working, lack of time to plan healthy meals, the cost of healthy foods, unsafe play areas, lack of control over the food given by child care providers, and counterproductive cultural messages.

(b) Overall, the staff demonstrated their acceptance of nutrition and physical activity messages, offering sound suggestions about what parents could do, but with an awareness of the obstacles parents face. In one group there appeared to be less empathy towards parents and a higher level of frustration towards their behavior, but most seemed to understand these difficulties. Urban and rural differences were noted, in terms of levels of physical activity due to living conditions and other environmental factors.

(c) Staff expressed caution about their ability to effect change in parent behavior. While confident in their abilities, knowledge, resources, and counseling skills, they did not have as much confidence in parent willingness to change. Some felt they could be a resource but not the direct agents of change. On the other hand, many had a variety of strategies for approaching parents about overweight, including a sensitive approach, client-driven assessment (VENA), objectivity, stressing weight as a health issue, using charts and other visual aids, building rapport with clients, avoiding offensive terminology, encouraging small, incremental changes/attainable goals, and offering on-going reinforcement and support. Many staff have used their personal experiences and problems as a “point of connection” with parents.

(d) Staff suggestions included having more time with clients, seeing the same client consistently, having on-going training and feedback, more staff, more space, and consistent funding. The staff would also like to see consistent messages about overweight from physicians and other health care providers.

Recommendations

- Provide on-going training and support.
- Arrange seminars on how to open a dialogue with parents, perhaps having the more experienced nutritionists work with those who are less trained.
- Provide parenting training and interactive skill training with children’s groups.
• Provide materials in other languages (Manchester).
• Recommend to the State more fruits and vegetables and less cheese.
• Recommend the State provide nutrition and physical activity messages with issuance of Food Stamps.
• Clarify travel reimbursement for staff.
• Develop experiential learning techniques for parents.
• Provide incentives for parents to participate in the program.
• Investigate how time could be used more effectively or how more time could be allowed clients who are willing to work on their weight and the weight of their children.
• Investigate feasibility of client seeing the same nutritionist each time.
• Create partnerships with doctors and health care professionals to reinforce Fit WIC message.
As part of the Evaluation Plan for the State of New Hampshire Fit WIC Project, focus groups were conducted with staff from the five WIC agencies representing the five intervention groups participating in the program. These focus groups were conducted in late January, 2008, in Concord, Littleton, Exeter, and Manchester.

The purpose of the focus groups was to “assess: (a) how Fit WIC staff perceived their skill levels and the effectiveness of staff training; (b) Fit WIC staff’s acceptance of Fit WIC nutrition and physical activity messages; and (c) Fit WIC staff perception of their ability to effect change in participant behavior regarding nutrition and physical activity. Information from the groups will be used by Fit WIC leadership to improve staff training so that staff needs are continuously met in a timely manner and to improve Fit WIC messaging.” (Fit WIC Evaluation Plan)

Method and Sample

Four focus groups were conducted with staff from the five WIC agencies: Community Action Program Belknap/Merrimack Counties; Ammonoosuc Community Health Services; Coos County Family Health Services; Rockingham Community Action; and Southern NH Services. (Staff from Ammonoosuc Community Health Services and Coos County Family Health Services met in one group). Each session was attended by between four and eleven participants. The sample included all five Program Directors, a Program Coordinator, eleven nutritionists, eight nutrition assistants, and other staff, such as health technicians, a breast feeding coordinator, a case manager, an educator, and an occupational therapist, for a total of 31 participants. About half of the sample had had at least ten years of experience. Over 30% had more than 15 years in the field. About ¾ of the sample had children of their own.

Each session was conducted by a trained facilitator and lasted between one and one and one half hours each. A note taker was present and all sessions were audio taped (with permission from the participants) for any additional information that could be added to the notes. Notes were then forwarded to the evaluator for independent review and analysis. Participants were informed of the purpose of the focus groups, assured of anonymity and confidentiality, and were encouraged to speak openly. Efforts were made to gather input from all of those attending.

Questions were framed in order to assess staff comfort with their knowledge and rationale for overweight causes, risks, and interventions; comfort with physical activity and play skill knowledge; comfort with talking to parents about overweight; comfort with changing the behavior of others; and comfort with their own weight and physical activity management. At the end of each session, participants were asked what additional resources they would need and what suggestions they might have for improvements in the program. (See Appendices I, J, and K of the NH Fit WIC Evaluation Plan for focus group guidelines, questions, and protocol.)
Results

Comfort with knowledge and rationale for overweight causes, risks, and interventions

Causes of Overweight. Much of the discussion around what causes overweight in children centered around the behavior of parents. The most frequently mentioned reasons were poor modeling, lack of education, poor food choices (especially a lack of fruits and vegetables), bottle feeding for too long, too much juice and other sugary drinks, using food as a reward, a sedentary lifestyle as learned behavior - then transmitted to children, buying foods on the run, and being unwilling to sacrifice. Genetics was also mentioned as a primary cause. Responses to the question of what causes overweight in preschool children illustrate a combination of internal and external factors. While parents and their behaviors were brought up frequently, many of these behaviors could be the result of the influence of social and cultural forces, especially socioeconomic ones. For example, many brought up the higher cost of healthier foods like fruits and vegetables. Others mentioned the problems of working mothers who provide food to keep their children content or snacks because they are on the run. Many participants mentioned the relationship between television and food. One interesting point made was the “open kitchen” concept which is popular today but means there is more access to food at non-meal times. The popularity of snacking, fast food, processed food, and large portion sizes, often promoted by ads, is a problem. Lack of outdoor play and general inactivity, including less recess time in schools, were also cited as contributors to overweight. Finally, lack of pediatrician intervention was mentioned as a factor.

Risks of Overweight. The general consensus among all staff was that overall wellness in children was dependent upon a healthy weight. The majority of participants mentioned physical problems as a major risk, including diabetes, asthma, high blood pressure, heart disease, and eating disorders. Some mentioned that normal physical development could be hindered and that children could develop hyperactivity or ADHD as a result of a poor diet. Three out of four groups discussed the social stigma of being overweight and how that affects self esteem, social skills, self-confidence, and overall mental health. Overweight children may also learn to use food as a comfort if isolated and stigmatized and develop poor eating habits that they retain into adulthood.

What Can a Parent Do? Most participants emphasized that parents must take responsibility by modeling proper eating habits and exercise themselves. They should try to reduce their own stress, avoid fast food, and get educated on nutrition and exercise. Food should not be given in the car, nor should it be used as a reward. Healthy foods should be introduced when children are very young. Parents should not be afraid to say “no” to their children. One group mentioned how bottle feeding can lead to overfeeding. Another suggestion was for parents to monitor what their children are being fed at day care and that parents should take the time to plan healthy meals. Some discussed that parents blamed genetics and explained how cheaper foods, while less healthy, have a longer shelf life. While most of the emphasis was on eating habits, three groups mentioned that parents needed to provide more physical activity for their children. Finally, it was suggested that parents seek advice on weight and diet from pediatricians.

Comfort with physical activity and play skills knowledge

Beneficial Effects of Play. Three out of four groups agreed that one hour per day was the government recommendation for the time children should play, but two groups mentioned that it depended upon the child and that more was always better. All of the groups brought up the
physical, psychological, and social benefits of play for children. All of them brought up increased self-esteem and a sense of mastery as a result of physical activity. In addition to controlling weight, other physical benefits included more energy, better sleep patterns, better motor development, muscle strength, and coordination. All four groups brought up increased creativity and/or a willingness to try different things in other areas, and the ability to focus better on other activities. More physical activity leaves less time for television, videogames, and other sedentary activities. Television was cited as a major problem, especially because of ads that promote unhealthy foods. More physical activity could help children develop healthier patterns for later life. Finally, the social benefits of play were brought up often; for example, learning to play well with others (perhaps leading to team sports later), creating bonds with friends and family, overcoming shyness, promoting acceptance, and enhancing physical appearance.

**Appropriate Physical Activities and Skills.** There were some differences between groups on the types of physical activities they would recommend. Some believed that the basics were best, such as running, swinging, jumping, crawling, using little things to step on and playground equipment. Pretend play, such as imitating animals, and using simple tools such as trucks and shovels were mentioned. These things can be done anywhere and allow the child to use his/her imagination. Others emphasized group activities, such as kickball, and still others recommended more formal activities, such as badminton, karate, and dance. Some recommended family activities as a good idea. These differences may be attributable to the age of the child.

With regard to skills that were appropriate, cooperation through group play was mentioned, as well as gross and fine motor development enhancing coordination. Creativity could be developed through imaginative activities.

**Barriers to Children’s Physical Activity.** In all four groups, the issue of lack of time and other demands came up as reported to them by parents, particularly working parents. Being tired and inactive themselves or brought up with exercise as a low priority was cited often as a reason given by parents. Three out of four groups discussed television as a problem, especially when used as a babysitter. Parents see this but they also wanted to get things done. Caregivers, especially grandparents, may use television or DVDs as a way to keep kids content. Some parents say they don’t want to go outside with their children if they have other things to do. One person mentioned a handicapped parent who may not be physically able to go out with their children.

There were some differences between urban and rural sites on this question. Urban parents complain about not having a place to play; for example, if living in a small apartment, they are afraid to let their children make too much noise. Safety is also an issue; one person mentioned a park in the city frequented by prostitutes. Rural parents may have more outdoor space, but may also have transportation problems that prevent them from taking their children to parks or other organized activities.

The New England weather was mentioned in all four discussions as a barrier to outdoor activities. Other problems staff have heard from parents were the expense and lack of proper equipment, environmental deficiencies, such as lack of bike paths and sidewalks, fear of kids getting hurt, lack of ideas, and tending to occupy children with DVDs or other sedentary activities.

**Comfort with talking to parents about overweight**

All participants agreed that approaching a parent about an overweight child was up to nutritionists. While most felt confident with their counseling skills, many expressed caution about approaching parents on this subject. The consensus among all groups was that they test for
receptivity first to avoid a defensive reaction. Eye contact and body language are noted. This is a difficult topic for parents, especially if they are overweight themselves. Because of this, sensitivity is required. Some mentioned that they present the topic as objectively as possible by showing the whole growth chart and emphasizing weight as a matter of health. Building rapport with parents was seen as essential if they are going to listen, make changes, and continue to come back. Some mentioned that a parent should see the same person consistently for trust to be established. Handouts, articles, and recipes helped to inform parents, a “softer,” less direct approach.

