

TABLE OF CONTENTS

Overview	
Participants Who Evaluated Nutrition Education	
Lesson Evaluation Summaries.	
Iron	
Eating Right During Pregnancy	
Sweet Tooth	
Cholesterol	
Fat	I-5
Fruits and Vegetables	I-6
Fast Food	I-6
Calcium	I-6
Your Baby's First Year	I-7
Oral Health	I-7
Smoking and Pregnancy	I-8
Physical Activity	I-8
Food Safety	I-8
Portion Sizes	I-9
Fiber	I-9
Prenatal Breastfeeding	I-9
Breastfeeding Support	
Statewide Promotion of Fruit and Vegetable Consumption	
Resource and Training Needs	
Nutrition Education Best Practices for FFY 2006	
State Agency Initiatives	
Value Enhanced Nutrition Assessment (VENA)	
Local Agency Best Practices	
ECTION II: NEW JERSEY POPULATION Overview	II-1
Pregnancy Nutrition Surveillance System	
Pediatric Nutrition Surveillance System	
Breastfeeding Promotion and Support	
Breastfeeding Activity Plan	
ECTION III: FFY 2007 STATEWIDE NUTRITION EDUCAT	
Overview	
FFY 2007 Nutrition Education Plan Highlights	
Implementation	III-3
ECTION IV: FFY 2007 LESSON PLANS	
Overview	IV-1
Behavioral Approach Theories	IV-2
Training Opportunities for WIC Competent Professional Authorities	

Lessons Iron......IV-5 Prenatal Nutrition IV-13IV-57 Fast Food Calcium IV-65 Your Baby's First Year IV-73 Oral Health IV-81 Individual Breastfeeding Education IV-109

SECTION I EVALUATION FFY 2006

OVERVIEW

Nutrition education dramatically improved in FFY 2006. Participants reported an overall greater interest in the nutrition education topics offered and the majority learned something new. Lessons on Fat and Fast Food were particularly well received and many respondents indicated a need for more information on these topics. Forty-two of the 88 classes evaluated this year had themes related to obesity prevention, and provided participants with strategies toward the maintenance of a healthy weight. This includes classes on Fat, Cholesterol, Fast Food, Fruits and Vegetables, Physical Activity and Portion Sizes. A significantly greater percentage of WIC participants demonstrated increased knowledge and met all lesson objectives in 2006 compared to 2005 evaluation results. This was especially true for the Fruits and Vegetables lesson and the lesson on Physical Activity. In addition, in 2006, a greater percentage of participants indicated that they would change their behavior based on what they learned in class. Overall, greater than 88% of participants indicated they would change the way they eat, feed their family, prepare food, or change their level of activity based on the information received at WIC. This improvement may be attributed to the Food and Nutrition Service's focus on "Revitalizing Quality Nutrition Services in WIC" that initiated State and Local agency efforts to improve service delivery to WIC participants. These include, but are not limited to:

- Year round promotion of fruits and vegetables and physical activity and increased visibility of these messages in the clinic environment
- Increased CPA training on nutrition education delivery methods
- Greater availability and increased quality of education materials and resources to support nutrition education
- More familiarity with lesson content and better preparation by CPAs
- Simplification of the lesson evaluation forms
- Increased use of visual aids, incentives, and technology to support education
- Facility renovations to create education classrooms and private counseling space
- Collaboration with local health departments, vendors, farm markets and community groups

Local agencies are commended for providing a higher quality of nutrition services to participants despite budget cuts, staff shortages, and space issues. These improvements are expected to continue with the implementation of Value Enhanced Nutrition Assessment (VENA) and the statewide implementation of a competency based training program for WIC staff.

The program faces the continued challenge of meeting the needs of the Spanish speaking population. More than 50% of New Jersey WIC participants are of Latino/Hispanic decent, and preliminary data suggests that Spanish is the primary language spoken in more than 20% of WIC households. Despite efforts, local agencies have been unable to recruit bi-lingual nutritionists and support staff in numbers sufficient to meet the needs of this population. The lack of bi-lingual staff

and an overall need for more CPAs (funding) are the primary barriers to enhanced service delivery cited by Coordinators.

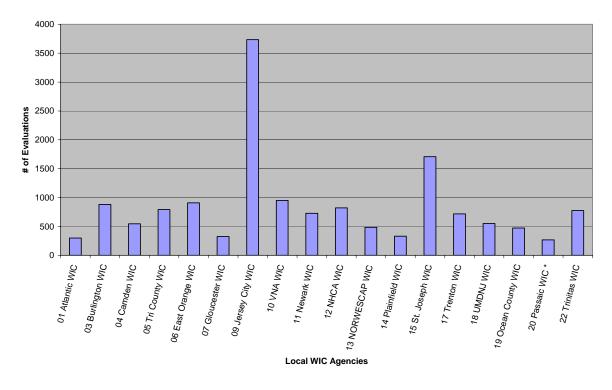
Feedback indicates that lack of space, accessible resources in English and other languages, and requirements of unfunded mandates such as Immunization and Voter Registration compromise the quality of nutrition services that agencies are able to provide. Ongoing competency based training for WIC professional staff and new employee training continue to be critical needs at the local agencies. A few local agencies still do not have access to e-mail and the internet and for those that do, these resources are generally limited to administrative staff. The widespread lack of internet access limits the ability of local agencies to take advantage of FNS sponsored, free online trainings developed specifically for WIC staff. Many agencies suggest the use of trained paraprofessionals to deliver low-risk nutrition education contacts in Spanish, and self-study or web-based education options as ways to more efficiently deliver services with available staff resources. CPAs would like to have food models, videos, more space, and the resources and staff to do food demonstrations in order to improve nutrition education in the WIC clinics.

Nutrition Education Evaluation

Local agencies provided nutrition education utilizing a variety of teaching methods, including but not limited to, group discussion, case studies, food demonstrations, tastings, and individualized instruction, based on the lesson plans in Section IV, in order to meet overall program goals for improved health outcomes for WIC participants. The lesson plans utilized included objectives, materials and methods, content outline, evaluation and nutrition education provider suggestions for active participation on the part of the participants.

This approach to nutrition education was evaluated by soliciting feedback from participants and/or caretakers of WIC participants on their views of the education received in the WIC clinics. The evaluation forms contained questions to determine participant comprehension of the information provided and willingness to change behavior based on the information provided. Local agencies determine the number of participants to evaluate by calculating 10% of their June caseload. Participants completed a total of 15,203 evaluation forms for nutrition education, 757 for breastfeeding education, and 716 for breastfeeding support. The figure below shows the number of nutrition education evaluations submitted by each local WIC agency in 2006.

Nutrition Education Evaluations By Local WIC Agency



Participants Who Evaluated Nutrition Education

The total number of evaluation forms received for each lesson evaluated during FFY 2006 is reported in the chart below. The most evaluated lessons were those on Iron, Oral Health, and Baby's First Year representing 17.1%, 13.3%, and 12.6%, respectfully, of all evaluations submitted.

Lesson Topic	# of Evaluations	% of Total
Iron	2614	17.1
Eating Right and Gaining Weight to Build a Healthy Baby	354	2.3
Sweet Tooth	1739	11.4
Cholesterol	148	1.0
Fat	1038	6.8
Fruits and Vegetables	1243	8.1
Fast Food	1417	9.3
Calcium	629	4.1
Your Baby's First Year	1931	12.6
Oral Health	2030	13.4
Let's Get Physically Active	915	6.0
Food Safety	760	5.0
Fiber*	282	1.8
Portion Sizes*	203	1.3
Total	15,303	100.00

LESSON EVALUATION SUMMARIES

Iron

Fourteen of eighteen local agencies submitted evaluations for this lesson. The total number of WIC participants/caregivers who completed evaluations after receiving this lesson was 2614. Questions one through four relate to participants' comprehension of lesson objectives. More than 94% of respondents correctly identified the importance of iron in the diet, 92% correctly identified the symptoms associated with iron deficiency, 91% could identify good sources of iron in the diet, and 91% recognized that vitamin C can enhance iron absorption. Seventy-six percent of participants met all lesson objectives.

Statewide, participant feedback on the lesson was positive. More than ninety percent of respondents were interested in the topic and enjoyed the lesson. Eighty-nine percent learned something new and 88% said that they would change what they eat based on this information. Ninety-six percent of respondents felt the instructor presented the information clearly. Suggestions for improvement included providing more classes in Spanish, offering iron rich snacks to try and providing childcare during classes.

Eating Right During Pregnancy

Three of eighteen local agencies submitted evaluations for this lesson. The total number of WIC participants/caregivers who completed evaluations after receiving this lesson was 354. Questions one through five relate to participants' comprehension of lesson objectives. Ninety-seven percent of respondents correctly identified the number of servings of dairy foods needed daily by pregnant women while 95% responded correctly for protein intake. Ninety-five percent of respondents correctly identified the average recommended weight gain for pregnancy, as well as choosing WIC cereal as a good source of folic acid. Seventy-one percent of participants recognized that folic acid is important before and during pregnancy and eighty-four percent of respondents met all five, lesson objectives.

Statewide, participant feedback on the lesson was positive. More than 93% of respondents were interested in the topic and enjoyed the lesson, 89% learned something new and 88% of respondents indicated they would change what they eat based on this information. Suggestions for improvement included providing more classes in Spanish, and using more visual aides. Some participants felt that this information was a repeat of what they received during pregnancy certification.

Sweet Tooth

Nine of eighteen local agencies submitted evaluations for this lesson. The total number of WIC participants/caregivers who completed evaluations after receiving this lesson was 1739. Questions one through four relate to participants' comprehension of lesson objectives. Eighty-seven percent of respondents correctly identified a food high in sugar, while only 79% were able to identify a beverage with added sugar, and 89% correctly identified "brushing your teeth after meals and snacks" as a strategy for preventing tooth decay. Eighty-seven percent of participants correctly identified a low-sugar, healthy snack. Seventy-seven percent of participants met all lesson objectives.

Statewide, participant feedback on the lesson was positive. Ninety-three percent of respondents enjoyed the lesson, 92% were interested in the topic, and 82% indicated that they learned something new. Eighty-eight percent of respondents indicated they would change what they eat based on the information provided in the lesson. Seventy-seven percent of participants met all lesson objectives.

Cholesterol

Two of eighteen local agencies submitted evaluations for this lesson. The total number of WIC participants/caregivers who completed evaluations after receiving this lesson was 148. Questions one through four relate to participants' comprehension of lesson objectives. Ninety-three percent of respondents correctly identified animal products as a source of cholesterol and 100% recognized that WIC cereal is a heart healthy food. Ninety-four percent correctly identified exercise as a way to prevent high cholesterol however only eighty percent could identify the amount of exercise recommended daily. Seventy-three percent of respondents met all four, lesson objectives.

Statewide, participant feedback on the lesson was positive. Greater than 97% of respondents were interested in the topic, 92% enjoyed the lesson, and learned something new and 89% would change what they eat based on the information provided. One-hundred percent of respondents felt the nutritionist presented the information clearly. Suggestions for improvement included using more visual aides such as fat models, showing a video and offering more classes in Spanish

Fat

Seven of eighteen local agencies submitted evaluations for this lesson. The total number of WIC participants/caregivers who completed evaluations after receiving this lesson was 1038. Questions one through four relate to participants' comprehension of lesson objectives. Previous participant feedback indicated an increased interest in this topic due to the popularity of low-carbohydrate diets such as Atkins and South Beach, and evaluation results indicate a need for even more education in this area. Eighty-nine percent of respondents correctly identified three different types of fat; saturated, unsaturated, and hydrogenated; however, 29% still thought that any type of fat could raise blood cholesterol. Eighty-seven percent of respondents recognized that unsaturated fats from plant foods may help lower blood cholesterol. Ninety-two percent of respondents correctly identified one way to reduce total fat in the diet. Only fifty-five respondents met all lesson objectives indicating a continued need for education in this area.

Statewide participant feedback on the lesson was positive. More than 97% of respondents were interested in the topic and enjoyed the lesson. Ninety-five percent of respondents reported that they learned something new and 90% would change the way they eat based on the information provided. Ninety-eight percent of respondents felt the information was presented clearly. Suggestions for improvement included using charts or visuals to help participants distinguish the different kinds of fats and showing participants how to modify recipes to be lower in fat (food demonstrations.) Nutritionists felt they needed to spend more time reviewing "healthy" fats and providing strategies to help participants reduce the total fat in their diets.

Fruits and Vegetables

Eight of eighteen local agencies submitted evaluations for this lesson. The total number of WIC participants/caregivers who completed evaluations after receiving this lesson was 1243. Questions one through four relate to participants' comprehension of lesson objectives. Ninety-five percent of respondents identified that eating more fruits and vegetables can lower a person's risk for heart disease and certain cancers, and 96% correctly identified the recommended number of servings to consume. Ninety-two percent correctly identified fruits high in vitamin C while ninety percent recognized food sources of vitamin A. Eighty-three percent of respondents met all four objectives for this lesson. This represents a significant increase in comprehension from last year when only fifty-seven percent of respondents met all objectives.

Statewide, participant feedback on the lesson was positive. Ninety-seven percent of respondents enjoyed the lesson, 95% were interested in the topic, 89% learned something new and 87% reported they would change what they eat based on the information provided. Ninety-nine percent of respondents felt that the nutritionists presented the information clearly. Participant suggestions for improvement included: using more visual aids, having food demonstrations and tastings, providing fruits and vegetables as part of the food package (because of their expense), and letting them use the farmers' market vouchers in their grocery stores.

Fast Food

Seven of eighteen local agencies submitted evaluations for this lesson. The total number of WIC participants/caregivers who completed evaluations after receiving this lesson was 1417. Questions one through four relate to participants' comprehension of lesson objectives. Ninety-five percent of respondents were able to identify a healthy alternative to French fries, and 90% were able to select the lower-fat meal from three fast food meal options. Ninety-seven percent of respondents identified high blood pressure as a negative health outcome from consuming a diet of fast foods high in fat and sodium. Seventy-eight percent of respondents correctly identified that a plain hamburger was lower in fat than a taco salad with cheese and sour cream and 70% of respondents met all the lesson objectives. CPA suggestions for improvement included using more visual aids to show hidden sources of fat in salads, as well as showing participants how to compare the nutrient information labels provided by the fast food companies.

Statewide, participant feedback on the lesson was positive. Ninety-four percent of respondents enjoyed the lesson, 93% were interested in the topic, and 88% learned something new. Eighty-eight percent of respondents indicated they would change what they eat based on the information provided. Participant suggestions for improvement included more training in choosing "healthy" fast foods, providing coupons for healthy selections, providing a list of fast food restaurants that offer healthy choices for kids, and more use of visual aids.

Calcium

Six of eighteen local agencies submitted evaluations for this lesson. The total number of WIC participants/caregivers who completed evaluations after receiving this lesson was 629. Questions one through four relate to participants' comprehension of lesson objectives. Ninety-nine percent of respondents recognized that calcium is necessary to build strong bones, 94% correctly identified food sources of calcium, and 90% recognized the importance of vitamin D for calcium

absorption in the body. Seventy-two percent of respondents correctly identified teenagers as needing the most calcium. Overall 64% of respondents met all four, lesson objectives.

Statewide, participant response to the lesson was positive. Ninety-nine percent of respondents enjoyed the lesson, 98% were interested in the topic, 95% learned something new, and 86% would change the way they eat based on the information provided. Ninety-nine percent of respondents thought the instructor presented the information clearly, but nutritionists thought they needed to do a better job of stressing calcium needs for growing teenagers. Suggestions for improvement included increased use of visual aids, food samples, and videos.

Your Baby's First Year

Six of eighteen local agencies submitted evaluations for this lesson. CPAs in many local agencies present this information individually to caregivers during initial and subsequent certifications of infants. However, some agencies schedule participants by status and offer this class at check pick up for parents and caregivers of infants. The total number of WIC participants/caregivers who completed evaluations after receiving this lesson was 1931. Questions one through five relate to participants' comprehension of lesson objectives. Eighty-seven percent of respondents correctly answered that infants should be able to sit with support and have good head control prior to receiving solid food. Ninety-one percent of respondents correctly identified infant cereal as the first food to introduce into a baby's diet and 87% selected the correct age of six months for introduction of infant fruits and vegetables. Ninety-two percent of respondents correctly identified six months of age as the time to introduce liquids in a cup and 89% of respondents could identify foods to avoid in the first year. Seventy-three percent of respondents met all lesson objectives for this lesson compared to only 55% percent in the previous year.

Statewide, participant response to the lesson was positive. Ninety-seven percent of respondents were interested in the topic and enjoyed the lesson. Ninety-four percent of respondents learned something new and 84% of respondents would change what they feed their babies based on this information. Ninety-seven percent of respondents felt that the instructor presented the information clearly. Some participants felt that this information was a repeat of counseling provided at certification

Oral Health

Eight of eighteen local agencies submitted evaluations for this lesson. The total number of WIC participants/caregivers who completed evaluations after receiving this lesson was 2030, almost twice as many as in the previous year. Ninety-seven percent of respondents correctly identified that vitamin D and calcium are necessary for healthy teeth and 90% of respondents could identify at least one way to prevent baby bottle tooth decay. Eighty-one percent knew that children should see the dentist by one year of age but some CPAs and participants said that dentists do not want to see children until age two and that some insurance coverage for dental care does not begin before age two. Sixty-eight percent of respondents met all lesson objectives.

Statewide, participant feedback on the lesson was positive. More than 91% of respondents were interested in the topic and enjoyed the lesson. Eighty-nine percent of respondents learned something new and would change what they eat based on this information. Eighty-nine percent of respondents felt that the instructor presented the information clearly. Suggestions for improvement

included using visual aids to show participants the different kinds of snacks to avoid and offering non-cavity causing snacks to try during the lesson.

Smoking and Pregnancy

This lesson was not evaluated in FFY 2006. Local agency staff counsel pregnant and breastfeeding women on health risks related to substance abuse (including smoking) during initial certification and make referrals when appropriate.

Physical Activity

Seven of eighteen local agencies submitted evaluations for this lesson. The total number of WIC participants/caregivers who completed evaluations after receiving this lesson was 915. Questions one through five relate to participants' comprehension of lesson objectives. Ninety-nine percent of respondents identified that physical activity is any movement, like walking or cleaning; 95% correctly identified health benefits from exercise, and 97% recognized that regular exercise reduces a person's risk for diabetes and heart disease. Ninety-three percent of respondents identified drinking plenty of water and warming up as ways to prevent injury.

Statewide, participant feedback on the lesson was positive. Ninety-six percent of respondents enjoyed the lesson and were interested in the topic and 89% learned something new. Eighty-eight percent of respondents reported that they would change their level of activity based on this information. Ninety-nine percent of respondents felt the instructor presented the information clearly and 86% of respondents met all lesson objectives, compared with only 60% from the year before. Suggestions for improvement included providing a fitness activity during class and having staff available to teach the lesson in Spanish.

Food Safety

Six of eighteen local agencies submitted evaluations for this lesson. The total number of WIC participants/caregivers who completed evaluations after receiving this lesson was 760. Questions one through four relate to participants' comprehension of lesson objectives. Ninety-eight percent of respondents recognize that illness, vomiting, and diarrhea are symptoms related to unsafe food handling practices and 88% identified that hands need to be washed for at least 20 seconds to kill bacteria. Ninety-four percent of respondents correctly identified the four steps to safe food handling (Clean, Separate, Cook and Chill), and 85% would consider using a food thermometer after attending the lesson. Sixty-eight percent of participants met all lesson objectives. Many respondents provided feedback on ways they could improve food safety in their home such as cleaning and washing the food well, using different cutting boards for vegetables and meats, refrigerating leftovers within two hours, and cooking meats very well.

Statewide, participant feedback on the lesson was positive. Ninety-seven percent of respondents enjoyed the lesson and 96% were interested in the topic and learned something new. Ninety-one percent of respondents would change how they handle and prepare food based on this information. Ninety-eight percent of respondents felt that the instructor presented the information clearly. Suggestions for improvement were to have classes in Spanish, use more visual aids, and show a video.

Portion Sizes

One local agency offered this lesson as a Power Point presentation and created an evaluation form similar to the State issued evaluations. The total number of WIC participants/caregivers who completed evaluations after receiving this lesson was 203. Seventy-nine percent of respondents recognized the new *Dietary Guidelines* information is in amounts rather than servings; 65% correctly identified a correct portion of natural cheese, 92% correctly related a 3-oz. portion of meat to the size of a deck of cards. Sixty percent of respondents recognized that a 1-cup portion is not equal to ½ a baseball.

Participant feedback was very positive. Ninety-seven percent of respondents enjoyed and were interested in the topic, and 95% learned something new. Ninety percent of respondents would change the way they eat based on this information. Although 99% of respondents thought the information was presented clearly, only 34% met all lesson objectives. Suggestions for improvement were to use more visual aids like portions of real food. CPAs felt that "total amounts to consume" is a hard concept to teach. (Note: Professional staff training materials on how to present the My Pyramid concepts are now included on the 2007 SNEP CD-ROM.)

Fiber

Two local agencies submitted evaluations for this lesson. The total number of WIC participants/caregivers who completed evaluations after receiving this lesson was 282. Eighty-eight percent of respondents correctly identified a high fiber food, 92% identified the need to drink additional water when adding more fiber to the diet, and 95% recognize that Americans are not getting enough fiber. Eighty-three percent of respondents correctly identified the importance of fiber in the diet.

Participant feedback was very positive. Ninety-eight percent of respondents enjoyed the lesson and felt the instructor presented the information clearly, 95% were interested in the topic and learned something new, and 93% would change what they eat based on this information.

Prenatal Breastfeeding

All ten breastfeeding grantees submitted evaluations for this lesson. The total number of prenatal participants who completed questionnaires after receiving the breastfeeding lesson was 757.

Last year, three multiple choice questions with a correct answer of "all of the above" proved confusing to respondents. Those questions were revised for FFY 2006 and the confusion was eliminated. Seventy-five percent of the respondents correctly answered all five questions that were related to the breastfeeding lesson; this compares to only 44% in the previous year who answered all five questions correctly.

Over 90% of the respondents knew that human milk alone provides all the nutrition a baby needs for the first six months, that women who have HIV or use illegal drugs should not breastfeed, that WIC provides help and more food for breastfeeding mothers, and how to recognize if baby is getting enough milk. Over 17% of women thought that pain is a sign of a baby correctly latching onto the breast.

Over 96% of the respondents enjoyed the lesson, learned something new, and were interested in learning about breastfeeding. Only 3% of women said they were not going to breastfeed; 81% of women said they would breastfeed and 16% said they would think about breastfeeding.

Breastfeeding Support

Women who ever breastfed their infants and whose infants were at least three months old were asked to complete a questionnaire on WIC breastfeeding services.

Seven hundred and sixteen women completed the questionnaire. Of those, 543 (75.8%) women said they were currently breastfeeding and 173 (24.2%) women said they were not. Responses from breastfeeding women indicated that:

- 62% of breastfeeding women attend the WIC breastfeeding lesson while pregnant
- 82% received a book or literature about breastfeeding from WIC
- 79% knew they could ask WIC for breastfeeding help
- 53% had no questions or problems with breastfeeding
- 53% asked for help with breastfeeding questions or problems and the majority (61%) of those women asked WIC for help

When asked what the most important thing WIC did to help them breastfeed, women were appreciative of the support and education, the WIC foods, the books and literature and the breastfeeding aids that they received. They liked having someone to talk with when they had questions and they said that WIC gave them confidence in themselves.

Statewide Promotion of Fruit and Vegetable Consumption

During 2006, local WIC agencies took steps to create clinic environments that support WIC parents in their role as models of health and fitness for their children. The theme, "Energize and Mobilize: Eat Fruits and Vegetables and be Active," was highlighted by local agencies in their fruit and vegetable promotion activities.