Doctors were mentioned in three out of four groups. Sometimes parents feel there is no problem if doctors have not mentioned it. Participants said they might ask first if a doctor has made any recommendations. They feel that parents believe doctors first.

Finally, one group discussed “Value Enhanced Nutrition Assessment,” a new style of counseling which is client-driven, meaning the client must want to address an issue. This is consistent with what was discussed above. Two of the groups mentioned time constraints and seeing clients only every three to six months.

**What makes the conversation easier?** In addition to parent interest and willingness to take advice, weight is easier to discuss if a parent has a medical problem in the family, such as diabetes, and is concerned about health. Other suggestions by participants for easing the process were to: take a constructive approach; not laying it all out right away but encouraging small steps to try; asking what a parent thinks they can reasonably do; using physical aids; having a goal calendar; promoting a good feeling in parents by encouraging them and recognizing the positive things they are doing.

**What makes the conversation more difficult?** In addition to lack of parent interest or a defensive attitude, other roadblocks included fear of alienating the parent, inconsistencies among health care providers, especially doctors, and being seen by parents as a “necessary evil” to get the WIC voucher. In one group, terminology and labeling were mentioned as being offensive.

**Facilitators.** The process of approaching a parent about overweight children could be facilitated by having more time (they report they only have 15 minutes per family and they need a half hour); having one child at a time; seeing the same client consistently; getting more doctors involved in weight management; lower caseloads; more money; and more staff. One person suggested parenting training for WIC staff.

**Comfort in changing others’ behaviors**
Overall, the participants expressed confidence about changing behaviors in that they had the knowledge, experience, information, and resources to effect change. Only one group seemed less optimistic about client willingness to change (unless there was a medical crisis that forced them to change) and more people in that group felt they could only be a resource, especially if they did not have more time with clients.

**What works.** What would work best is to have a solid knowledge of human behavior, to provide adequate support for clients, help them to implement small, incremental changes (for example, going from whole milk to skim) which are attainable, and emphasize the positive. Parents may need help learning how to talk to significant others and/or grandparents who may have different perspectives on eating. This can also be a problem for split families. They would emphasize to parents the importance of learning healthy habits young and not to panic when children don’t want to eat.
Again participants mentioned seeing the same client consistently as important to offer them support and reinforcement. VENA came up again as a good assessment style. They would also like to see all health care professionals “on the same page,” especially doctors. A community-wide effort to raise awareness about overweight and working with good partners on this would help, such as Head Start and the UNH Cooperative Extension Nutrition Connections program. Understanding the differences between rural and urban problems is important when talking to a client.

**What does not work.** To effect behavior change, it does not help to tell the parent what to do or to insult their parenting skills. One problem mentioned was that food stamps have no restrictions on what you can buy and that media can be a deterrent with promise of magic pills and conflicting advice about how to lose weight. School lunches and shorter recess times were mentioned also. Unhealthy patterns parents have used with other children are hard to break. Some parents use the wrong foods to keep their children happy. Some feel countermanded by doctors who do not suggest diet changes. Time constraints and not seeing the same person consistently were mentioned again and fear of failure and/or losing people if they become offended.

**Comfort with staff’s own weight and physical activity management**

All four groups mentioned that they can often find a point of connection with clients based on their own experiences. It may help to share certain things with clients if you show you can relate to overweight as a common problem and give personal examples. Practicing what you preach can help to convince a client that you are not superior to them or judging them.

There was not much discussion about the participants’ own difficulties or experience with their own behavior change. They mentioned that sharing experiences may be useful in building rapport, but often they are rushed and that may prevent a person from opening up to the nutritionist. However, many did say they could understand the problems people face and had difficulties themselves or within their families that helped them to be more empathetic with clients. Only one person said she did not feel empathetic and felt parents needed to sacrifice more for their children.

**Additional Resources Requested and Comments**

While many said that they understood Fit WIC and its goals and saw this as a priority, there were some concerns about administrative problems and how the program is being implemented. In one group, they wanted the program to be more clearly defined with more guidelines and felt it was over-burdening the staff. Getting parents involved, some who come only to get their vouchers, could be a problem. Other resources they felt were needed were: ongoing training, including parenting (especially since problems emerged after the initial training), travel reimbursement (some travel up to an hour away); more space; more staff; more ways to interact with children, especially in groups (problem of the “technical vs. interactive nutritionist”); experiential learning techniques for parents; materials in other languages; offering fruits and vegetables and less cheese. One person asked if the State could be approached to include non-two and three-year olds in the clinic play groups. Bigger beach balls were requested. Giving children something to do while parents were meeting with adults was seen as a positive. Finally, funding was an issue and whether it would be provided and continued.

**Conclusions**

Participants seemed very knowledgeable about the causes and risks of overweight in preschool children, as well as what interventions could help mitigate it. They brought up the physical, psychological, and social effects of overweight and discussed at length the barriers
faced by parents as well as health care professionals in addressing the problem. These barriers could be categorized as both internal and external; that is, much of the discussion centered around parent responsibility and their failure to provide a healthy diet and an appropriate amount of physical activity for their children, but they also discussed the many factors working against parents, such as the stress of working, lack of time to plan healthy meals, the cost of healthy foods, unsafe play areas, lack of control over the food given by child care providers, and counterproductive cultural messages.

Overall, the staff demonstrated their acceptance of nutrition and physical activity messages, offering sound suggestions about what parents could do, but with an awareness of the obstacles parents face. In one group there appeared to be less empathy towards parents and a higher level of frustration towards their behavior, but most seemed to understand the difficulties many face. Urban and rural differences were noted, in terms of levels of physical activity due to living conditions and other environmental factors.

On the staff’s perception of their ability to effect change in parent behavior, almost all participants expressed a fair degree of caution. While they expressed confidence in their abilities and felt they had the knowledge, information, resources, and counseling skills to do the job, they did not have as much confidence in a parent’s willingness to change. Some felt they could only be a resource and not the direct agents of change. On the other hand, many had a variety of strategies for approaching parents about overweight, including a sensitive approach, client-driven assessment (VENA), objectivity, stressing weight as a health issue, using charts and other visual aids, building rapport with clients, avoiding offensive terminology, encouraging small, incremental changes or attainable goals, and offering on-going reinforcement and support. While there was not as much discussion around their own behavior change, many staff have used their personal experiences and problems as a “point of connection” with parents.

The staff had several suggestions for improving the program, including having more time with clients, seeing the same client consistently, having on-going training and feedback (one group needed more guidelines and specifics), more staff, and in some cases, more space. The staff would also like to see consistent messages about overweight from physicians and other health care professionals and/or agencies who could reinforce Fit WIC messages on nutrition and physical activity. Finally, some wanted to be reassured about funding.

**Recommendations**

- Provide on-going training and support.
- Arrange seminars on how to open a dialogue with parents, perhaps having the more experienced nutritionists work with those who are less trained.
- Provide parenting training and interactive skill training with children’s groups.
- Provide materials in other languages (Manchester).
- Recommend that the State provide more fruits and vegetables and less cheese.
- Recommend that the State provide nutrition and physical activity messages with issuance of Food Stamps.
- Clarify travel reimbursement for staff.
- Develop experiential learning techniques for parents.
- Provide incentives for parents to participate in the program.
- Investigate how time could be used more effectively or how more time could be allowed clients who are willing to work on overweight.
- Investigate feasibility of client seeing the same nutritionist each time.
- Create partnerships with doctors and other health care professionals to help reinforce Fit WIC messages.
Appendix I: Fit WIC Participant Focus Group Protocol
PARTICIPANT FOCUS GROUPS PROTOCOL

The first Participant Focus Group will be administered at each of the five intervention sites in April 2008, the month after the 12-month cohort enrollment is completed for the outcome study (3/31/08). Focus group participants will include a sample of 6 – 10 participants from that intervention site who are enrolled in Fit WIC. A second Focus Group will be administered at each intervention site in 4/09 after data collection for the outcome study is complete.

Should any Fit WIC sites enroll 20 or more Spanish speaking participants in its cohort study, an additional Participant Focus Group should be administered in Spanish to these participants.

The purpose of this participant focus group is to assess participant knowledge, perception, barriers, and receptivity to education on overweight and physical activity. Information from this focus group will be used by Fit WIC leadership to improve Fit WIC messaging.

Focus Group Basics
The focus group basics below have been designed to facilitate the administration of all focus groups by Fit WIC leadership or by a trained facilitator. Specific targeted questions have been designed for each staff and participant focus group.

Focus groups are a powerful means to evaluate services or test new ideas. Basically, focus groups are interviews of 6-10 people at the same time in the same group. One can get a great deal of information during a focus group session.

Preparing for the Session
1. Identify the major objective of the meeting.
2. Carefully develop five to six questions (see below).
3. Plan your session (see below).
4. Call potential participants to invite to the meeting. Send a follow-up invitation with an agenda, session time and list of questions the group will discuss. Plan to provide a copy of the report from the session to each participant and let them know you will do this.
5. About three days before the session, call each member to remind them to attend.

Developing Questions
1. Develop five to six questions - Session should last one to 1.5 hours -- in this time, one can ask at most five or six questions and conduct a discussion based on issues and themes that arise.
2. First ask yourself what problem or need will be addressed by the information gathered during the session, e.g., examine if a new service or idea will work, further understand why a program is faltering, etc.
3. Focus groups are essentially multiple interviews. Therefore, many of the same guidelines for conducting focus groups are similar to conducting interviews.

Planning the Session
1. Scheduling - Plan meetings to be one to 1.5 hours long. Over lunch or in the early evening can be good times for participants to attend. However, the time of day should accommodate the needs of the participants.
2. Setting and Refreshments - Hold sessions in a conference room or other setting with adequate air flow and lighting. Configure chairs so that all participants can see each other. Provide name tags for members as well. Provide refreshments or box lunches, if the session is held over lunch.
3. **Ground Rules** - It's critical that all participants are given a chance to speak and be heard. It is the facilitator’s job to guide the discussion in order to generate useful information. Because the session is often a one-time occurrence, it's useful to have a few, short ground rules that sustain participation, yet do so with focus. Consider the following three ground rules: a) keep focused, b) maintain momentum and c) get closure on questions.

4. **Agenda** - Consider the following agenda: welcome, review of agenda, review of goal of the meeting, review of ground rules, introductions, questions/discussion, wrap up.