Local agencies received additional tabletop displays to create opportunities for WIC families to self-discover that fruit and vegetable consumption goals are achievable by their families.

During FFY 2006, the New Jersey 5 A Day Coalition worked to increase fruit and vegetable consumption in the community and reinforce the messages WIC families receive through the program. These strategies included fruit and vegetable consumption in schools, worksites, and community settings, including retail and farm markets, faith-based settings, and reinforcement of the fruit and vegetable messages by significant health care professionals, including pediatricians.

Finally, fruit and vegetable promotion activities continued to evolve as a key strategy in statewide health and fitness initiatives, including obesity prevention, and the New Jersey State Nutrition Action Plan (SNAP).

RESOURCE AND TRAINING NEEDS

The yearly Nutrition Education Profile provides valuable information about local WIC agency needs for nutrition education materials, training and resources. The information is used to direct changes to the Statewide Nutrition Education Plan (SNEP), prioritize the ordering of nutrition education materials, and determine in-service and training needs for WIC professionals and support staff. The following is an abbreviated summary of information collected from the 2006 Nutrition Education Profile. The most frequently requested items are listed in order of importance.

Resource Requests:

Equipment Needs

- DVD player
- Color printer
- LCD projector
- TV/VCR

New Lesson Plan Topics

- Portion control
- Mealtime strategies
- Healthy weight maintenance
- Snacking tips
- My Pyramid
- Postpartum weight loss

Nutrition Education Topics for Materials/Handouts

- Lead
- Iron
- Postpartum nutrition
- Portion sizes
- Weight loss
- Fiber
- 5 A Day
- Physical activity

Education Resources Needed

- PowerPoint presentations for each lesson
- Tri-fold display materials for each lesson in English and Spanish
- Videos and DVD's in English and Spanish for each lesson
- Food models

Critical Needs to Provide Quality Nutrition Services

- Availability of more staff (funding)
- Bi-lingual (Spanish) CPAs
- Use of trained, bi-lingual paraprofessionals for nutrition education
- Videos of lessons in Spanish

- Ongoing, competency based training for all CPAs
- Videotapes of Quarterly Meetings
- Options for nutrition education to ease burden on staff
 - o Online, computer based or Kiosk
 - o Lessons in Spanish for when bi-lingual staff are not available

Training Needs:

Training Needs for Professional Staff

- Creative, interactive nutrition education
- Specialized infant formulas
- High Risk care plans
- Counseling skills
- Policies and procedures
- Nutrition risks, anthropometrics, WIC ACCESS

Training Needs for Support Staff

- Policies and procedures
- Anthropometrics
- WIC ACCESS
- Bloodwork
- Breastfeeding

Preferred Training Method

- Regional trainings at the local agencies
- Self study or CD-ROM
- Quarterly meetings
- Online

NUTRITION EDUCATION BEST PRACTICES FOR FFY 2006

Special programs, initiatives, and activities aimed at "Revitalizing Quality Nutrition Services in WIC" at both the State and local agency level are highlighted in this section.

State Agency Initiatives

Value Enhanced Nutrition Assessment (VENA)

Overview

In early 2006, the Food and Nutrition Service (FNS) issued the Value Enhanced Nutrition Assessment (VENA) Policy and Guidance document to WIC State Agencies. The 2002 Institute of Medicine (IOM) report, *Dietary Risk Assessment in the WIC Program*¹, found that traditional diet assessment methods are not sufficiently accurate or precise enough to determine an individual's dietary risk and recommended the inclusion of a presumed WIC dietary risk criterion. As a result, FNS identified the need for comprehensive nutrition assessment policy and guidance. The FNS/NWA (National WIC Association) VENA workgroup collectively identified the process, content, and staff competencies necessary for a WIC nutrition assessment, and identified participant centered counseling strategies that can more effectively foster behavior change. The VENA Policy and Guidance presents a change in philosophy from conducting nutrition assessment primarily for the purpose of determining WIC eligibility, to using assessment as a means to enhance the interaction between WIC provider and participant as well as to link collected health and diet information to the delivery of relevant nutrition education, referrals, and food package tailoring. VENA is part of the larger FNS process known as Revitalizing Quality Nutrition Services in WIC.

On The Road To VENA

In 2006, New Jersey WIC Services took the first steps toward implementation of VENA.

- New Jersey was selected as one of the WIC State agencies to participate in the formative evaluation pilot of the Rochester Institute of Technology training modules, 1) Rapport Building; 2) Critical Thinking; and 3) Health Outcome-Based WIC Nutrition Assessment. States will use these modules to provide statewide trainings on the core competencies identified for VENA. Attendees at the meeting provided valuable feedback, which RIT incorporated in the final training curriculum. Patricia Zecca represented NJ at this meeting.
- New Jersey WIC Services hosted the USDA Mid-Atlantic Region VENA Training from July 25-27 at the DoubleTree Hotel in Somerset, New Jersey. The purpose of the regional meeting was to train State Agency Nutrition Services staff on use of the RIT Training modules. Patricia Zecca, Cindy Weiss-Fisher, Florence Rotondo, Sherry Valente, Victoria Hollist, and Robin McRoberts, VNA Local Agency Coordinator, attended this training.
- State staff began work on the VENA self-evaluation and the VENA workgroup, consisting of both local agency and State staff, will begin meeting in early fall 2006 to complete this process. Implementation Plan development, policy revisions and statewide staff competency training will follow with final VENA implementation scheduled for FFY 2010.

I-13

^{1.} Institute of Medicine: Committee on Dietary Risk Assessment in the WIC Program. Dietary risk assessment in the WIC Program. Washington (DC): National Academy Press: 2002.

The projected VENA timeline is as follows:

Early 2006

- Final VENA Policy Memorandum issued.
- Final VENA Guidance issued.
- VENA Implementation Guidance issued (to include a self-evaluation guide).

July-September 2006

• Regional (for State agencies) VENA Competency Training (rapport building, critical thinking, and health outcome-based assessment).

On or Before December 15, 2006

 WIC State agencies submit results from their self-evaluation of existing nutrition assessment protocols and identify potential areas for enhancement to FNS Regional Offices.

Spring 2007

• FFY 2008 State Plan Guidance issued with instructions for State agencies to include a VENA implementation plan and amendments as necessary to implement Policy Memorandum 98-9: WIC Nutrition Risk Criteria; Revision 8, in State Plan submissions.

On or Before August 15, 2007

- WIC State agencies submit FFY 2008 State Plans to include:
 - 1. VENA Implementation Plan.
 - 2. Amendment(s) as necessary to implement WIC Policy Memorandum, 98-9, Revision 8.

Fiscal Year 2008 – 2009

• WIC State agencies revise nutrition assessment policy and procedures, provide necessary staff training, etc., (as described in their FNS-approved plans) to implement VENA.

Fiscal Year 2010 (October 1, 2009)

• VENA implemented in all WIC State agencies.

Quarterly Nutrition Services Training

The State office provided four yearly opportunities for professional development and training of local agency staff. These all day training opportunities featured invited speakers on a variety of topics relevant to the population served, while a portion of the day is reserved for programmatic issues and discussion with local agency staff. During FFY 2006, training topics included Calcium and Body Weight, Food Safety, Postpartum Depression, Oral Health, and Gestational Diabetes. State staff gave presentations on Value Enhanced Nutrition Assessment and Web-based Nutrition Education.

The Intergenerational School Breakfast Program (ISBP)

This program helps pre-schools and elementary schools in New Jersey's low-income Abbott School Districts continue the nutrition education begun in WIC. WIC Services developed and launched a website for the program in August 2005, to expand schools' access to program materials that support nutrition education for young children. More information about the program can be found at www.nj.gov/health/isbp. Since the launch of the website, 36 new schools registered for the program and more than 77 tote bag kits of materials were distributed to schools to support nutrition education.

Local Agency Best Practices

Local WIC agency CPAs throughout New Jersey sought to incorporate positive health messages related to increased physical activity, increased fruit and vegetable consumption, and the maintenance of a healthy weight, into all nutrition counseling. In addition, the local agencies were encouraged to improve the clinic environment for the promotion of these positive health messages. This section briefly describes local agency initiatives and best practices related to nutrition education and health promotion.

Atlantic City WIC Program

- During Physical Activity classes, participants watched a video on "Child Obesity" and were provided handouts showing the caloric benefit of physical activity. Caretakers were encouraged to limit TV time and engage children in active play.
- WIC staff were encouraged to participate in weekly Cardio Dance classes given by Health Department staff. In addition, a Health Department nurse provided free health screenings (cholesterol, glucose, and blood pressure) and health information to participants during recertification at the Pleasantville office in May.
- During Farmer's Market season, participants in the Fruits and Vegetables class watched a
 video on food preparation techniques and received recipe cards, while their children
 received Five A Day Activity coloring books.
- The video "All about Fiber" was shown to participants as a supplement to the Fiber lesson. Participants received educational materials and samples of a high-fiber cereal.
- An Atlantic City Health educator presented a short lesson on smoking cessation following classes on three occasions during February/Heart Health Month.

Burlington County WIC Program

- Arranged for a farmer at WIC sites for clients to redeem their Farmers' Market checks. At the JFK Center in Willingboro, clients enjoyed cooking demonstrations using produce provided by local farmers.
- Nutrition staff received training on use of Microsoft PowerPoint and then presented classes
 on My Pyramid and Portion Distortion to participants in this format. Nutritionists enjoyed
 using the technology and felt it made their classes more innovative.
- National Nutrition Month weekly activities included guest speakers from the Health
 Department on fad diets and vitamin supplementation, cholesterol, blood sugar, and blood
 pressure screening for WIC clients and employees, and a presentation by local YMCA staff
 on exercise and stress reduction. Ray Funkhouser, an Olympic Race Walker, gave a

- presentation on Fitness Walking to WIC clients as a second education contact. Local grocery stores provided healthy refreshments to serve at all the events.
- Family Health Initiatives provided WIC with Wipe Out Lead Kits which staff distributed to eligible clients during certifications.

Camden County WIC Program

- Began collaborating with the county to offer free lead screening.
- Staff created more tri-fold display boards in Spanish to accompany lessons to better meet the needs of Spanish speaking participants.
- Staff utilized physical activity resources from the NEP CD-ROM (FIT WIC and Fitness for Families lessons) to provide practical tips to WIC participants to facilitate behavior change.

Tri-County Community Action Partnership WIC Program

- CPAs at each WIC site developed bulletin board displays to accompany the Oral Health and Your Baby's First Year lessons. Incentives provided to participants included sippy cups, toothbrushes and referrals to the Tri-County Tooth Mobile.
- CPAs stressed increased physical activity and consumption of fruit and vegetables as positive behaviors to improve health to clients during certification. Video tapes with these positive health messages were shown to WIC clients in the waiting rooms at some clinic sites.
- During Farmers' Market Season, several clinic sites had a local farmer onsite during check pick-up to encourage voucher redemption.

East Orange WIC Program

- National Nutrition Month activities: CPAs used resources from the WIC Works Resource System and Rutgers Cooperative Extension website to educate clients on Food Labels, Shopping on a Budget, Physical Activity, and Tips for Purchasing Fresh Fruits and Vegetables.
- Fresh fruit and vegetable tastings were held during classes in September. Following
 completion of a lesson evaluation, participants' names were entered into a weekly drawing
 for a basket of fresh produce. Winners expressed gratitude and credited WIC as the reason
 they now eat more fruits and vegetables. A local farmer also sold produce onsite during
 Farmers' Market season.
- State fitness initiatives motivated staff to create their own "Healthy Weight" challenge. Some WIC staff and those from other health care offices in the building participated in the weight loss challenge from August through October 2005. The winner lost 12 lbs and received a cash reward (from staff contributions). Participants report they are now more conscious of eating healthy and motivated toward maintaining a healthy weight.

Gloucester County WIC Program

- CPAs updated bulletin boards seasonally with relevant nutrition information to keep education fresh.
- A WIC Dietetic Intern created display boards to educate participants about the new My Pyramid recommendations.