5. **Participants** - Focus groups are usually conducted with 6-10 participants who have some similar nature, e.g., similar age group, status in a program, etc. Select members who are likely to be participative and reflective. Attempt to select participants who don't know each other.

6. **Plan to record the session with either an audio or audio-video recorder. Don't count on your memory. If this isn't practical, involve a co-facilitator who is there to take notes. Make sure that participants are comfortable with being tape or video recorded and be prepared for the group to decide against it. Always include a co-facilitator/note taker in your focus group plan.

**Facilitating the Session**

1. The major goal of facilitation is collecting useful information to meet goal of meeting.
2. Introduce yourself and the co-facilitator, if used.
3. Review out the agenda and purpose of the focus group.
4. Explain the means to record the session and obtain consent from the group to tape or video record the session.
5. Carefully word each question before that question is addressed by the group. Allow the group a few minutes for each participant to provide their answers. Then, facilitate discussion around the answers to each question, one at a time.
6. Ensure even participation. If one or two people are dominating the meeting, then call on others. Consider using a round-table approach, including going in one direction around the table, giving each person a minute to answer the question. If the domination persists, note it to the group and ask for ideas about how the participation can be increased.
7. After each question is answered, carefully reflect back a summary of what you heard (the note taker may do this).
8. Closing the session - Tell members that they will receive a copy of the report generated from their answers, thank them for coming, and adjourn the meeting.

**Immediately After Session**

1. Verify that the tape recorder, if used, worked throughout the session.
2. Make any notes on your written notes, e.g., to clarify any scratching, ensure pages are numbered; fill out any notes that don't make senses, etc.
3. Write down any observations made during the session. For example, where did the session occur and when, what was the nature of participation in the group? Were there any surprises during the session? Did the tape recorder break?
As part of the evaluation of the New Hampshire Fit WIC Project, focus groups were conducted with Latino and non-Latino participants at four WIC agencies in New Hampshire. This report is based on five focus groups conducted between March and July, 2008.

The purpose of the participant focus groups was to “assess participant knowledge, perception, barriers, and receptivity to education on overweight and physical activity.” (Fit WIC Evaluation Plan). Data obtained from the focus groups will be used to help WIC staff develop appropriate materials and to find out how participants can be made more comfortable in talking to WIC staff and their families about weight and physical activity.

Method and Sample

Five focus groups were conducted with 44 participants (39 women and 5 men) at different WIC agencies throughout the state (Belknap/Merrimack WIC in Concord, Rockingham Community Action WIC in Exeter, Coos County Family Services WIC in Berlin, and two separate groups at Southern NH Services in Manchester). Two groups were Latino and three were non-Latino. Each session was attended by between three and thirteen participants; 21 were Latino and 23 were non-Latino.

Each session was conducted by a trained facilitator and lasted between one and one-half and two hours each. A note taker was present and all sessions were audio taped (with permission from the participants) for any additional information that could be added to the notes. The Latino focus groups were conducted in Spanish by a Latino WIC nutritionist with a Latino note-taker. The country of origin breakdown for the Latino groups was 50% from Mexico, 30% from the Dominican Republic, 10% from Columbia, and 10% from Guatemala. Notes were taken in Spanish and then translated into English. The notes from all groups were then forwarded to the evaluator for independent review and analysis.

Participants were informed of the purpose of the focus groups, assured of anonymity and confidentiality, and were encouraged to speak openly. Efforts were made to gather input from all of those attending. Questions were framed in order to assess participant comfort with their knowledge about overweight in children and adults; availability of food resources; comfort with physical activity and play skill knowledge; comfort with talking to WIC staff about overweight; and confidence to change behavior. (See Appendices of Evaluation Plan for participant focus group guidelines, questions, and protocol.)

Results

I. Comfort with knowledge about overweight in children and adults

Perceptions about Overweight. Of the 23 non-Latino participants, the most frequent responses for judging overweight were whether children ate healthy foods (7), by appearance (5), whether they were physically active (4), based on a nutritionist’s (2) or doctor’s opinion (2), how children compared with the “average” (2), or based on medical charts (1). The Latino groups relied on some behavioral indicators, such as eating well, eating a variety of foods, and laziness, as well as whether a child was sick regularly, but relied more on medical opinions (7) as to overweight.
Both groups mentioned height in relation to weight; that is, if a child was tall, he/she might be heavier.

Warning signs were similar in all groups, including sluggishness/laziness, high cholesterol, irregular or heavy breathing, appearance, too much television, fast food, wanting to eat all the time, and generally not eating well. Non-Latinos were more apt to mention depression, embarrassment, and attitude as warning signs. The word “obese” held similar meanings across groups as being dangerous, unhealthy, and preventing children from engaging in regular activities.

Causes of Overweight. All groups mentioned poor eating habits, lack of exercise, and genetics as possible causes of overweight in children. Two groups discussed television and the relationship between television and food as a problem. Non-Latinos brought up many more topics, such as lack of education on portion sizes and what foods are healthy, poor parental role modeling (including uncooperative spouses in their own eating habits), fast food, busy lifestyles, using food for comfort and to alleviate boredom, and failure to monitor all child environments (schools, daycares, babysitters, etc.). Non-Latinos mentioned economics more often; that is, the higher cost of buying healthy foods and seemed more aware of processed foods. They brought up cultural factors, such as the availability of a wide variety of foods that are not necessarily healthy but marketed to attract consumers and foods that can be prepared quickly to accommodate the fast pace of American life. One Latino group mentioned climate, sporadic work schedules, and laziness as contributing causes. The other Latino group mentioned diabetes as a cause.

At Risk. Most participants recognized that setting eating patterns when children were young was critical for long-term health. Risks included heart disease, diabetes, and breathing problems. At risk meant that children were “close to the line” based on growth charts. Members from both cohorts said that health care professionals were worried about weight because of the cost to the health care system, as well as the physical and mental consequences of overweight. Three of the non-Latinos said they had overweight children, but there were several comments reflecting their unwillingness to accept the recommendations of doctors. Their attitude was one of watchfulness and avoiding overreaction, but were taking small steps, such as using low-fat milk. Of the 21 Latino participants, 7 reported that they had overweight children (1/3).

Prevention. Ways to prevent overweight included controlling portion sizes, regular exercise, parental role modeling, a healthy diet that includes fruits and vegetables, teaching children healthy eating habits young, having a regular eating routine/schedule, limiting television time, and shopping carefully. One of the Latino groups discussed the need for more activities for children, that they had no transportation to programs, and had no place to walk.

Responsibility. Both Latino groups said that mothers were responsible for eating control. Non-Latinos said parents were responsible when children are young, but both parents and the child are responsible as they get older. They also mentioned that schools, grandparents, television, the food industry (especially food labeling), and societal norms were factors. Non-Latinos seemed to take a wider view of where the responsibility lies than Latinos and tended to emphasize cultural factors.
II. Availability of Food Resources

Latino groups were not asked if they had enough food. There was no real response to what would help or if they wanted a group session, but this issue comes up later in the section on learning new techniques for behavior change. In one non-Latino group, seven said they had enough food; one said sometimes; one said mostly. The other two groups focused a lot on economics and while they felt their children did not go hungry, emphasized how difficult it was to buy the right foods. Strategies for meeting this challenge included using leftovers, watching for sales, gardening, and cutting out other expenses. All groups described the right kinds of foods as healthy snacks, meat, granola, fresh produce, whole grains, juices, and water. Low sodium foods and eating in moderation were mentioned. Difficulties included the expense of healthier foods and getting kids to eat foods that were not “starchy”.

III. Comfort with physical activity and play skill knowledge

Play. Latinos were not specific on how much children should play. Only one person said one hour a day. Non-Latino responses ranged from 30 minutes to as much time as possible throughout the day. Latinos were not asked the benefits of play. Non-Latino groups listed the benefits as better health, acceptance, self-esteem, better sleep, eating better, being happier, having better concentration, and promoting family bonding if activities were done together.

All five groups reported doing activities with their children, including walking, biking, swimming, exercises, dancing, and running, but there were more sedentary activities reported by one of the Latino groups, such as reading, music, and sewing. Some had outside activities like basketball, baseball, soccer, swimming classes, and gymnastics, but all groups mentioned hardships, such as having no time, being too tired, having no yard or play area, winter climate, and safety concerns that prevented outside activities. Other barriers included non-support of parents, television, lack of parks and recreation centers, computers, weight, and fear of making noise in their apartments.

Need for Ideas. On the question of their need for new ideas for physical activities and play skills, three of the non-Latinos said yes. The Latino groups wanted more indoor activity programs and less expensive options. Some said they lacked a sense of community where they lived, had no transportation to activities, were not aware of what programs were offered and where, were concerned about safety, and language barriers which make it difficult for them to understand the information that is out there. One person said they would like more seminars or discussion groups (like the focus group) and more information in Spanish.

IV. Comfort with talking to WIC staff about overweight

Accessing Information. All five groups said they get information on nutrition from WIC, but one Latino group felt the information was not always specific or prescriptive enough and that WIC needed to provide new information to motivate parents. Other sources of information mentioned were community centers, doctors, nutritionists, the Internet (including the UNH Cooperative Extension website) the UNH Cooperative Extension cookbook, the library, food labels, and the Bureau of Special Medical Services.
Types of Information. Participants found information most useful on the food pyramid, what foods help with different health problems, the amount and quality of portions (daily values), a specific “drawn-out” diet plan (including what food to provide, with nutritional values, what they are lacking, and the best snacks), guidelines for exercise, the benefits of physical activity, and parenting help (ways to show kids how to eat without feeling like it is a punishment, thereby producing guilt.) All non-Latinos said they were comfortable seeking information from WIC staff about nutrition. In one Latino group, there were no responses to this. In the other group, four said they were comfortable and glad they have a place to get help.

V. Confidence to Change Behavior

Non-Latinos said their ability to change behavior depended on the child, that it was difficult to change routines, and mentioned the difference between boys and girls. They talked about peer pressure, indulgent grandparents, and the difficulty of changing behaviors after age six. Some in one Latino group said communication was good with their children, but the second group expressed lack of confidence trying to change behaviors and discussed the guilt they felt about denying food to their children.

The non-Latino groups expressed a much more rule-oriented approach to monitoring food, being tough and consistent, while the Latino groups tended to talk more about communication, exercising with their children, eating together as a family, and not forcing kids to change.

What works. Non-Latinos listed modeling, making slow changes, patience, and consistency as effective. Latinos mentioned family activities, parks outside (weather permitting), exercises the kids learned at school, good communication, denying fast food. One person stated that when she sent her children to Texas they lost weight because they could play outside at grandparents.