Jersey City WIC Program

- CPAs incorporated mealtime strategies and practical tips for parents into education lessons.
- Sippy cups were distributed at infants' six month certification appointments to encourage weaning by age one. Participants with risk factors related to inappropriate feeding practices or inappropriate use of feeding bottles were scheduled for the Oral Health class. The goal of the program was for at least 70% of attendees to have their babies stop bottle feeding before the next recertification.
- Participants designated "high risk" due to anemia were asked to be present at check pick-up and offered a follow-up blood test.

VNA of Central Jersey, Inc. WIC Program

- Two nutritionists attended the statewide Child Consortium meeting in October 2005.
- CPAs developed a staff weight loss contest called "The Biggest Loser."
- The Monmouth County Health Department began free lead screenings for uninsured children in the Freehold WIC Office in November 2005, and to date has screened over 250 children. Children with high lead levels were referred for more testing and follow-up. A "Stomp Out Lead" education program and screenings were offered at the Woodbridge WIC office by the local health department.

Newark WIC Program

- WIC nutritionists utilized food models, flipcharts, video tapes, and USDA Food Safety posters as visual aids in nutrition education classes. Clients received incentives for participation. Fresh fruit was the incentive provided at classes during farm market season.
- Food demonstrations were held during classes on Fruits and Vegetables. WIC participants enjoyed sampling the different dishes and received education on the use of Farmers' Market checks, the benefits of consuming increased amount of fruits and vegetables, serving sizes, and fresh fruit and vegetable selection, preparation and storage. WIC clients were able to redeem their Farmers' Market checks onsite after class.
- National Nutrition Month activities included a weekly guest speaker on Mondays, conference room exhibits, and food demonstrations on the 2nd and 4th Fridays.

North Hudson Community Action Corp. WIC Program

• The nutritionists enhanced the clinic environment for nutrition education by creating colorful bulletin boards for each of the monthly lesson topics (iron, fiber, shopping on a budget, food safety, physical activity, fruits and vegetables, fats, sweets, breakfast, and holiday meal planning) and provided a greater variety of class topics than in previous years.

- Other classes offered each month include: Infant Feeding, Breastfeeding, and Prenatal Nutrition.
- WIC collaborated with Asprocolas Acres and a local church, Evangelical Pentecostal Church Assembly of God, to increase the purchase and consumption of fruits and vegetables during Farmers' Market season. On Wednesdays and Fridays from June to November, the farmer set up a stand in the parking lot of the church. Each month CPAs conducted cooking demonstrations at the farm stand and provided samples to WIC participants. Results of the collaboration were presented at the Faith-Based Summit in November 2005.
- The cookbook, "Cook It Up," was updated based on feedback from the State Lead Program and then professionally translated into Spanish. The cookbook was designed to increase awareness about lead poisoning and contains healthy recipes with nutrients that reduce lead absorption. The recipes are a compilation of recipes submitted by WIC participants and staff. Copies of the cookbook are available upon request.
- During National Nutrition Month, CPAs provided supermarket tours to WIC participants and provided tips on selecting healthy foods on a budget.
- Staff initiated an employee exercise program. For an entire month, employees could arrive at work early and participate in a 15-minute exercise routine. Employees reported having more energy and received a certificate for their participation.

NORWESCAP WIC Program

• CPAs provided a lesson on Oral Health to participants this year in response to feedback from Head Start that indicated 30% of the children screened required dental care or treatment.

Plainfield WIC Program

- Staff employed a variety of teaching methods to provide nutritional education to WIC participants: classes with interactive activities, group discussions, handouts, food model displays, product sampling, flip charts, bulletin board displays, and nutrition-themed "Jeopardy" games.
- Plainfield WIC arranged for two farm stands, one youth stand and one faith-based community sponsored stand, to be set up outside WIC facilities during the summer months to promote redemption of Farmers' Market checks. CPAs provided weekly fruits and vegetable food demonstrations, tastings, and recipes to participants.
- A health educator from Horizon Blue Cross/Blue Shield of New Jersey provided a presentation on the lesson "Sweet Tooth."
- A health educator from HealthNet Insurance provided a presentation on the lesson "Lead Poisoning."
- A student intern from Montclair University created bulletin board displays and read nutrition themed children's books to participants throughout the months of September, October, and November.
- Staff designed colorful bulletin boards and posted them at various sites to promote physical activity.
- The agency re-designed the WIC space to ensure privacy for clients and improve clinic flow. The new layout provides more space for nutrition education, a larger waiting area, employee cubicles, and a children's play area.

St. Joseph's Hospital & Medical Center WIC Program

- The theme for 2006, "Step Up To Nutrition and Health" was embraced by the entire staff. The full-time WIC Clinic, which is on one of the main shopping streets in Paterson, had a store window display replicating the visual theme in 3-dimensions with crates of food models, sky, and clouds. CPAs designed three portable bulletin boards with "balance activity and food variety" messages for the satellite clinics, and continually updated five permanent bulletin board displays at the main site with new information. A new approach, developed for nutrition education this year, included nutrition questions in a Nutrition Tic-Tac-Toe game with bright, 6-inch "X's" and "O's" velcroed to foam poster boards. Participants were very engaged and everyone was a winner.
- At the main office on Getty Avenue, magnetic message boards were mounted in the counseling booths at eye level for children. The children occupy themselves with rearranging the fruit and vegetable magnets and reading the alphabet.
- Staff provide nutrition education classes in English and Spanish, utilizing the bilingual skills of nutritionists and the nutrition education assistant. Participants received materials, in English, Spanish, and Arabic.

Trenton WIC Program

- The office layout at the main clinic site was redesigned to provide private counseling space for CPAs, a larger classroom for group education, a separate children's play area, complete with safe, educational toys, and a space for CPAs to prepare lessons and access the internet for training and reference materials.
- In September, participants were able to sample fruits and vegetables during class and had opportunities to win a basketful of produce. A local farmer offered onsite check redemption and home delivery of the produce, however only a few participants took advantage of this service
- CPAs created colorful bulletin board displays for each lesson topic and used food models and visual aids to encourage participant interaction and discussion.
- CPAs created a poster highlighting the theme of "Step Up to Nutrition and Health" and hung it on display in the main site lobby for National Nutrition Month. My Pyramid and ADA materials were distributed to clients. WIC participants also received fitness tips and water bottles during a class on physical activity
- Staff distributed blankets, handmade by local seniors, to participants during the months of November and December.

University of Medicine and Dentistry WIC Program

- Laura's Lean Beef coupons were provided to participants in the Iron classes.
- Guest speakers from UMDNJ Dental Faculty provided classes on oral health and provided clients with toothbrushes, toothpaste, and/or training cups as incentives to better oral health.
- Nutritionists utilized materials from the California Advisory Board to stress the importance of a high fiber diet and exercise. Participants were instructed on how to cook dried beans and incorporate them in different dishes.
- CPAs provided water bottles and pedometers to participants of the Physical Activity lesson and captured their interest using visual aids such as videos, weights, and resistance bands.

Ocean County Health Department WIC Program

- CPAs used visual aids and other strategies to increase class participation.
- National Nutrition Month: The Ocean County Board of Freeholders officially proclaimed March National Nutrition Month in Ocean County and saluted WIC for providing quality nutrition education and improving community health. CPAs provided food demonstrations at the Ocean Mall and onlookers were treated to healthy snacks. Nutritionists answered questions on the new Food Guide Pyramid, exercise, tips for picky eaters and other topics. WIC provided a fun-filled day of activities for parents and children.
- During National Nutrition Month, the chief nutritionist provided a presentation on Childhood Obesity to Head Start parents and a presentation on prenatal nutrition to local area pregnant high school students.

Passaic WIC Program

- CPAs utilized food models and flip charts to visually present nutrition information to participants.
- A greater variety of education topics were offered to WIC participants in both English and Spanish and classes were scheduled to coincide with national health observances.
- CPAs created a colorful bulletin board with tips on increasing physical activity.
- A guest speaker from Horizon NJ Health provided a presentation on prevention of breast and prostate cancers.

Trinitas Hospital WIC Program

- The nutritionists made bulletin boards about Five A Day during the summer months and Food Safety during the holiday seasons. The bulletin boards also included information on formula preparation and storage.
- Three nursing students from Seton Hall University, College of Nursing did a portion of their Community Health Perspectives at the main site and presented information on water sterilization to a group of participants during nutrition education.

SECTION II NEW JERSEY POPULATION

OVERVIEW

Section 17 of the Child Nutrition Act of 1966, as amended, states that "substantial numbers of pregnant, postpartum and breastfeeding women, infants and young children from families with inadequate income are at special risk with respect to their physical and mental health by reason of inadequate nutrition or health care or both." Therefore, Congress authorized the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) to protect and improve the nutritional status of this population during the critical times of growth and development and to prevent the occurrence of health problems including substance abuse.

WIC benefits are delivered through eighteen local agencies and four Maternal and Child Health Consortia in clinic and mobile sites throughout New Jersey. WIC benefits include:

- 1. Assessment of participants' nutritional status using anthropometric and hematological measures and dietary assessments.
- 2. Provision of individual/group counseling education and nutrition care plans for high-risk participants.
- 3. Provision of targeted nutrition education to participants to promote informed health and dietary choices and patterns.
- 4. Protection, promotion and support of breastfeeding.
- 5. Provision of supplemental nutritious and wholesome foods to WIC participants.
- 6. Referrals to healthcare, the Food Stamp Program, TANF, Medicaid, substance abuse treatment and other social services.
- 7. Immunization screening.

Federal Regulations mandate that "Nutrition education shall be designed to achieve the following two broad goals:

(1) Stress the relationship between proper nutrition and good health, with special emphasis on the nutritional needs of pregnant, postpartum, and breastfeeding women, infants and children less than five years of age and raise awareness about the dangers of using drugs and other harmful substances during pregnancy and while breastfeeding.

^{2.} Child Nutrition Act of 1966 [As Amended Through P.L. 108-269, July 2, 2004], Section 17(a).

(2) Assist the individual who is at nutritional risk in achieving a positive change in food habits, resulting in improved nutritional status and in the prevention of nutrition- related problems through optimal use of the supplemental foods and other nutritious foods. This is to be taught in the context of the ethnic, cultural, and geographic preferences of the participants and with consideration for educational and environmental limitations experienced by the participants."³

WIC provides nutrition risk assessment, food vouchers for obtaining supplemental nutritious foods, nutrition and breastfeeding education, and referral to pertinent health and social services. These components contribute to the early detection, reduction in incidence, and prevention of factors that lead to poor pregnancy and birth outcomes and improve the health and nutrition status of program participants.

Enrollment into WIC is based on income and the presence of nutritional risk factors. In 2005, New Jersey WIC served over 258,000 pregnant, breastfeeding and postpartum women, infants and children. Fifty-one percent were Hispanic, 26% Black, 18% White, 3% Asian and 2% Other.

PREGNANCY NUTRITION SURVEILLANCE SYSTEM

The Pregnancy Nutrition Surveillance System (PNSS) is a program-based public health surveillance system that monitors risk factors associated with infant mortality and poor birth outcomes among low-income pregnant women who participate in federally funded public health programs. In New Jersey, all PNSS data is from WIC. Raw data is sent to the Centers for Disease Control and Prevention (CDC) for analysis and the generation of reports.

In 2004, New Jersey PNSS data showed that:

- 10.3% of women had a prepregnancy Body Mass Index (BMI) that indicated underweight compared with 12.1% of the records of all women in the nation in PNSS.⁴ Rates of prepregnancy underweight have declined since 1998 for all groups from 13.1% to 10.3%.⁵ However, these rates have increased for Asian/Pacific Islanders from 21.0% to 23.7%.⁶
- 41.1% of women had a prepregnancy BMI that indicated overweight compared to a national rate of 43.0%. Since 1999, rates of prepregnancy overweight increased from 37.1% to 41.1%. The rates increased for all racial ethnic groups except Asian/Pacific Islanders, which declined from

^{3.} WIC Consolidated Regulations, 7 CFR Ch. 11, Subpart D, §246.11(b). January 1, 2004;345.

^{4. 2004} Pregnancy Nutrition Surveillance, New Jersey, Table 5C, Comparison of Maternal Health Indicators by Contributor to Nation.

^{5. 2004} Pregnancy Nutrition Surveillance, New Jersey, Table 16C, Summary of Trends in Maternal Health Indicators.

^{6. 2004} Pregnancy Nutrition Surveillance, New Jersey, and Table 20C, Summary of Trends in Maternal Health Indicators by Race/Ethnicity.

^{7. 2004} Pregnancy Nutrition Surveillance, New Jersey, Table 5C, Comparison of Maternal Health Indicators by Contributor to Nation.

^{8. 2004} Pregnancy Nutrition Surveillance, New Jersey, Table 16C, Summary of Trends in Maternal Health Indicators.

- 26.1% to 22.0%. Black women had the highest rates, 50.5%, while rates for Hispanic women increased the most rapidly, from 29.9% to 39.0%.
- 25.3% of New Jersey women were obese, compared to a national prevalence of 28.5%. Obese is defined as a BMI greater than 29.0. Obese women are at greater risk of delivering macrosomic infants and infants with shoulder dystocia and other complications. Obese women are also more likely to develop gestational diabetes.
- Of New Jersey WIC women who began pregnancy underweight, 33.3% achieved Ideal Weight Gain while 24.4% gained more than the Ideal. It is significant to note that the percentage of underweight women who gained more weight than ideal increased from 25.9% in 2003 to 40.3% in 2004.
- Of those women who began pregnancy at normal weight, 27.8% gained less than Ideal and 33.8% gained more than Ideal.¹²
- Of those women who began pregnancy overweight, 12.5% gained less than Ideal and 56.8% gained more than Ideal weight.¹³
- Of those women who began pregnancy obese, 20.0% gained less than Ideal and 48.9% gained more than Ideal weight.¹⁴
- The prevalence of third-trimester anemia was 33.0% in New Jersey as compared to 30.3% for the nation. The highest rate of third trimester anemia, at 44.6%, was among African American women. The highest rate of third trimester anemia, at 44.6%, was among African American women.
- 26.6% of participants enrolled in WIC during the first trimester while most women (49.7%) enrolled during their second trimester compared to the nation where almost even percents of women enroll in each trimester.¹⁷ Hispanic women were most likely to enroll in the first trimester (28.4%) while American Indian/Alaskan Native women enrolled at the lowest rates in the first trimester (21.7%) followed by All Other/Unknown (22.3%).¹⁸

^{9. 2004} Pregnancy Nutrition Surveillance, New Jersey, and Table 20C, Summary of Trends in Maternal Health Indicators by Race/Ethnicity.

^{10. 2004} Pregnancy Nutrition Surveillance, New Jersey, and Table 2C, Summary of Health Indicators.

^{11. 2004} Pregnancy Nutrition Surveillance, New Jersey, and Table 13C, Maternal Weight Gain and Birth Outcomes by Select Health Indicators.

^{12. 2004} Pregnancy Nutrition Surveillance, New Jersey, and Table 13C, Maternal Weight Gain and Birth Outcomes by Select Health Indicators.

^{13.} Ibid.

^{14.} Ibid.

^{15. 2004} Pregnancy Nutrition Surveillance, New Jersey, Table 5C, Comparison of Maternal Health Indicators by Contributor to Nation.

^{16. 2004} Pregnancy Nutrition Surveillance, New Jersey, Table 9C, maternal Health Indicators by Race/Ethnicity, Aged or Education.

^{17. 2004} Pregnancy Nutrition Surveillance, New Jersey, Table 2C, Summary of Health Indicators.

^{18. 2004} Pregnancy Nutrition Surveillance, New Jersey, Table C, Summary of Trends in Maternal Behavioral Indicators by Race/Ethnicity.

Pregnancy Advances and Concerns

Rates of prepregnancy underweight continued to decline for all groups except Asian/Pacific Islanders, which was the only group that had an increase in prepregnancy underweight. Of concern is the continued increase in the percentage of women who began their pregnancy overweight both in New Jersey and nationwide. More than 41% of New Jersey's pregnant women entered pregnancy overweight and most of them continued gaining more than the Ideal amount of weight during pregnancy. Rates of anemia in New Jersey were higher than the national rates and were particularly high among African American women.

Pregnancy Recommendations

The New Jersey PNSS data indicate that the following actions need support:

- Outreach to pregnant women, particularly African American women, in the first trimester of pregnancy to encourage enrollment in WIC.
- Promote Ideal weight gain for all stages of pregnancy through good nutrition and physical activity.
- Promote adequate iron intake to decrease the prevalence of iron deficiency anemia.

PEDIATRIC NUTRITION SURVEILLANCE SYSTEM

The Pediatric Nutrition Surveillance System (PedNSS) is a child-based public health surveillance system that monitors the nutritional status of low-income children in federally funded maternal and child health programs. Data on birthweight, short stature, underweight, overweight, anemia, and breastfeeding are collected for children who visit public health clinics for routine care and nutrition services, including education and supplemental food. Data are collected at the clinic level, and then aggregated at the state level and submitted to the Centers for Disease Control and Prevention (CDC) for analysis.

The goal of PedNSS is to collect, analyze, and disseminate surveillance data to guide public health policy and action. PedNSS information is used to set priorities and plan, implement, and evaluate nutrition programs.

Demographic Characteristics

In the New Jersey 2004 PedNSS, 17.2% of the records were from non-Hispanic White children, 47.7% from Hispanic children, 29.0% from non-Hispanic Black children, 2.5% from Asian or Pacific Islander children, 0.4% from American Indian or Alaska Native children, and 3.1% from children of all other or unspecified races and ethnicities. Most PedNSS records (60.9%) were from children aged 1 to 5 years; 39.1% were from infants aged less than 1 year.

The 2004 PedNSS data showed:

- 9.1% of infants were low birthweight, compared with 9.1% of U.S. infants.¹⁹ One of the *Healthy People 2010* objectives (16-10a) calls for a reduction in low birthweight to no more than 5% of all live births.²⁰
- In 2004, 13.1% of Black infants were low birthweight; 8.1% of White infants were low birthweight, 10.1% Asian or Pacific Islander infants were low birthweight and 7.0% of Hispanic infants were low birthweight.²¹
- 6.8% of infants were high birthweight, compared with 7.3% of U.S. infants.³ The overall prevalence of high birthweight decreased slightly from 1995 (7.6%). The greatest decrease (1.5%) was among White infants and a decrease was seen in all groups except Black infants, which did not change.
- 6.2% of children from birth to age 5 were of short stature, compared with 6.2% of U.S. children.²² The prevalence of short stature in the New Jersey PedNSS population was somewhat above the expected level (5%) and did not meet the *Healthy People 2010* objective (19-4) to reduce growth retardation among low-income children less than 5 years of age to 5%.²³ The prevalence of short stature increased from 5.8% in 1995 to 6.2% in 2004.²⁴ An increase in short stature was evident in all racial and ethnic groups; the largest increase was in White children, from 5.7% in 1995 to 8.7% in 2004.²⁵ The highest prevalence of short stature was in White infants 12 to 23 months (11.5%).²⁶
- The highest prevalence of underweight was in the American Indian/Alaskan Native aged 0 to 11 months (9.4%).²⁷ The overall prevalence of underweight decreased from 7.1% in 1995 to 4.4% in 2004.²⁸
- The prevalence of overweight in children aged 2 to 5 years was 17.7%. The highest rates were among Hispanic (21.6%) and All Other/Unknown (14.7%) children; the lowest (10.0%) were among American Indian/Alaskan Native children.²⁹ Of particular concern is that the prevalence

^{19. 2004} Pediatric Nutrition Surveillance, New Jersey, Table 2C, Summary of Health Indicators, Children Aged <5 Years.

^{20.} U.S. Department of Health and Human Services. Healthy People 2010. 2nd edition. Two volumes. Washington, DC: U.S. Government Printing Office; 2000. Available at http://www.healthypeople.gov/Publications/.

^{21. 2004} Pediatric Nutrition Surveillance, New Jersey, Table 8C, Growth and Anemia Indicators by Race/Ethnicity or Age, Children Aged <5 Years.

^{22. 2004} Pediatric Nutrition Surveillance, New Jersey, Table 6C, Comparison of Growth and Anemia Indicators by Contributor, Children Aged <5 Years.

^{23.} U.S. Department of Health and Human Services. Healthy People 2010. 2nd edition. Two volumes. Washington, DC: U.S. Government Printing Office; 2000. Available at http://www.healthypeople.gov/Publications/.

^{24. 2004} Pediatric Nutrition Surveillance, New Jersey, Table 20C, Summary of Trends in Growth Indicators by Age, Children Aged <5 Years.

^{24. 2004} Pediatric Nutrition Surveillance, New Jersey, Table 18C, Summary of Trends in Growth and Anemia Indicators by Race/Ethnicity, Children Aged <5 Years.

^{26. 2004} Pediatric Nutrition Surveillance, New Jersey, Table 16C, Growth Indicators by Race/Ethnicity and age, Children Aged <5 Years.

^{27.} Ibid.

^{28. 2004} Pediatric Nutrition Surveillance, New Jersey, Table 18C, Summary of Trends in Growth and Anemia Indicators by Race/Ethnicity, Children Aged <5 Years.

^{29.} Ibid.

of overweight in children aged 2 to 5 has steadily increased from 12.5% in 1995 to 17.7% in 2004³⁰. This is a relative increase in overweight of 5.2% between 1995 and 2004. Overweight increased among all racial and ethnic groups; however, the greatest increase occurred among Black children.

- The prevalence of risk of overweight in children aged 2 to 5 years increased from 14.0% in 1994 to 17.1% in 2003. This increase was seen among all racial and ethnic groups. Hispanic children have a prevalence of risk of overweight (18.3%) that is consistently higher than all other groups. Findings from PedNSS are consistent with trends of increasing overweight in children aged 2 to 5 years in the U.S. population; however, the prevalence of overweight (10.4%) and risk of overweight (10.2%) was considerably lower for U.S. children aged 2 to 5 years.³¹
- The prevalence of anemia was 16.5%, compared with 12.8% for U.S. children less than 5 years of age (unpublished data, Dr. Zuguo Mei, CDC, 2003), indicating a wide difference between these populations. The highest prevalence of anemia in both the New Jersey PedNSS and U.S. children was in children younger than age 2; the prevalence decreased as children got older. The prevalence of anemia varied among racial and ethnic groups in PedNSS; Black children had the highest prevalence (20.7%). The overall prevalence of anemia in PedNSS declined from 18.3% in 1995 to 16.5% in 2003. Increases were seen in the Hispanic and Asian or Pacific Islander children.
- Breastfeeding rates showed slight increases in the percent of infants Ever breastfed (57.0%) and those breastfed for at least 12 months (27.6%); 35.8% were breastfed for at least 6 months, a slight decline from 36.1% the previous year. The *Healthy People 2010* objectives (16-19 a-c) are to increase the proportion of children ever breastfed to 75%, the proportion breastfed at 6 months to 50%, and the proportion at 1 year to 25%. New Jersey has exceeded the objective for breastfeeding at 12 months. Black infants had the lowest rates among all groups and the rates declined slightly in 2004 for initiation and duration at 6 and 12 months. Except for breastfeeding at 12 months among Asian/Pacific Islanders, the rates of breastfeeding increased from the 1995 rates among all racial and ethnic groups for initiation and duration at 6 and 12 months.