What does not work. Some Latinos said taking food and/or television away was too punitive, but eating in front of the television was a mistake. They felt food should not be used as a reward or punishment. The most frequent responses from non-Latinos were that demanding change, having a sporadic eating schedule, yelling, and punishments did not work well for them.

Learning New Techniques. Only one Latino group was asked about this. They again mentioned needing transportation, wanting their children to learn English, and having more discussion groups like this one. Non-Latinos were open to new ideas, wanted group sessions, liked talking to other parents, wanted to find out what works for others, and would prefer structured discussions around a particular theme.

Conclusions

- Latinos seemed to have more confidence in medical opinions on overweight.
- Latinos were more open about overweight in their own children. Since Latino children in New Hampshire have higher rates of overweight and obesity, this may help explain the higher rates.
- All groups seemed to have general knowledge of the causes, risks, and prevention of overweight, but non-Latinos had a much wider view of where responsibility lies. Latinos cited mothers as responsible for food control, while non-Latinos cited parents, the child, and outside influences, such as lifestyle, television messages, school responsibility, and societal norms.
Availability of food for all groups was related to the expense of healthy foods and problems getting children to eat them.

Latinos did not express a clear idea of how much a child should play and were more likely to mention sedentary activities, perhaps because of the way the question was interpreted. (i.e., play being not limited to physical activity)

Latinos mentioned the difficulty of adjusting to lack of community, transportation problems, severe climate, and lack of space, all of which limit opportunities for outdoor play.

Latinos expressed more specific needs for new ideas/techniques, such as types of indoor activities, where to go for cheaper programs, and more information (especially in Spanish) about what is out there. They would like informational seminars and discussion groups.

Non-Latinos expressed comfort with WIC staff, but Latinos seemed less so in that while they were glad to have a place to get advice, they requested specific types of information, such as diet plans, nutrition and activity guidelines, and parenting help.

Latinos appear to be far less confident when it comes to behavior change. They seem to require more guidance on how to accomplish this in a positive way.

Non-Latinos seemed more rule-oriented in controlling food, while Latinos were more apt to express guilt.

All participants expressed interest in learning new ideas in a discussion group format, especially if centered on a specific theme.

Overall, cultural differences between Latinos and non-Latinos came into play in terms of who is responsible for overweight, understanding play skills, types of activities, family dynamics and the role of motherhood, parenting skills in relation to behavior change, acceptance of authority, difficulties with a perception of lack of community, transportation problems, perceived limitations of the New England climate, and language barriers.

Recommendations

- Conduct small group discussions with participants.
- Conduct sessions around specific themes.
- Keep cultural differences in mind when planning programs.
- Provide information in Spanish.
- Promote comfort with WIC staff by asking for more feedback and suggestions from participants.
- Develop money-saving strategies for buying healthy foods.
- Develop lists of indoor physical activities in response to concerns about the climate, limited outdoor space, and safety concerns.
- Develop lists of free activities in different communities.
- Develop parental strategies to address behavior change.
Appendix K: Participant Survey Summary
### Participant Survey Summary

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#### SECTION A: Fit WIC Participant Information

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4. Relationship to Child

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5. Ever been told child is overweight

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<td>6. Think your child is overweight or at risk</td>
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<td>9. Family visited public places (parks, playgrounds, libraries, etc) in past week</td>
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<td>% (n)</td>
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<td>1 – 2 hours</td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
</tr>
<tr>
<td></td>
<td>3 – 4 hours</td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
</tr>
<tr>
<td></td>
<td>5 or more hours</td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
</tr>
<tr>
<td>11. Receive a Fit WIC Kit today</td>
<td>Yes</td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
</tr>
</tbody>
</table>
Appendix L: Participant Survey Data Entry Screen Shots
## Section A of Fit WIC Participant Survey

### A1. Is your child:
- 3 years old
- 4 years old

### A2. Is your child:
- Male
- Female

### A3. Is your child of Hispanic origin:
- Yes, child is Hispanic
- No, child is not Hispanic

### A4. What is your relationship to the child:
- Parent
- Grandparent
- Other Family Member
- Other (Specify)

### A5. Have you ever been told that your child is overweight by any health care provider:
- Yes
- No

### A6. Do you think your child is overweight or at risk of becoming overweight:
- Yes
- No

### A7. On a typical day, does your child participate in 1 or more hours of active play:
- Yes
- No

### A8. On a typical day, do you spend 30-60 minutes helping practice physical skills:
- Yes
- No

### A9. In the past week, did your family visit public places like parks, playgrounds:
- Yes
- No

### A10. About how many hours does your child sit and watch TV or movies or video games on a typical day:
- None
- Less than 1 hour
- 1-2 hours
- 3-4 hours
- 5 or more hours

### A11. Did you receive a Fit WIC Activity Kit today:
- Yes
- No
<table>
<thead>
<tr>
<th>Section B: Fit WIC Activity Kit Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>b1. Did you ever use the Fit WIC Activity Kit (or any part)?</td>
</tr>
<tr>
<td>✔ Yes</td>
</tr>
<tr>
<td>b1a. If no why not?</td>
</tr>
<tr>
<td>☐ No time</td>
</tr>
<tr>
<td>b2. In the past two weeks, about how many times did you use the items, activities or ideas from the Kit with your child?</td>
</tr>
<tr>
<td>☐ None</td>
</tr>
<tr>
<td>b3. In the past two weeks, did you do any of the following activities from the Fit WIC Activities book with child (Check all that apply)</td>
</tr>
<tr>
<td>☐ We did not do any Fit WIC Activities</td>
</tr>
<tr>
<td>☐ Played one or more of the games described in the book</td>
</tr>
<tr>
<td>☐ Made one or more of the homemade play objects in the book</td>
</tr>
<tr>
<td>☐ Did at least one exploring or outing activity described in the book</td>
</tr>
<tr>
<td>☐ Did one or more of the indoor or outdoor helping activities</td>
</tr>
<tr>
<td>☐ Used one or more of the toys from the Fit WIC Kit</td>
</tr>
<tr>
<td>b4. Did you use any of the Quiet Time suggestions from the book?</td>
</tr>
<tr>
<td>✔ Yes</td>
</tr>
<tr>
<td>b5. Did your child participate in a Fit WIC Activity playgroup since last visit?</td>
</tr>
<tr>
<td>✔ Yes</td>
</tr>
<tr>
<td>b6. How much did participating in the Fit WIC Program help you learn about the importance of physical activity in keeping your child healthy?</td>
</tr>
<tr>
<td>☐ Not at all</td>
</tr>
<tr>
<td>b7. What do you like or dislike about the Fit WIC Activity Kit and Book?</td>
</tr>
<tr>
<td>b8. Please provide us with feedback or suggestions</td>
</tr>
</tbody>
</table>
Appendix M: Fit WIC Impact Report – Graphic Presentation of Individual Intervention Agencies
Among intervention agencies | most recent visit | compared by intervention agency

Use of Activity Book and Kit:

- Ammonoosuc Community Health Services:
  - Used 3+ times in past 2 weeks: 19%
  - Used 1-2 times in past 2 weeks: 37%
  - Used, but not in past 2 weeks: 36%
  - Never used: 8%

- Coos County Family Health Services:
  - Used 3+ times in past 2 weeks: 23%
  - Used 1-2 times in past 2 weeks: 40%
  - Used, but not in past 2 weeks: 23%
  - Never used: 14%

- Community Action Program Belknap-Merrimack Counties:
  - Used 3+ times in past 2 weeks: 21%
  - Used 1-2 times in past 2 weeks: 41%
  - Used, but not in past 2 weeks: 22%
  - Never used: 16%

- Southern New Hampshire Services:
  - Used 3+ times in past 2 weeks: 24%
  - Used 1-2 times in past 2 weeks: 37%
  - Used, but not in past 2 weeks: 11%
  - Never used: 28%

- Rockingham Community Action:
  - Used 3+ times in past 2 weeks: 23%
  - Used 1-2 times in past 2 weeks: 36%
  - Used, but not in past 2 weeks: 19%
  - Never used: 22%
In the past 2 weeks, did you do any of the following activities from the Fit WIC Activities book with your 3–4 year old child?

- Did FitWIC activities: 51%
- Played games described in book: 28%
- Used toys from kit: 15%
- Did exploring or outing activities: 11%
- Did indoor or outdoor helping activities: 25%
- Made homemade play objects in book: 36%

Among intervention agencies: most recent visit | compared by intervention agency

- Ammonoosuc Community Health Services
- Coos County Family Health Services
- Community Action Program Belknap-Merrimack Counties
- Southern New Hampshire Services
- Rockingham Community Action
Did you use any of the Quiet Time suggestions from the Fit WIC Activity Kit?

Among intervention agencies | most recent visit | compared by intervention agency

- Ammonoosuc Community Health Services: 29% Yes, 70% No
- Coos County Family Health Services: 40% Yes, 60% No
- Community Action Program Belknap-Merrimack Counties: 38% Yes, 62% No
- Southern New Hampshire Services: 34% Yes, 66% No
- Rockingham Community Action: 42% Yes, 57% No
### Did your child participate in a Fit WIC activity playgroup since your last visit?

<table>
<thead>
<tr>
<th>Intervention Agency</th>
<th>Percent Yes</th>
<th>Percent No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonoosuc Community Health Services</td>
<td>91</td>
<td>9</td>
</tr>
<tr>
<td>Coos County Family Health Services</td>
<td>74</td>
<td>26</td>
</tr>
<tr>
<td>Community Action Program Belknap-Merrimack Counties</td>
<td>73</td>
<td>27</td>
</tr>
<tr>
<td>Southern New Hampshire Services</td>
<td>64</td>
<td>36</td>
</tr>
<tr>
<td>Rockingham Community Action</td>
<td>83</td>
<td>15</td>
</tr>
</tbody>
</table>

Among intervention agencies | most recent visit | compared by intervention agency
How much did participating in the Fit WIC program help you learn about the importance of physical activity in keeping your child healthy?

<table>
<thead>
<tr>
<th>Intervention Agency</th>
<th>A lot</th>
<th>Quite a bit</th>
<th>Some</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amonosuc Community Health Services</td>
<td>2</td>
<td>20</td>
<td>63</td>
<td>4</td>
</tr>
<tr>
<td>Coos County Family Health Services</td>
<td>11</td>
<td>33</td>
<td>46</td>
<td>3</td>
</tr>
<tr>
<td>Community Action Program - Belknap-Merrimack Counties</td>
<td>9</td>
<td>36</td>
<td>47</td>
<td>8</td>
</tr>
<tr>
<td>Southern New Hampshire Services</td>
<td>14</td>
<td>33</td>
<td>42</td>
<td>17</td>
</tr>
<tr>
<td>Rockingham Community Action</td>
<td>11</td>
<td>33</td>
<td>47</td>
<td>7</td>
</tr>
</tbody>
</table>

Among intervention agencies, most recent visit compared by intervention agency.
What do you like or dislike about the Fit WIC Activity kit and book?

Among respondents who provided a response:

- **Like the Kit**: Ammonoosuc Community Health Services 13%, Coos County Family Health Services 19%, Community Action Program Belknap-Merrimack Counties 24%, Southern NH Services 16%, Rockingham Community Action 20%
- **Like the activities**: Ammonoosuc Community Health Services 18%, Coos County Family Health Services 20%, Community Action Program Belknap-Merrimack Counties 26%, Southern NH Services 18%, Rockingham Community Action 18%
- **Like the items**: Ammonoosuc Community Health Services 16%, Coos County Family Health Services 19%, Community Action Program Belknap-Merrimack Counties 19%, Southern NH Services 21%, Rockingham Community Action 19%
- **Like information / ideas**: Ammonoosuc Community Health Services 26%, Coos County Family Health Services 36%, Community Action Program Belknap-Merrimack Counties 25%, Southern NH Services 29%, Rockingham Community Action 32%

Among intervention agency respondents | most recent visit | compared by intervention agency

- **Positive experiences using the kit**: Ammonoosuc Community Health Services 56%, Coos County Family Health Services 58%, Community Action Program Belknap-Merrimack Counties 58%, Southern NH Services 41%, Rockingham Community Action 54%
- **Negative comment**: Ammonoosuc Community Health Services 5%, Coos County Family Health Services 3%, Community Action Program Belknap-Merrimack Counties 3%, Southern NH Services 0%, Rockingham Community Action 0%
- **Other**: Ammonoosuc Community Health Services 7%, Coos County Family Health Services 3%, Community Action Program Belknap-Merrimack Counties 3%, Southern NH Services 4%, Rockingham Community Action 3%
- **Did not use**: Ammonoosuc Community Health Services 3%, Coos County Family Health Services 1%, Community Action Program Belknap-Merrimack Counties 4%, Southern NH Services 3%, Rockingham Community Action 1%
Please provide us with any ideas you would like to share about your experience with the Fit WIC program.

Among respondents who provided a response:

Among intervention agency respondents | most recent visit | compared by agency

Like the items

Positive experience

Suggestions/improvements

Other
Appendix N: Fit WIC Impact Report - Responses to Open-Ended Survey Questions
B7: What do you like or dislike about the Fit WIC Activity kit or book?

1256 Meg liked the music CD and the bean bags.
697 Everything in the book is very useful and fun.
3179 It had some good ideas.
7031 I thought the book had some wonderful ideas.
7006 New ideas.
3827 The bean bags hurt.
3159 Great fun activities.
6364 The CD was great, my kids enjoyed it and the bean bag toss.
6074 My child's favorite things are the bean bag toss and dancing with the CD.
1621 Did not dislike anything - kids loved bean bags and ball.
1918 I thought it had great ideas!!
4447 Very helpful.
2143 Keeps Ashley busy.
5466 I like the activities.
5787 It gives you ideas of inexpensive activities to do with my kids.
5227 Great ideas.
4393 It has good ideas.
2835 Good ideas.
4242 It helps my kids learn new ideas and with imagination.
6105 That you liked and understood it.
6054 Different ideas for physical activity and variety.
705 It's all helpful.
4929 Good ideas for things to do with the kids.
5773 Everything.
2310 A lot of good suggestions for activity.
5122 It has a lot of wonderful ideas on physical activity that are age appropriate. I really do enjoy it.
4763 Great as how to use our free time better to have more fun.
6768 It gives good ideas.
7342 Good ideas.
1979 I thought it was very interesting and helpful. It gave me a lot of ideas to help my sons stay active and want to do things besides watch TV.
3530 We like the games.
7024 Hopscotch, bean bag, and beach ball.
5382 Gave me more ideas.
1288 New ideas to try.
6988 New ideas.
6958 Very simple and easily explained with common items that I already have.
7025 Gave us some new ideas for new activities.
3826 It keeps him moving all day long.
6394 Makes Christopher learn new things, how to be patient.
5765 Erin really enjoyed the kit - especially the bean bags.
5080 Think it is good for the kids.
6415 Gave me more ideas to work and play with my child.
6899 The activities are fun to do.
3176 Used it a couple of times.
6996 Great ideas and lots of fun.
6428 Everything, it gives me and my son alone one-on-one time.
6986 I liked the bean bags and suggestions.
7009 Nothing to dislike, gives great ideas about playing and helping your child.
6366 My child did some of the activities with her school.
7007 Gave good ideas to help keep them interested.
6900 Great ideas for items that you already have around the house.
1899 I like making the games then playing with him. I don't hate it at all it's wonderful.
7278 We like it.
7279 We like it.
Very interesting for the children, they love it with their older siblings.

With four kids it was a bit hard to sit and read the whole book but he does love the CD.

It has good ideas.

Gives ideas for activities.

We only had it for a short time but he enjoyed the activities.

Gives Riley more productive things to do.

New ideas.

Haven't done program yet.

I liked all the information it gave for activities to do with the kids.

Good programs and fun for my child.

The different activities!

I like that my son plays with the toys.

We learn different ways to play with the kids.

It gave me some good ideas for the kids.

It had a few cute ideas for fun with your kids.

I love it, it gives me ideas to use at playtime for signing class I teach. At house parties with family the games were great to introduce.

Like the activities, great ideas.

All of the activities.

Liked CD.

We enjoy the whole book.

We liked all the activities.

Basic Ideas.

My kids like the games and throwing the bean bags.

The kids love the bean bags and bear book (too much TV). They also enjoy dancing to the music.

The toys and games.

There are many great ideas how to communicate with our children.

New ideas.

Connor learned a lot from the activity kit, balancing, catching, etc.

There are some original ideas in it.

I like all of the activities they have in the books. My children love the bean bags.

Teaches them how to play the games. Helps them learn.

Teaches them how to play the games. Helps them learn.

I like the ideas on games to play.

We love how many different ideas there are.

We liked all the fun movements and activities we did together. We are sad that Lisa is leaving.

The games. I loved it.

Helpful, simple play.

I just loved it. I like all the suggestions I can get and I'm glad a program exists to people.

Like the "Hour a day" motto. Great ideas for activities that are age appropriate for varying ages.

It makes my daughter happy.

I lost it.

It was very helpful on ideas to do.

We get to play one-on-one with her and she really like her games.

I think there should be more.

We like to play the games and read the tips.

How creative you can be.

Excellent book! Great program! My son looks forward to working with Lisa.

I like the idea of getting the kids moving.

Gave me some good activities to do with Tianna.

The new ideas that I may not have thought of.

It gives you new ideas to do things with your child.

I use anything that works.

I really enjoyed the bean bag throwing game. That was a wonderful indoor game.

It is fun and low cost activities.

Gave us new ideas for playing.

The excitement on my daughter's face.

Very helpful ideas. Something different for everyday activities.

We liked it, it gave us different fun things to learn and do!

We lost the book and things that go along with it.
Bean bags are still pretty popular with her. Everything is common sense, really didn't learn much from the book. It was enjoyable to play with the kids. Daughter was excited to try new activities. Its very helpful and interesting. Good ideas.

It's a good way to help parents interact with their kids. All kinds of new ideas. I liked that we did it together. Wonderful program.

Ideas, bean bags, cassette tape and book. Skyla is so active at Daycare and on weekends we go sledding or playing outside and visiting family and friends, so didn't always think of the kit.

Most of it. Bean bags. Gave good ideas for easy game that can be played indoors or outside. All different activities, games and music. Enjoyed it but had a house fire and it burnt up. I like a lot of the games and book suggestions.

I think it is a good idea. It would be nice to have more activity play groups for kids. Has some great ideas and the children don't really know they are learning. Suggestions and props for play.

Great ideas! Liked the colorful objects. Be creative. It was very useful. Sam absolutely loves it! Learning, gave me better ideas. I like some of the suggested games. I was concerned about the safety of the toys that came with it.

Very useful suggestions. Liked bean bags and music. It gave you suggestions about things you can do with your child. Games etc. and tools to use. Gives you some great ideas to do with your kids that don't cost a lot if anything at all.

Liked everything about it. I even learned from it. New ideas. Good activities.

Love the bean bags. The creative games and activities.

Love the ideas provided along with the toys. He loves the bean bags. Blocks would be great - mentally good toy.

It has good ideas. I liked the book it gave me game to play on rainy day instead of TV. My 7 year old wants to play too!! I like how the games can be made with things at home.

Gives us more ideas to use to get our child in more physical activities. The neat ideas. Liked it!

My daughter loved the time focused on her. Lots of fun ideas. I like it a lot.

Very nicely organized, easy to understand. Easy for small hands to use toys that are included. It is full of different ideas.

Great ideas, easy to implement. The creative crafts. The time spent together with both my sons. The smiles on their faces are priceless.

He liked the bean bags. Book is full of ideas and activities.