Infant and Child Health Advances and Concerns

Several advances in nutrition and health indicators were observed in the New Jersey PedNSS population from 1995 to 2004. Small overall improvements were made in both low and high birthweight, but there was an increase in low birthweight among White, Black, and Asian/Pacific Islander infants. Short stature increased slightly, with no group showing improvement and the White group showing the greatest decline. Slight reductions occurred in the prevalence of anemia; an increase occurred among the Hispanic, American Indian/Alaskan Native and Asian/Pacific Islander groups, with Asian children having a 1.2% increase. Major improvements occurred in both the prevalence of infants ever breastfed and those breastfed for at least 6 and 12

^{30. 2004} Pediatric Nutrition Surveillance, New Jersey, Table 20C, Summary of Trends in Growth Indicators by Age, Children Aged <5 Years.

^{31.} Ogden CL, Flegal KM, Carroll MD, Johnson CL. Prevalence and trends in overweight among U.S. children and adolescents, 1999-2000. Journal of the American Medical Association. 2002;288(14):1728-1732.

^{32. 2004} Pediatric Nutrition Surveillance, New Jersey, Table 19C, Summary of Trends in Breastfeeding Indicators by Race/Ethnicity Children Aged <5 Years.

months. While the prevalence of breastfeeding remains lowest for Black infants, this group showed improvement in prevalence of ever breastfed and breastfed for at least 6 months. Hispanic infants showed the largest improvement in prevalence of ever breastfed and breastfed for at least six months.

Other areas of concern remain. No racial or ethnic group achieved the *Healthy People 2000*³³ objective to reduce the low-birthweight prevalence to 5%, and increases in low birthweight occurred among White, Black, American Indian/Alaskan Native and Asian/Pacific Islander infants. Although there has been a decrease in the prevalence of anemia, it is still high among all racial and ethnic groups. The New Jersey PedNSS population did not achieve the *Healthy People 2000* objective for 75% of infants to initiate breastfeeding. Overweight is a major public health problem that has steadily increased; 5.2% more children aged 2 to 5 years are overweight than in 1995. Although Hispanic and All Other/Unknown children have the highest prevalence of overweight, increases occurred among all racial and ethnic groups, with the largest increase among Black and Hispanic children aged 2 to 5 years.

Pediatric Nutrition Recommendations

The New Jersey PedNSS data indicate that national and state public health programs are needed to support the following actions:

- Implement innovative strategies to reverse the rising trend of overweight in young children by increasing breastfeeding, increasing physical activity, promoting increased consumption of fruits and vegetables, and decreasing television viewing.
- Promote and support breastfeeding through medical care systems, work sites, and communities.
- Promote adequate dietary iron intake and the screening of children at risk for iron deficiency.
- Prevent low birthweight by providing preconception nutrition care and outreach activities to promote early identification of pregnancy and early entry into comprehensive prenatal care, including the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and the Title V Maternal and Child Health Program.
- Routinely screen for overweight and risk of overweight using BMI-for-age as recommended by the American Academy of Pediatrics Policy Statement.³⁴

Summary

The PedNSS and PNSS data suggest a need to increase outreach programs targeted at increasing the early enrollment of pregnant women into WIC Services. Early enrollment into WIC Services is an important step in accessing WIC benefits, early identification of risk factors and improving birth outcomes. It is also necessary to promote or raise awareness about the health benefits of WIC program participation to pregnant women, infants, and children.

^{33.} U.S. Public Health Service. Healthy People 2000: National Health Promotion and Disease Prevention Objectives. Washington, D.C.: U.S. Department of Health and Human Services, Public Health Service; 1991. Publication No. PHS 91-50212.

^{34.} American Academy of Pediatrics Committee on Nutrition. Policy statement. Prevention of pediatric overweight and obesity. Pediatrics (serial online) 2003; 112(2):424-430. Available at http://aappolicy.aappublications.org/cgi/content/full/pediatrics;112/2/424?fulltext=pediatrics+overweight&searc hid=QID_NOT_SET.

Disparities in health outcomes exist between White not Hispanic and Non-White in the PNSS and the PedNSS populations. Given the existence of disparities based on ethnicity in all nutrition, growth, hematological and birth outcomes shown within the PNSS and PedNSS populations, a need remains for the continued provision of culturally competent services. There are strong social and cultural influences on health and nutrition behaviors, and they affect early enrollment and continued participation in health and nutrition services such as WIC.

New Jersey PNSS population has low rates of risk factors such as smoking and alcohol consumption during pregnancy; however, WIC continues to include abstinence from smoking and alcohol consumption during pregnancy as an education topic during the prenatal period.

The prevalence of low hemoglobin among the New Jersey PNSS population exceeds state and national goals. New Jersey WIC Services does not yet collect data to assess iron supplementation during pregnancy among PNSS population. Given that WIC provides vouchers for only supplemental foods, it is important to encourage prenatal participants to adhere to the recommendation for iron supplement use during pregnancy and to provide nutrition education about dietary iron needs during pregnancy.

Note: More information on New Jersey PNSS and PedNSS data, with charts, can be found in the 2006 State Plan, section 4.4. The State Plan is available at: http://nj.gov/health/fhs/wicstateplan2006.pdf, beginning on page 4-30.

BREASTFEEDING PROMOTION AND SUPPORT

Breastfeeding Women

The FFY 2005 objective for breastfeeding women was "to increase the monthly average number of postpartum women who participate as breastfeeding women by 1%." In FFY 2004, 12,995 women participated as breastfeeding and in FFY 2005, 13,217 women participated as breastfeeding. This was a 1.7% increase. The objective was exceeded.

Breastfeeding women were 61.5% of all postpartum women.³⁵ Of women participating as breastfeeding, 72.6% were within six months of delivery and 27.4% were in the second six months after delivery. When comparing all women in the first six months after delivery, 47.8% participated as breastfeeding and 52.2% participated as non-breastfeeding.³⁶

Between March and September 2005, records are available for 4,743 women who stopped breastfeeding. Of these, 1,664 (35.0%) stopped in the first month after delivery. When asked why they stopped breastfeeding, the most common response (394) was, "baby too demanding, fussy, not satisfied." This was the most reported reason for stopping breastfeeding (1,048 or 22.1%). The second most common response over all was, "not enough milk, milk not good enough" (741, or 15.6%).

^{35.} New Jersey WIC Services. Management Information Summary Report, Redeemed Participation, 2005.

^{36.} New Jersey Department of Health and Senior Services. Report on Postpartum Women, September 2005.

Breastfeeding Infants

Breastfeeding initiation rates at New Jersey delivery facilities increased in 2004 but exclusivity decreased and combination feeding (both breastfed and supplemented with formula) increased. 37.3% of New Jersey infants were breastfed exclusively in the 24 hours prior to hospital discharge and 30.4% of infants were combination fed, with an overall breastfeeding rate of 67.8% in the 24 hours prior to hospital discharge. Hospitals with the highest minority populations have the lowest exclusive and any breastfeeding rates.³⁷

In 2004, 57.0% of New Jersey WIC children were ever breastfed and 35.8% breastfed at least six months; 27.6% breastfed at least a year, which is above the 2010 objective for 25% of infants to breastfeed at least one year. Besides New Jersey, only one other state participating in PedNSS has met this objective for one-year duration. The national rates were 53.2%, 21.5%, and 13.6% respectively. The Table below shows how the rates varied by race/ethnicity in New Jersey.³⁸

New Jersey WIC Breastfeeding By Race/Ethnicity, 2004			
Race/Ethnicity	Ever Breastfed	Breastfed ≥ 6 Months	Breastfed ≥ 12 Months
White, Not Hispanic	45.4%	26.0%	22.7%
Black, Not Hispanic	41.4%	24.8%	19.5
Hispanic	69.5%	44.9%	33.1%
Asian/Pacific Islander	66.6%	41.2%	31.1%
All Other	66.7%	44.7%	34.0%
Total, New Jersey	57.0%	35.8%	27.6%
Total, Nation	53.2%	21.5%	13.6%

The FFY 2005 objective for exclusive breastfeeding was to "increase the percentage of infants who are breastfed and do not use WIC formula to a statewide average of 11.8% during 2005." In FFY 2005, 11.1% of infants were breastfed and did not use WIC formula. This objective was not met.

Another objective for FFY 2004 was to "decrease the statewide percentage of breastfed infants who receive full formula packages to 18.5% during FFY 2005. In FFY 2005, 16.7% of infants were breastfed and received full formula packages. This objective was exceeded.

II-9

^{37.} New Jersey Department of Health and Senior Services. Electronic Birth Certificate Data, 2004.

^{38.} Pediatric Nutrition Surveillance, Table 19C. Centers for Disease Control and Prevention. 2003.

Assessment of Needs

The national health objectives for breastfeeding for the Year 2010 are for 75% of mothers to breastfeed in the early postpartum period, for 50% of mothers to breastfeed at six months, and 25% to breastfeed at one year. ³⁹ Breastfeeding objectives in *Healthy New Jersey 2010* are "to increase to at least 75 percent the proportion of mothers who breastfeed their babies at hospital discharge," and "to increase to 90% the proportion of breastfeeding infants who are exclusively breastfed at hospital discharge." ⁴⁰ Exclusive breastfeeding is ideal nutrition and sufficient to support optimal growth and development for approximately the first six months after birth. ⁴¹ Breastfeeding has a dose-related protective effect against illness in the first six months of life. ⁴² Compared with no breastfeeding, full breastfeeding reduces the odds ratios of diarrhea, cough or wheeze, and vomiting and lowers the mean ratios of illness months and sick baby medical visits. Minimal breastfeeding does not confer the same protective effects.

Pregnant women need accurate information about breastfeeding so they can make informed infant feeding decisions. The major barriers to breastfeeding⁴³ such as embarrassment, lack of confidence, concerns about dietary and health practices, loss of freedom, and the negative influences of family and friends must be addressed. New educational messages are needed to target the major reasons why women stop breastfeeding. Breastfeeding women need assistance, information, educational literature in English and other languages, and breast pumps when they are separated from their infants. Mothers who desire to breastfeed their low birth weight infants and infants with medical problems need individual support and assistance to establish and maintain their milk supply until their infants are able to feed at the breast.

Providers of health care to WIC participants must have continuing education on breastfeeding management and techniques so that WIC participants will receive consistent, accurate information wherever they receive health care. Hospitals must be encouraged to establish and follow evidence-based protocols and practices for establishing breastfeeding. Community support for exclusive and extended breastfeeding must be facilitated. Mothers who return to work or school need support and advocacy for facilities for breastfeeding or milk expression. New Jersey WIC Services protects, promotes, and supports breastfeeding so that women will make informed infant feeding choices and so those who do start breastfeeding will be able to meet their goals.

FFY 2007

Below is the Overall Breastfeeding Activity Plan for FFY 2007, which includes Objectives, Plan of Action, Methods and Materials, and Evaluation. Breastfeeding grantees develop implementation plans based on this template.

^{39.} Department of Health and Human Services. Healthy People 2010, Conference Edition: Chapter 16, Maternal, Infant, and Child Health.

^{40.} New Jersey Department of Health and Senior Services. Healthy New Jersey 2010, Trenton, NJ; April 2000.

^{41.} American Academy of Pediatrics Work Group on Breastfeeding. Breastfeeding and the Use of Human Milk. Pediatrics. 1997;100(6):1035-1039.

^{42.} Raisler J, Alexander C, O'Campo P. Breast-Feeding and Infant Illness: A Dose-Response Relationship? Am J of Public Health. 1999;89(1):25-29.

^{43.} Best Start. Breastfeeding for Healthy Mothers, Healthy Babies Training Manual, A-7 – A-17.

BREASTFEEDING ACTIVITY PLAN

GOAL 7: To increase the rates of breastfeeding initiation and duration among WIC participants through protection, promotion, and support activities.

TARGET GROUP: Pregnant and breastfeeding women

OBJECTIVES	PLAN OF ACTION	METHOD & MATERIALS	EVALUATION
I. To increase the monthly average percent of postpartum women who participate as breastfeeding to 62.0% during FFY 2007 (baseline, 61.5% in FFY 2005, Management Information Summary Report, Redeemed Participation, close out data).	At initial certification: • Encourage pregnant women to breastfeed • Address barriers to breastfeeding • Schedule pregnant women for the group "Prenatal Breastfeeding Class" as a second contact. Peer counselors teach the group breastfeeding class during prenatal second contact appointments at administrative sites. Provide literature to promote and support breastfeeding. Give participants two breastfeeding support warmline/telephone numbers. Telephone support/warmline services are available during and after WIC clinic hours. Coordinate with local community health and breastfeeding support groups. Peer counselors provide telephone support to all pregnant/breastfeeding participants: • 3 weeks before estimated date of delivery • 1-2 days after hospital discharge • Weekly in first month • Monthly from 2-6 months	CPAs follow P&P 2.04 for initial certification; use the 3-Step Counseling Technique; ask, "What have you heard about breastfeeding?" Offer "Why Should I Nurse My Baby?" to all pregnant women. Lessons: • Prenatal breastfeeding class or individual breastfeeding lesson Class Handouts: • "Breastfeeding is Best" pamphlet and flyer • "Breastfeeding" by La Leche League/Kiwanis • "When to Call for Breastfeeding Help" Visual aids: Infant doll and breast model Document attendance at the prenatal breastfeeding class in WIC ACCESS. Display breastfeeding posters and/or a "Breastfeeding is Welcome Here" sign. Ask participants calling to schedule their initial newborn certification appointments "How is breastfeeding going?" Refer breastfeeding participants to breastfeeding support staff to ensure telephone contact prior to the upcoming appointment.	Monitor the Management Information Summary Report for percent of postpartum women who breastfeed. Monitor prenatal breastfeeding education and counseling skills of CPAs and breastfeeding support staff. Request participants complete the prenatal breastfeeding lesson and breastfeeding support evaluation forms; review participants' evaluations. Monitor the Secondary Nutrition Contacts report for percent of pregnant women who receive the breastfeeding class. Monitor the Formula Supplementation of Breastfed Infants Report for percent of breastfeeding infants who do and do not use WIC formula. Review staff documentation of telephone contacts for pregnant and breastfeeding participants.

OBJECTIVES	PLAN OF ACTION	METHOD & MATERIALS	EVALUATION
OBJECTIVES II. To increase the percentage of infants who are breastfed and do not use WIC formula to a statewide average of 12.0% during FFY 2007 (baseline, 11.2% in February 2006, Formula Supplementation of Breastfed Infants Report).	PLAN OF ACTION Breastfeeding staff provides 15-minute contacts with all breastfeeding women during certification, check pick-up and package change appointments scheduled at administrative sites, referring to the IBCLC as necessary. IBCLCs provide 30-minute onsite consultations at initial certification appointments for referred breastfeeding women at administrative sites. IBCLCs provide 30-minute onsite consultations as needed for breastfeeding participants during second contact and package change appointments at administrative sites. Breastfeeding staff provides telephone follow-up and assessment as necessary. Breast pumps and breastfeeding aids are provided for participants as necessary.		Monitor monthly Breastfeeding Activity Reports for the number of: - breastfeeding classes and women taught - breastfeeding contacts - telephone calls to/from participants - products distributed Monitor the use and maintenance of the private, designated breastfeeding consultation area at administrative sites. Monitor clinical assessment and counseling skills of breastfeeding staff. Review documentation of in-person and telephone contacts with participants. Review documentation of the distribution of breast pumps and aids.
	Provide targeted information and printed materials as necessary.	Document distribution of targeted information and printed materials to participants.	
III. To decrease the statewide percentage of breastfed infants who receive full formula packages to 14.0% during FFY 2007 (baseline, 14.6% in, February 2006, Formula Supplementation of Breastfed Infants Report).	Breastfeeding staff and CPAs coordinate services to ensure appropriate food package tailoring for breastfeeding women and their infants. Breastfeeding support staff coordinates with community and health care providers to ensure consistent and accurate breastfeeding support for WIC participants.	CPAs and breastfeeding staff communicate relevant participant information, which may include documentation in WIC ACCESS SOAP notes. Utilize "Breastfeeding Management and Promotion in a Baby-Friendly Hospital" (UNICEF/WHO training program).	Monitor package- tailoring skills of CPAs. Monitor coordination of services for breastfeeding women and their infants. Monitor in-services, coordination, and outreach with community and healthcare providers.

SECTION III FFY 2007 STATEWIDE NUTRITION EDUCATION PLAN

OVERVIEW

During FFY 2007, nutrition education for WIC participants of all status will focus on encouraging healthy lifestyle behaviors related to diet and physical activity to promote positive health outcomes.

- **GOAL** 1: To promote optimal iron status in WIC participants and/or caretakers of WIC participants by encouraging the selection of foods high in iron and vitamin C. GOAL 2: To promote the birth of normal weight, full term infants to pregnant women participants by encouraging them to eat properly and to gain an appropriate amount of weight during pregnancy. GOAL 3: To promote the optimal growth and development of children by encouraging appropriate eating habits and the maintenance of a healthy weight. GOAL 4: To promote the optimal growth and development of infants by encouraging appropriate feeding behaviors. GOAL 5: To promote good oral health for infants and children participating in the WIC program. GOAL 6: To encourage WIC participants to assess their personal risks for potential problems related to substance abuse (alcohol/drug intake) and cigarette smoking. GOAL 7: To increase the rate of breastfeeding initiation and duration among WIC participants
- To promote regular physical activity in conjunction with nutrition education to prevent and decrease the incidence of overweight and obesity and the maintenance of a healthy weight in WIC participants and caregivers of WIC participants.

through protection, promotion, and support activities.

These broad goals remain virtually unchanged from FFY 2006. New Jersey WIC Services will continue to promote regular, sustained physical activity, increased consumption of a variety of colorful fruits and vegetables, and the maintenance of a healthy body weight as positive behaviors to improve health.

Model Healthy Lifestyle Behaviors

Local agency staff is encouraged to continue to model healthy lifestyle behaviors to participants. Strategies include prominently wearing a pedometer at work, posting activity reminders to take the stairs, organizing a walking lunch, and choosing healthy foods for meetings and celebrations. Worksite wellness activities are encouraged.

Promote Physical Activity

Local agencies are encouraged to promote the importance of physical activity by incorporating positive physical activity messages into all nutrition counseling. Recommended strategies include providing educational materials that stress the importance of physical activity, having physical activity displays or posters visible, and making a short statement at the end of every counseling session such as, "Good nutrition is not enough; remember to be physically active every day!" The local agencies are encouraged to utilize materials from *Get Fit New Jersey*, produced by the NJ Council on Physical Fitness and Sports, the President's Council on Physical Fitness and Sports, Team Nutrition, and the CDC as well as the lesson and resources provided in this document.

Local agencies received training materials summarizing the 2005 Dietary Guidelines for Americans and how to interpret these guidelines for WIC participants. Recommendations for physical activity vary and are now based on an individual's age and desired health benefit. CPAs are encouraged to help each participant understand these new recommendations and base their counseling on the participant's desired health goal.

Promote Fruit and Vegetable Consumption

In 2007, the key message of fruit and vegetable nutrition education will be the positive messages consistent with key recommendations for fruits and vegetables in the *Dietary Guidelines* including:

- Consume a sufficient amount of fruits and vegetables while staying within energy needs.
- Choose a variety of fruits and vegetables each day and select from all five vegetable subgroups (dark green, orange, legumes, starchy vegetables, and other vegetables) several times per week.

The key behavioral strategies will be simple messages to:

- Enjoy fruits and vegetables "as is" with minimal food preparation.
- Enjoy healthy snack choices.
- A supporting message to fill half your plate with fruits and vegetables will continue.

Fiscal year 2007 will serve as a transition time of both nutrition education messages and materials to reflect the new national fruit and vegetable promotion program messages, as the familiar brand of "5 A Day" begins to phase-out.

• New brochures are on order from the Centers for Disease Control and Prevention (CDC) to promote increased consumption of fruits and vegetables. Local agencies should receive the electronic versions of these materials early in the new fiscal year with print copies to follow.

Brochures include a low literacy handout, "Three simple steps to eating more fruits and vegetables," and a general audience brochure, "How many vegetables do *you* need?" Both of these handouts will be in English and Spanish. Two additional brochures designed for African-Americans will also be available: "Choose Smart, Choose Healthy" (for women) and "Why do fruits and vegetables matter to men?"

• Training will be made available to all WIC staff as the new brand to promote fruit and vegetable consumption is launched.

FFY 2007 NUTRITION EDUCATION PLAN HIGHLIGHTS

Lesson content is now consistent with the 2005 Dietary Guidelines and USDA My Pyramid Food Guidance System information. In response to VENA, the lesson section contains a brief summary of behaviorally focused counseling strategies such as Motivational Interviewing and Facilitated Discussion and includes a list of free training opportunities for professional staff. Lessons include more provider suggestions to increase discussion among and interaction with WIC participants. The 2007 Nutrition Education CD-ROM includes all NEP materials including additional lesson plans on requested topics such as FIT WIC, Time for a Cup, Lead, Grocery Shopping on a Budget, Portion Size, Family Mealtime, Smart Snacking, and Fitness for Families. The "Presentations" folder contains PowerPoint presentations for use with WIC participants, and the "Training" folder contains job aids and resources for staff training on a number of requested topics. The CD also contains new education handouts on physical activity, fruits and vegetables, food safety, fiber, lead, TV viewing, oral health, calcium, mercury in fish, and breastfeeding education and support materials.

IMPLEMENTATION

Local agency coordinators, chief nutritionists, and CPAs are to review the 2007 Statewide Nutrition Education Plan and either adopt it or use it as the base for development of the local agency plan. Local agencies should submit a plan detailing the specific methods they will use to achieve the goals outlined by the State or submit a modification based on specific population needs within their agency.

Local agency plans must include information pertaining to the nutrition education topics, schedule, delivery method (group class or individual instruction), use of guest speakers, food demonstrations and/or any other special events planned to support the focus areas of increased physical activity, increased consumption of a variety of colorful fruits and vegetables and the maintenance of a healthy weight among WIC participants. Local agencies should include planned activities for National Nutrition Month and, when possible, schedule nutrition education topics to coincide with National Health Observances.

SECTION IV FFY 2007 LESSON PLANS

OVERVIEW

The lesson plans in this section are designed for use in both individual and group settings. The lessons are appropriate for groups of mixed status and suggestions are included for tailoring content to meet the needs of the audience. The ethnic distribution of New Jersey's population was considered and lessons were designed to be culturally sensitive. New Jersey WIC Services further recognizes the cultural and ethnic diversity of the state's WIC population and encourages local WIC agencies to employ a variety of counseling and educational strategies to meet the unique needs of their participants. The lessons include Nutrition Education Provider suggestions with a focus on interactive, participant centered learning, utilizing facilitated discussion and motivational interviewing techniques. All lessons include objectives, suggested materials and methods, a course outline and timetable, references, website links to downloadable materials and evaluation and reporting forms. The lesson section is followed by an appendix of handouts along with a full-color copy of each handout in English and Spanish. All materials included in this education plan are provided to each local WIC agency and CPA in hard copy and on a CD-ROM along with forms and other nutrition education support materials.

WIC nutritionists and CPAs are expected to be familiar with the various educational methods and techniques recommended in these pages. Over the next few years, New Jersey WIC Services will be moving away from a lecture style education class to more of a facilitated discussion format. Included in this section is a summary of some behavioral approach theories which can be applied to the delivery of nutrition education and a list of continuing education and training opportunities for WIC CPAs related to nutrition assessment, education, and counseling. New Jersey WIC Services encourages local agency coordinators to provide all professional staff access to these trainings and/or to require that staff receive training following internal monitoring or performance review that identifies skill deficiencies.

BEHAVIORAL APPROACH THEORIES

Facilitated Group Discussion (FGD)

Facilitated Group Discussion is a style of providing nutrition education that results in greater potential for behavior change and compliance. Participants have a greater potential for behavior change when given the opportunity to be influenced by their peers in an interactive approach rather than a lecture style presentation with a "nutrition expert." In FGD, participants meet in a group and discuss specific nutrition related topics, sharing their knowledge with one another. The nutrition educator leads the discussion by posing open ended questions and encouraging clients to discuss among themselves their unique approaches to the nutritional problems posed during the session. This allows clients to receive and exchange nutrition information within a supportive environment that respects their culture, prior experience, and personal concerns. The CPA or facilitator directs the discussion, clarifies points, corrects misinformation in a supportive way, and summarizes the key points of the discussion for participants.