So many ideas and choices to be able to do something different everyday instead of the same activities daily.
All of it.
The kids loved the bean bags and the beach ball.
Its great.
It's a wonderful idea he loves the ball activities.
The children loved the bean bags.
Liked it a lot.
I like the activity.
It was fun for us and the kids.
I like the way the games are fun and simple it makes for an easy clean up but a fun time.
Loved bean bags.
It is always nice to have more ideas of fun things to do with my children.
Its great.
Its great.
Both my children enjoy the games and activities. The most popular is the CD the boys love dancing tom the music.
Like the ability to use creativity with physical activity.
It has lots of good ideas to keep active and easy ways to incorporate activities into daily life.
It was nice for a couple days then my child got bored with it.
I enjoyed reading it and participating in some of the activities with my children.
Too long ago.
New things for the kids to do.
I like how there is all kinds of learning games also didn't get the chance to make stuff. But was interested in it.
Liked it all.
I like the idea of getting active while having fun.
It is convenient and handy. I can put it in the bag and go.
I had a lot of great ideas.
I like the ideas of things to do on rainy days.
Makes you realize how much it's important to stay active.
We loved the CD and the bean bags.
It refreshed my memory of some fun games that I could play with my kids.
Liked, it was informative.
I don't remember receiving it.
Keeps the kids busy.
My children all enjoy the activities in the book they are a variety of ages and all genuinely enjoy.
I like it because you get to spend a lot of time with the kids that you would never do.
We liked playing with the bean bags.
Good ideas for inside play.
He was interested at first but he's more like a 6/7 year old. He likes to do big boy things not stuff for babies.
I like all.
It helps give you ideas on what to do.
I like how they gave different ideas for indoor and outdoor play.
I thought it was a great idea even if we didn't use the quiet time.
I like the book because it gave me a lot of new ideas with my children.
Nothing I disliked.
I like all of the different activity ideas.
Gave me new ideas for my kids.
It was informative, easy to use and lots of fun for the kids.
Good time.
The kit was awesome.
The quiet exercises.
It has a lot of great activities.
There is nothing to dislike, it's great!
Loved the hopscotch idea with the tape.
It is very interactive to my child.
CD, bean bags and book were great.
Los juegos y to das las actividades estan muy bien.
We both love playing with the bean bags.
We like it a lot and enjoyed the activities, games, etc. Kids did a lot of things and played a lot with the bean bags and ball. I think the Fit WIC book great.

I think it is a great program.
The whole kit was great.

Very useful suggestions.
The game and outside suggestions.

It is all great.
Quality time to sit with my children. Having ideas from the book.

Great music! Great for winter days!
Music.

Really like the music.

Not interested.
Like.

Do not use.

Great ideas for fun and simple games and activities. Things easily understood/set-up/done for this age.

Lots of ideas.

She liked the bean bags throwing and counting.

I liked the outdoor ideas.

New ideas.

Learn new things.

I don't normally have time. Mom normally does the activities.

The CD is great for dancing to.

I liked that he knew it was his so he wanted to use it all of the time.

Gives good indoor ideas.

Practical suggestions.

It helped us learn some activities.

Very useful and creative.

She likes to play and have fun.

I never try.

Some helpful hints of games.

It's nice to get some new ideas. We are usually pretty creative with our play and activities. But the books are great!
The bean bags open and are a choking hazard. The money the state is using to fund the Fit WIC could be better utilized elsewhere.

I like it a lot and it's very good.

I liked the Fit WIC Activity Kit it had good ideas and things to do.

Great ideas for physical activities that all my girls could participate in.

I like it because it makes my children feel good and helps them learn.

Fun family ideas.

I like how it made me and my daughter bond more.

The bean bags!

It has a lot of good ideas on playtime and activities.

Do not assume those in WIC don't play with their children. I sometimes feel like you talk down to us like we are uneducated. Just because we are on WIC

I liked being able to have other ways to play with her especially the bean bags.

Game ideas.

It was ok.

We enjoyed tossing the ball and bean bags. Unfortunately we have a very busy day.

Loque me gusto fue que pude dibertir a mis hijos mas.

The different activities.

I like the diversity of things suggested and find them very helpful.

I liked everything.

I like it because it makes me do things with the kids.

Teach him how to take turns along with keeps him active.

Michael liked the bean bag game.
I like that the activities were easy to incorporate my younger son into.

Good suggestions.
The bean bag toss.
The sand bag game was awesome.
It's great.
I think it was all great. We loved it!
I like how it explains on how to keep a kid healthy.
I liked everything; its age appropriate and the activities were fun!
All great ideas for kids.
All great ideas for kids.
I like the range of ideas.
It's a pain in the butt.
Bean bags.
I like the different suggestions.
All the ideas for play and exercise.
I like it very much it will help my 4 year old be active.
Is good.
I really enjoyed the kit and book. There was very good information.
Was able to play several games with the toys.
Likes it.
I enjoyed it.
Liked the different activities.
Good ideas to keep child active and very interested. A lot of the same activities are in her regular routine.
Good activities.
Good suggestions and age appropriate.
The music.
The things it explains you can make with my kids.
Music, bean bags and beach ball.
Nice activities to do together. Made for time well spent and he enjoyed what we did.
It was great thanks.
Love it.
Teaching me new ways to keep my kids healthy and active.
Haven't really participated in any activities.
I especially liked the CD. It is an excellent at home activity and in the vehicle.
We played with the ball and the CD.
The CD and book of ideas.
Easy to fit into your day. Items you can use at home. The kit was great.
Good ideas for play.
It was ok. We did some things.
I liked it a lot.
The boys enjoyed it a lot - made them feel important.
Keeps child occupied while doing other activities.
Great ideas for inside play!
I like the entire kit. We have had a lot of fun and learned a lot.
Useful information and Malakai enjoys the activities.
Very good - after a while though it sits on the bookshelf!
I think it's a great tool to ensure that children keep active.
Never received book or at least couldn't find it when we got home.
It's all good and educational.
We love the bean bags!!!
Great suggestions.
I'm hoping most of the activities are common sense, we liked the bean bags.
Activities, ideas - knowing I did a lot that was suggested.
Liked caring for pet, threw bean bags at empty milk jugs for bowling.
Good ideas.
Enjoyed the many ideas for activity that keeps kids off the TV and allows family time together.
I like the suggestions on how to keep him going and out of trouble.
Snow block.
It gives us good ideas we may not have thought about on our own.
The new ideas.

Kids love the bean bags and the CD!
I like that it keeps children healthy by being active.
We love the music.
It helped give me a lot of new ideas to do with the girls.
Its great.
It was all great, love the ideas.
Good ideas and keep children busy.
We enjoyed all the ideas and activities in the kit.
Liked everything about it.
A lot of new ideas.
I think it was a great resource, very creative ideas! Many of them we already do we still go to the book to get ideas.
My child enjoyed the bean bags.
Briar just loves the bean bags and the musical DVD!
When we use the kit, my children enjoy it! Thank you!
I liked everything!
Exercise and she loves to try to read.
The things you can do with just a few things at home.
It has really good ideas.
Creative, easy ideas.
I liked it because it helped them with learning things.
I find it to be a helpful reference book for new ideas and it allows the kids to pick out their own activities.
I like the ideas but have so little time.
Thought it was great. My kids love the CD's.
The stuff breaks easily; doesn't last long.
Ideas and games.
They have good suggestions.
I liked the whole program. It covered all the different ways to play and learn.
I liked everything.
Its very helpful and great ideas that I would not have thought about for activities.
It was all good stuff.
Good family time.
Children really enjoyed it.
We like making our own games to play.
Gave more ideas to get my son more active.
Easy to use. Loved the book suggestions.
All the tips that it gives you about games that are fun and easy to do.
Games and quiet time suggestions.
I'm very active with my kids and this activity kit gave me many more ways to entertain the children and it didn't cost anything.
Gives more ideas especially in winter months.
I like the variety of activities.
Gives you new ideas on activities to do with kids.
I like all.
Gave me some ideas that hadn't occurred to me (example: masking tape hopscotch).
Good ideas.
Good ideas/encouraging.
Fun kid friendly activities - my kids love to play games!
I just think it's a great way for kids to interact and be physical.
The overall ideas and activities and easy.
It has great ideas.
There are a lot of helpful things.
I use it all the time, it's a great help.
There were a lot of helpful ideas.
I like ideas.
I have really no dislikes. The WIC book helps with activities for us to do together.
It's all good.
Neutral.
I love all the different ideas and my girls love the CD.
Different yet creative stuff.
I like how it gave me a lot more ideas then I originally had for my children.
It is broken down nicely and some people might find it helpful. We are fitness and health food oriented family.
My daughter loved the bean bags and there were a lot of good suggestions on playtime games.
Liked it!
I like all the ideas for rainy days.
My daughter and I enjoyed having "mommy and Athena time". She loved the CD that came with it as well.
Yes.
It is very educative.
Different options for activities and art projects.
My kids enjoy the games.
Gave me a lot ideas for indoor activities for winter.
I like simple ideas to keep my kids busy.
It gives a variety of activities that I wouldn't think of that are simple and don't cost any money.
I like that it gives us a lot of ideas on how to keep our kids interested in playing games, helping out instead of them sitting in front of the TV.
Loved all of it.
It has great ideas of fun things to do with your child.
I love all the new ideas of things to do that I didn't really think of.
The kids enjoy the music and the bean bags.
Likes the new games involving the bean bags. No dislikes.
We enjoyed the quiet indoor activities, mainly because it was something that could be done sunny, rainy, cold or hot.
I like the activities.
We loved the bean bags and the CD. Alexis loves the Ants go Marching. We had to modify some of the activities to fit her skill but it was easy.
I liked everything.
I like the different activities.
My son liked it and loved the bean bags.
I like it all, gave great ideas.
Great activity ideas.
I like everything.
I liked the fact I was able to interact with my son.
Great user-ready ideas for busy moms.
Was very helpful and the suggestions were fun for my children.
Something to do indoors during bad weather.
I like the rainy day games in the book.
Gives parents new ideas.
I liked everything in the kit.
None I like the toys!
It got good ideas that help me sometimes.
It was all fine. We used it more at the beginning.
I like the different games that they describe and it helped me play more with my son.
It's easy to bring with you. Good ideas for anywhere and anytime. Can involve his 1 year old sister.
I like all the different ideas.
I liked it all, had good ideas and games.
I didn't really use it.
My son almost knows the alphabet.
With 2 kids it's hard to have only one of everything.
Love the one-on-one activities.
I think it's very good for kids.
Less time inside.
Great ideas.
I liked it because it gave me more ideas on what to do with her.
Breanna seems to enjoy playing with the beach ball and likes to look at the book. I like the variety of activities. Emma loves the CD and some of the crafts. She also loves to read books. I like all the ideas it has, helps me to spend time with my kids. Music CD and bean bags. We liked it a lot. It was so fun to use. We use it a lot. The tape and bean bag game was fun too. Ideas. Like all activity. I like everything and so do my kids. My daughter loves the tape to make indoor hopscotch. It gave us something fun to do. Kids love the hopscotch. All of the ideas, easy to read and colorful for my daughter. Should add puzzles to the kit. My daughter enjoyed it and liked the activities and music. It was very helpful and she loves the beach ball. I enjoyed all of it and reading through the materials. Its helpful. Jillian was interested in it and it brings a lot of great ideas! We seem to like everything in the kit. The toys were a big hit with the children, especially the bean bags, beach ball, and cassette tape. They love to dance to the music. I liked all the different suggestions of activities that are in the book. I like that I got the Fit WIC Kit in the winter rather than summer. I like that I got the Fit WIC Kit in the winter rather than summer. Ideas. It is good to learn new ways to have a kid do activities. Like book with activities. I loved all the activities and enjoyed playing with my children. The ball popped the first time we used it. New ideas are always great. We get so tied up in regular activities - we forget to tie in the educational part of having fun. It shows new ways to play and do fun activities. She likes to dance to the music and she loves to look at books. The bean bags. Gives us new things to do, try and explore. Great ideas for indoor play and dancing. It all fit her level of activity. Everything was good and helpful. I loved it - she uses the ball and bean bags regularly and know shares them with her sisters. Keeps my child doing things and learning new things. The different ideas. I like the idea of getting the kids activities and busy instead of watching TV. It kept her busy and interested for a week. Creative activities kids would like to do. It gave us ideas of play activities. New ideas! I do not dislike any of it. It had helpful hints and equipment to get started. There were lots of great ideas and I loved that there were tools right in the kit to get started. Had a lot of great ideas. Keeps kids active. Gave alternative ideas on what to do with my child. I like the Fit WIC because it has great ideas. I like the Fit WIC because it has great ideas. A tape and jump rope. The kit was great but my son wants to tape everything. Great layout and suggestions on keeping kids active.
It gave me creative and inexpensive ways that were fun to make to keep us both more physically active.

It motivates my child.

Like music tape.

Very good idea!

Give good ideas as a baseline for activities.

It's more for outdoor activities.

Easy fun for my son. Kept his attention. Also fun for his younger sister to join in on most games.

It was fun but after a few months he didn't want to do it anymore.

I think the whole package is great.

The different activities.

It gives us time together to play and be together.

My daughter likes to play with toys from the kit.

It gives good ideas for more one-on-one time spent together.

Is pretty useful to get parents to start playing and teaching kids.

Lots of new ideas!

It's really helpful when you can't go outside and can only play in the house.

Like almost every suggestion.

I liked that it gave new ideas and activities that I haven't done yet.

It is compact, so it is mobile.

It was fun and helpful.

It was helpful to keep my child active.

Great ideas for busy kids - especially through winter months.

Loved the bean bags and the beach ball.

I love it.

Casey uses the Fit WIC Activity Kit at the sitters.

Lots of great ideas for active kids.

Liked it all.

Nice variety of objects.

I like it.

We liked the game suggestions, beach ball and bean bag toss kit. And he loves the CD of kids' songs, he dances like a crazy man!!

The best part about the kit is the bean bags. It helps a lot for the kids' eye-hand coordination.

I liked all the suggestions.

Think it's got good games and suggestions.

There were a lot of good ideas to do with the kids.

Bean bags and tape.

Everything.

There are always plenty of things to choose from in the book.

It's great.

There are some activities that my daughter gets running and exercising.

I don't think my child is overweight. He is very active.

It's good for first time parents or parents that don't do much with their kids.

Liked - geared towards the children specifically so it held their interest and attention.

Love bean bags, book and CD.

It's a good step for kids.

All is good no issues.

I like that it incorporates family time to help my child learn and have fun.

I don't dislike anything.

A lot of good ideas. More winter activities would be great.

I thought it was a great idea, showed me a lot of new activities.

I like all the suggestions given. Really fun ideas!

I like it but she is not that interested.

Some activities seemed too messy!

The ideas.

They liked hopscotch.

David liked the bean bag game.

Liked - lots of ideas.

Its good to get ideas to keep kids active.

I did it for my son but it isn't that good.
It was ok. Most of stuff did with child anyways. I like that it teaches my child to learn to play with others. Is good. I like that there's activities for inside and outside. Everything is cool in the kit. Like - the games. All of it. We loved the book since we don't have many. It has great ideas. I help you keep the kid. I'm already an active parent so didn't need it. I like that it's a family playtime. I like all of the information and the activities too. I think the activity book fills parents with a lot of age appropriate and developmental activities for the children that will help them understand their. Too much reading. All and everything. I really liked the equipment (music, bean bags, etc) but I already knew and used almost all the ideas listed in the book long before we ever received. I really liked the equipment (bean bags, etc) but I already knew and used almost all the suggestions in the book and have been for many years before. I like all the music, the activities, and how it teaches. Read it but didn't get a chance to use it. Very interesting, kids had a lot of fun with the packet. I like the bag games. Liked it. Liked it. Enjoy the little hints and guides towards enjoying and making learning fun for all. I thought that there should have been things for children of all ages. I have an 8 month-old, 2 1/2 year-old and a 4 1/2 year-old. I liked it all. Very helpful and fun. Keeps child active. I like how happy it keeps them and how fun it is to see their imaginations grow. It had helpful information to keep the girls busy. It had helpful information to keep the girls busy. I think it's good idea. We'll definitely use it more now that we have to be indoors more. I like the books my daughter loves to read. Didn't get to use it, it was in my car which got repossessed. Lots of ideas - she loved any games we played! It has a lot of creative easy ideas to keep my child active. Like got the kids interested in doing more structured play. They liked the bean bag, tossed it around, and had a lot of good ideas. My girls really enjoy the bean bag and the CD! I liked seeing my daughter have fun with it. Good activities to keep busy. Love the whole book. My kids love it. We like it a lot and find it really useful when looking for new things to play. Liked the game ideas. The activities and games. I think it is a very good kit. I liked how it brought us together as a family to do activities outside and indoors. That it can help keep your child busy even on those days they can't go out and play. It gave you different ideas. I love the socialization! It is great. It helped my daughter learn more and to share with her sister and brother and play together. Nothing - it was interesting with some ideas. Gives ideas. I don't dislike the kit but we are a very active family. It gave me some good ideas for games inside.
Great ideas.

Playing new games with Jacob.

Nice variety of positive things to do.

I like it a lot, gave me some fresh ideas to do with the kids.

I like all the ideas.

It was fun with bean bags.

It was all ok stuff to do with my kid.

Great ideas and information.

My son loved the CD, bean bags and roll of tape to make square on carpet.

I like the activity suggestions.

It had very good ideas.

Nothing wrong with it.

Used the bean bags a lot.

Wonderful activity to keep children stimulated.

Nothing I love it. It gives great ideas for his age.

My kids love the CD - we listen to it every day.

It was informative.

Low cost and free activity ideas.

The tape and ideas for it are great.

Great inexpensive ideas.

The activities are fun for my child and help give me ideas of things to do with my child.

Taylor loves playing with the bean bags.

Helpful in suggesting ways for getting them up and doing things.

I liked the different items and ideas that came with the packet.

Good ideas for indoor stuff when it is cold outside.

The bean bags and the CD.

The ideas are great, fun and easy to do.

Rainy day suggestions.

Its very helpful with ideas those days you need help.

I do like this program because they care about families very much.

The creative games.

Like it all.

Love the cassette and masking tape.

I like that you can use a lot of the activities on rainy days.

Can teach people who don't understand the importance. Gets kids more interested.

The fact the parents need to be part of what the children are doing.

It was great.

It was very helpful.

Homemade games!

Liked new ideas on what to do with kids. Liked using it.

Liked getting ideas on what to do with kids. Liked using the tape for different games.

Great variety of activities - very helpful.

Like music.

Great activities that keep them interested for more than 5 minutes.

Was a wonderful book for new parents and kit.

Love the ball, like and use the idea about masking tape and jumping.

What a wonderful resource for parents and families who have no idea where to start or what to do.

Easy to follow and gives new ideas.

I do not dislike anything about the Fit WIC Kit.

It gives you ideas for indoors.

I liked the many ideas that were in the book.

Loved it. Kept my daughter busy inside with all this snow.

It gives us ideas to use on days when there is "nothing" to do.

Gives me new ideas for play, less time in front of TV.

I liked all the different ideas.

Like tossing the bean bags!

The beach ball she used at the beach.

Some of the unique ideas.

Loved it - great activities in the book.
It is a very valuable kit. We enjoy it all the time.

I like the new ideas to our playtime.

He enjoys the bean bags and balls a lot, and if he gets a hold of the tape forget it he tapes toys together - no dislikes.

Helps when the weather is bad - to do activities inside.

My daughter loves everything in the book! She loves playing with the bean bags and beach ball.

Very useful.

Bean bags and games.

Love the bean bags.

I like all the games. My daughter does the bean bags almost every day.

The kids love it.

It was overall good but he just has a hard time concentrating on things.

Easy, simple activities.

I think they are great ideas and a benefit.

Liked all the ideas and activities.

The different ideas.

I liked that most of the stuff in the kit was stuff I already had in the house.

Has the cards and the papers with healthy eating that she looks at, at least once a day and she plays with the sacks often.

Like everything.

Kept us busy.

Great, easy ideas.

The bean bags, tape and CD (music).

Encourages physical activities.

Like the bean bag game.

I like it all.

Everything.

I didn’t get to see the DVD the first time.

We loved the music because we had heard it before at dance class.
B8: Please provide us with any ideas you would like to share about your experience with the Fit WIC program.

4 vouchers a month, 20 oz. of cheese twice a month to replace the milk lost.
Continue the program if possible.
I work full time and can never make it to the play groups, it would be great if there were some later in the day or on the weekends.
To help families have more ideas and ways to incorporate healthy living is always a plus.
Very supportive program for families. We are fortunate and grateful for this service.
Keep the program on.
Have them more often.
I always work nights and the mother plays and teaches him at night.
My daughter and I really enjoyed it.
I do have activities and arts and crafts from someone from Gorham Learning Center. Got off of Internet, thick folder - full.
Alexis really likes to do all the activities.
Not enough child interaction at WIC appointments.
Allie loves to throw the bean bags and plays ball with my older daughter and me after dinner 2 or 3 nights a week.
All wonderful ideas - nothing to suggest at this time.
Great idea.
More participants would've been better. A closer location.
Just that it is very important to let your child explore new things and this helped a lot.
My kids enjoyed the book and tools, also my neighbor's kids loved using the kit as well.
Provide small music instruments for active play.
It was a lot of fun, Voshon loves it.
We have had lots of fun doing indoor activities such as jumping, dancing and playing catch.
I feel more close to my 4 year old. Thank you.
La musica que puede relajar mas a los ninos.
We like to use play-dough as a treat on Saturdays instead of candy, etc.
I love what you guys do for our kids and us. Make sure bean bags are sealed.
It was great to add new things to do with him besides trucks.
I haven't had an actual lesson with the program as of yet. I had to reschedule because of the weather.
Some children do not fit into today's standard child charts.
I'm just happy that it's cheap and easy ways to play indoors on the cold days.
Fine.
It is helpful for me to find things to do with him.
When we played hopscotch we also counted the numbers to also learn our numbers.
My son uses some toys in ways not thought of in book.
My girls loved the bean bags and ball. They would toss at the same time and try to catch or hide one and tell the other if hot or cold.
It does help to have new ideas.
We don't feel it is necessary for him as he has not been identified "at risk". Also he attends the Gorham Community Learning Center which provides.
Filling this form out constantly is annoying. We use the kit only during the winter months.
Continue with the good work. Keep it up.
Looking forward to using as part of our home school physical education program.
Kids especially enjoy the music and dancing.
Quiet activities the best.
Uses things that are easily obtainable or used for other things, so there is not a lot of extra things taking up room in the house.
My daughter loved everything in the kit.
It was great.
It helped us to play more games together as a family.
None - great!
It's awesome - maybe an orientation DVD or video for the kids whose parents don't take an active role in teaching the kids.
More interactive things with groups. Park and local activities with the park service.

Enjoyable activities and was able to involve all of my kids.

More sharing activities and activities that involve siblings.

Great! Thanks.

Neat games and good ideas.

It's fun.

My son likes to play toss with the bean bags.

It's fun.

She now actually cares a bit about eating healthy and she will try more fruit and vegetables now than before.

It's nice because my daughter has a lot of energy and there are great ways to "release" it.

More interactive activities would be great.

My children used the bean bags and tape to create games of their own. It has been fun!

I found it to be somewhat helpful for me.

Thanks!

I loved it, it kept Pat busy for hours!

It is great don't change a thing.

Show parents how fun it is to be silly with kids - they like it.

I would like a kit and try it out then possibly give my feedback at another time. I'm sure Gabe would enjoy the kit! We seem to have misplaced it.

He actually kicks the beach ball around like a soccer ball when he's barefoot, he also tosses the bean bags like he's playing catch with my niece.

We used the bean bags as a preschool activity at their fair. Thank you!

Extra interest in something to bring home from WIC visit.

Like jump rope.

Keep everything the same. The program works great!

We enjoyed the CD and bean bag squares and played musical squares game which he loved.

Didn't get to play much cause we lost it in the middle of moving.

I found it to be somewhat helpful for me.

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Didn't get to play much cause we lost it in the middle of moving.

I found it to be somewhat helpful for me.

Thanks!
Good ideas if use right.
Cody loves the tape and the CD. They both dance around and sing in the car.
Look forward to going to our 1st Fit WIC playgroup.
It has been a great experience for my grandson and me.
It has taught my child the importance of exercise.
Keep up the good work. The lady does a great job!
Good activities, great people at WIC.
All the kids liked the bean bags.
Not sure. I think it's a great idea.
I am a preschool teacher so I am very aware of the importance of physical activity. But I think the program (Fit WIC) is wonderful.
My son plays with the bean bags all the time with his 16 month old brother! They both love them!!
WIC is a very helpful program.
We didn't attend any playgroups but we found the activities fun at home or at playgrounds.
We learned a lot from it. We like the activity it was so fun.
Very good.
The kids loved all the activities.
Bean bags - basketball - laundry basket.
Kids really enjoy this.
Tucker is learning patience and new skills and how to play with his brother and cousins.
So far we love it!
My kids and I really enjoyed it and hope everybody would.
Activity - DVD.
I think it's a great idea. I never thought I would be in the predicament but hopefully by spring I won't need this and would want to help others if I could.
Make up your own games the kids love to do different games.
It was great. Alexis loved the activities. It was fun.
Keep it going.
Tossing bean bags back & forth.
First of all, I would like to thank WIC because they did help to take care of my children.
It's a great program. Please continue the program.
It helped me and my son with different ideas and try new things.
We turned the bean bag pouches into carnival.
Your doing a great job.
Good work - everyone should try some of these.
Nice family time together.
Just the one-on-one involvement with my child with the games and activities. I enjoyed so much and she was able to teach her older sister.
It helps kids' coordination.
My girls really love the CD and we do a lot of the dances together.
Would like the playgroups to be more widely available.
Save paper - talk with parents about it with kids present so kids can hear about new ideas for activities.
Keep with it - it is an excellent program.
Great program - good ideas and suggestions.
My daughter is too active. She does her own exercising.
Thank you!
It's a great program!! Thank you for the supplies and support.
Parker likes the bowling.
I received the kit a year ago. Don't really use the activities so much anymore but we love the CD.
It was fun for the kids.
It's a great program!!
Bean bags are good for hand-eye coordination.
I think it is wonderful. I love having more ideas on how to keep my kids active. Thank you so much.
It's a wonderful program, keeps the parents/children motivated.
It is used each day in the Head Start Program.
I think it is a good idea and it helps a lot of parents and their kids.
The beach ball is great fun in the house!
One event / meeting to have parents and kids practice using the book and materials. We still use the stuff 1 year later and love it.

It's great for parents and the kids.

More game ideas!

The kit helped make my 2 daughters play very well together. Thank you so much.

Need to let parents know how important it is to spend time with their kids and how they learn from what they see and hear!

I like it, especially now in the summer.

Keep it going for them.

Helps keep children active.

I think it's working good.

Everything is good - thank you for your help.

Great program!

None - great program.

Showed me you don't need a huge space.

It's a great idea. I love it and enjoy participating with my children.

The ideas of the program and they work too as well. Thank you.

Doing well. Enjoy coming to WIC.

Enjoy coming to appointments.

Can we get another Fit WIC Kit please? My daughter loved it but we used it so much that everything got lost or broken.

Maybe you could include something to do with sharing.

You focus on the kids activity but I have no energy.

Los juegos que lienen en el programa de Fit WIC son muy buenos el viernes lar de los ninos.

I like more book (story, animal, good behavior).

Specific needs.

All my five children can play this game. Sand bag games they loved it. All together they played.

We had a lot of fun listening and dancing with the CD. Also the bean bag was fun too!

Keep coming up with these great ideas.

None - I think it is excellent.

Takes too much time to do during an office visit. I'd rather not have my child participate in it while in the office.

Playing with the color kit.

Thought program was fine the way it was presented.

Fine the way it is.

It helps our child to learn to share with other kids.

We stack the plastic champagne glasses on each other and create towers.

Cooking recipes like cookies or good snacks.

Learned more about teaching my children better use of time.

She loves the activities.

None, the ideas were great and my son had a great time.

Great play date getting all the kids together.

I have learned how to play with my child.

Have your child bring along friends to do the activities with, it provides more of a learning experience for everyone.

My 9 yr. old joins in the activities I'm doing with my 3-4 yr. old. The CD of favorite songs is their favorite. We came up with our own dances.

Excellent program - would strongly encourage parents to utilize this package and suggestions! Thank you!

You all do a great job.

I do not need ideas. We are a very active family doing walks every morning and bike rides (6 miles) at night.

I thought the kit was great. We haven't gotten to all of the activities yet but I think the kit has everything it needs!!

New ideas for play with the kids.
The Massachusetts Dietetic Association Abstract Form-2009

You are strongly encouraged to utilize email to submit your abstract. All abstract information must be typed in or pasted on to this form. It should remain within the border and be sent to Melanie Mott (Melanie.Mott@bmc.org) or Amy Boyce (amboyce@comcast.net) on or before February 14, 2009. Please complete all areas of the form. Refer to the abstract example and the “Abstract Format” instructions on the reverse side. **Literary reviews are accepted.**

**Title:** FIT WIC: ADDRESSING OVERWEIGHT AMONG PRESCHOOLERS

**Authors:** M-L Névoret, M.D., Simmons College, Boston, MA; V Long, MOE, RD, LD, University of New Hampshire, Durham, NH; N Herbold, Ed.D., RD, Simmons College, Boston, MA.

**Learning Outcome:** To determine whether the rate of absenteeism for preschoolers enrolled in Fit WIC is related to their body mass index (BMI).

**Abstract Text:** The 2005 CDC Pediatric Nutrition Surveillance System (CDC PedNSS) revealed that 18.1% of New Hampshire (NH) WIC children between the ages of 36 and 47 months were overweight (>95th percentile BMI for age), and an additional 19.6% of children in that age group were at risk for overweight (85th to 95th percentile BMI for age). These statistics allowed NH to obtain a federal grant to implement the USDA’s Fit WIC program (a WIC Childhood Obesity Prevention project). Three and 4 year-old WIC participants were targeted for this pilot program because NH WIC agencies serve almost 50% of the state’s preschoolers; they already experience high rates of overweight; they undergo regular screenings at WIC agencies accompanied by a parent; some research has shown that preschoolers are more likely than school-aged children to modify their lifestyle behaviors; and school-based programs may begin too late to prevent long-term obesity.

The Fit WIC program is aimed at increasing physical activity and decreasing sedentary behaviors among 3 and 4 year-olds. Every 3 months, children and their parents participated in 30-minute playgroups during their WIC visits; they were provided with Fit WIC activity kits and answered questionnaires regarding weight, activity level, and television viewing. The program’s goal was to slow the upward progression of BMI in this age group through early intervention.

Absenteeism from playgroups was an ongoing problem and led to consider whether the children failing to participate could be those most at risk for overweight and whose parents were least involved in their children’s activities. Over a 3-month period the names and BMIs of Fit WIC children absent from playgroup were compiled and plotted: of the 49 absent children, 26 (53.1%) measured in the >80th BMI percentile range. Seven children (14.3% of the 49 total) fell in the 95th percentile and above.

These findings suggest children enrolled in Fit WIC who failed to participate in playgroups should be tracked as they appear to represent an at risk or overweight population; this may help increase participation rates, or even help explain BMI trends in the final Fit WIC program analysis.

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**Presenting Author Information:**

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<td>WORK ADDRESS:</td>
</tr>
<tr>
<td>(Street) 300 The Fenway</td>
</tr>
<tr>
<td>(City/State/Zip) Boston, MA</td>
</tr>
<tr>
<td>Work E MAIL: <a href="mailto:nevoret@simmons.edu">nevoret@simmons.edu</a></td>
</tr>
<tr>
<td>Work Phone:</td>
</tr>
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</table>