Motivational Interviewing (MI)

Motivational interviewing is a client-centered, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence. It is a way of eliciting self-motivation in order to actively engage the client in the behavior change process. It does not assume that the individual necessarily has a desire to change and therefore the role of the educator is to support individuals in resolving ambivalence and progressing through the stages of change. MI gives individuals autonomy to move through the stages of change and it enhances internal attribution. The theory is based upon and builds on the Stages of Change Theory.

The Stages of Change Model

The Stages of Change model was developed by Prochaska and DiClemente⁴⁴ as a framework to encourage clients, in clinical settings, to develop motivation to change their behavior. Since then, McNamara⁴⁵ (1998) has adapted the model so that it can be applied to both clinical and educational settings:

- **Stage 1: Pre-contemplation**: Client sees no problem but others disapprove.
- Stage 2: Contemplation: Client weighs the pros and cons of changing.
- **Stage 3: Preparation**: Client makes a choice about whether to carry on as before or change their behavior.
- **Stage 4: Action**: Client puts the decision to change into practice.
- Stage 5: Maintenance: Client actively maintains change.
- Stage 6: Relapse: Client returns to previous behavior.

44. Prochaska JO, DiClemente CC. Transtheoretical therapy toward a more integrative model of change. Psychotherapy: Theory, Research and Practice. 1982;19(3)267-287.

45. McNamara E. The theory and practice of eliciting pupil motivation: Motivational interviewing - a form teacher's manual and guide for students, parents, psychologists, health visitors and counsellors. Ainsdale, Merseyside. Positive Behaviour Management. 1998.

TRAINING OPPORTUNITIES FOR WIC COMPETENT PROFESSIONAL AUTHORITIES

WIC Learning Online

The training modules were designed specifically for WIC professional and para-professional staff. The training consists of four lessons which cover topics such as Communicating with Participants, Counseling Skills (Motivational Interviewing and Facilitated Discussion), Reaching Participants through WIC (Making Nutrition Fun and Attractive), and Health and Nutrition. http://www.nal.usda.gov/wicworks/WIC Learning Online/index.html

Open Wide: Oral Health Training For Health Professionals

A series of four self-contained online modules designed to help health and early childhood professionals working in community settings (for example, Head Start, and WIC staff) promote oral health in the course of promoting general health for infants, children, and their families. The modules present professionals with information about tooth decay, risk factors, and prevention; explain how to perform an oral health risk assessment and oral health screening; and highlight anticipatory guidance to share with parents. http://www.mchoralhealth.org/OpenWide/

Quarterly Nutrition Services Meetings

Agencies will receive a schedule of training dates at the beginning of FFY 2007. Training topic selection is based on needs identified through onsite reviews and local agency feedback. Topics this year will include nutrition education behavioral approach strategies and exempt formula training.

Breastfeeding Training

"Breastfeeding Promotion and Support Training, Parts I and II" is offered at least once a year. This mandatory training must be completed by all CPAs, lactation consultants, and lactation instructors within one year of hire. Before interacting with participants, breastfeeding peer counselors must successfully complete the New Jersey WIC Services Breastfeeding Peer Counselor Training course. This course is a minimum of 18 hours of classroom work after which new peer counselors are paired with experienced staff for ongoing mentoring. Regional Breastfeeding Managers provide at least one in-service each year for each local agency served by its grant.

Limited English Proficiency (LEP) Resources

The U.S. Department of Justice has developed a website www.lep.gov where agencies can find resources for serving LEP individuals and communities. The site contains "Know Your Rights" brochures, "I Speak" flashcards, resources for translators and staff training materials.

LESSON PLAN

TITLE: Iron – A Key to Better Health

AUDIENCE: WIC participants and/or caregivers of WIC participants

OBJECTIVES:

At the end of the lesson, the participants and/or caregivers will be able to:

- 1) Identify at least one reason for iron's importance in the diet.
- 2) Identify symptoms of iron deficiency anemia.
- 3) Identify WIC and Non-WIC foods containing iron.
- 4) Identify one way to increase iron absorption.

MATERIALS:

- 1) For Goodness Sake! Prevent Anemia/Prevenga la anemia!/Tiv thaiv mob anemia! http://anrcatalog.ucdavis.edu
- 2) Handouts: The Strength of Iron, Iron (low literacy)
- 3) Food models, product samples

CONTENT OUTLINE:

I.	Introduction: 2 minutes
II.	Audiovisual: (optional)
III.	Presentation: 5 minutes
	A. What is iron?
	B. Iron deficiency anemia
	C. Foods high in iron
	D. Foods high in vitamin C
IV.	Activity and Discussion: Create a better iron rich menu
V.	Summary1 minute
VI.	Evaluation
	(18 minutes without video) Total 30 minutes

References: The National Institutes of Health http://ods.od.nih.gov/factsheets/iron.asp

 $http://www.kidshealth.org/parent/\overline{medical/heart/ida.html}\\$

CONTENT NE PROVIDER ACTIVITIES I. Introduction: (2 minutes) Use facilitated discussion or open 1. Welcome the participants; introduce self. ended questions to find out what the 2. State the purpose of the lesson. group already knows about iron 3. Review the learning objectives with the participants. deficiency anemia. 4. Introduce the subject with an open ended question Example: What have you heard about iron and good health? II. Videotape: For Goodness Sake! Prevent Anemia-Prevenga Show videotape. la anemia!/Tiv thaiv mob anemia! (Optional 12 minutes) **Presentation: (5 minutes)** A. What is Iron? Springboard questions for discussion: Iron is a necessary mineral for body function and Why is iron important in our diet? good health. Every red blood cell in the body contains iron in its hemoglobin, the pigment that carries oxygen to the tissues from the lungs. B. Iron Deficiency Anemia A lack of iron in the blood can lead to iron-deficiency What happens if we don't get enough anemia, the most common nutritional deficiency in iron in our diet? the world. Iron deficiency can also lead to better absorption of lead, which increases the risk of lead poisoning in children, especially those living in older homes. Even mild iron deficiency in pregnancy can lead to premature delivery, low birthweight and placental insufficiency Besides diet, other causes of anemia include blood What are some other causes of loss, poor absorption, or periods of rapid growth like anemia? during pregnancy or in childhood. Poverty can be a contributing factor to irondeficiency anemia because families living at or below the poverty level may not be getting enough iron-rich foods. If left untreated, iron-deficiency anemia may lead to behavioral or learning problems. When your iron is low you may: Write symptoms on the chalkboard or 1. Feel tired flip chart. Ask participants if they 2. Be irritable recognize any of these symptoms in 3. Have trouble concentrating their child. Show pictures that display 4. Have a headache these symptoms, if available. In most cases, iron-deficiency anemia is preventable by following some basic dietary recommendations:

CONTENT

C. Foods High in Iron

MEAT GROUP

Liver – the best source

Beef Pork

Chicken

Beans – garbanzo beans, black beans, Kidney beans, white navy beans; etc.

Peanut Butter

Ham

NE PROVIDER ACTIVITIES

Show pictures of food or food models. Ask participants to identify other sources of iron in the diet. Point out the reason for the absence of the milk group. Emphasize milks low iron content and calcium's ability to bind iron.

FRUIT AND VEGETBALE GROUP

Kale

Collard Greens

Spinach

Dried Fruits:

Apricots, dates, raisins, prunes

Have the participants identify the WIC foods from the list.

Ask participants how they could incorporate these foods into their family's diet.

BREADS AND CEREALS

Whole wheat bread Enriched white bread WIC Cereals

Rice

Fruits

Enriched pasta: e.g., spaghetti, macaroni and noodles

D. Foods High in Vitamin C

Discuss ways to increase the absorption of iron:

Grapefruit Broccoli

Oranges Green leafy vegetables

Vegetables

Cantaloupe Green peppers
Strawberries Tomatoes

Grapefruit juice Orange juice Pineapple juice

The iron found in foods is absorbed better when eaten with foods rich in vitamin C.

Eat Vitamin C rich foods.

Avoid teas and colas with caffeine. Avoid giving children too much milk.

Examples:

- 1. Raisins with orange juice for a snack
- 2. Broccoli with lemon juice
- 3. Hamburger with tomato
- 4. Peanut butter sandwich with orange slices

Ask participants "What other iron rich snack suggestions can you think of?" Point out the use of WIC foods or show pictures (poster board).

CONTENT NE PROVIDER ACTIVITIES IV. Activity: (5 minutes) Create a better iron-rich menu Identify sources of iron in the current menu and ask Write menu on chalkboard or flip participants for suggestions on how to improve the iron chart. Ask participants to identify the content of the sample menu. (Instructor may choose to foods that are sources of iron. Have review only one menu or both as time permits.) them make suggestions using WIC and non-WIC foods to improve the Sample Menu iron content of the menu. **BREAKFAST** -Total® Corn Flakes with milk, apple juice, toast graham cracker, coke AM SNACK -LUNCH ham sandwich, milk macaroni & cheese with a lettuce & DINNER tomato salad cake Sample Menu cream of wheat BREAKFAST orange milk LUNCH peanut butter and jelly sandwich cookies milk DINNER rice and beans salad with lettuce and tomatoes Jell-O® PM SNACK cookies milk V. **Summary: (1 minute)** Review these suggestions for preventing iron deficiency Provide handouts: anemia: The Strength of Iron Iron (Low literacy) • Eat a variety of healthy foods from all the food groups • Include iron rich foods like those we just discussed • Eat vitamin C rich foods with meals to enhance iron absorption from green leafy vegetables and meats • Reduce consumption of tea, coffee, and colas with meals VI. Evaluation: (4 minutes)

The CPA will solicit feedback on the lesson evaluation form following this lesson and discuss the correct answers with participants.

Distribute evaluation form.

Lesson Evaluation-Iron

Check the best answer:

1	l.	Iron is important in our diet because: □ a. It helps us have better vision. □ b. It helps our hair and nails to grow □ c. It helps our blood carry oxygen to our muscles and gives us more energy.
2	2.	People with anemia may feel: ☐ a. Full of energy ☐ b. Tired, irritable, and have a headache ☐ c. Have a dry mouth
3	3.	Foods that are good sources of iron include: □ a. Fruit, milk and cheese □ b. Meat, leafy greens, WIC cereals □ c. Ice cream, cake and candy
Ζ	1.	Which of the following helps your body absorb iron from food? □ a. Vitamin C foods and WIC juice □ b. Coffee and colas □ c. Milk and cheese
Plea	ase cl	heck Yes or No for the following:
5	5.	Did you enjoy this lesson? ☐ Yes ☐ No
6	5.	Was this lesson/class on a topic that interests you? ☐ Yes ☐ No
7	7.	Did you learn anything new from this lesson? ☐ Yes ☐ No
8	3.	Would you change what you eat based on this information? ☐ Yes ☐ No
Ģ).	Did the instructor present the information clearly? ☐ Yes ☐ No
I	How c	an WIC nutrition education be improved?
-		

Evaluación de la lección - Hierro

Marque la mejor respuesta:

1.	El hierro es importante en nuestra dieta porque: □ a. Ayuda a que tengamos mejor visión □ b. Ayuda al crecimiento de nuestro cabello y uñas □ c. Ayuda a que nuestra sangre lleve oxígeno a los músculos y tengamos más energía
2.	Las personas con anemia pueden sentirse: □ a. Llenas de energía □ b. Cansadas, irritables y con dolor de cabeza □ c. Tienen la boca seca
3.	Los alimentos que son buenas fuentes de hierro incluyen: □ a. Las frutas, la leche y el queso □ b. La carne, las verduras de hojas verdes, los cereales del programa WIC □ c. Los helados, pasteles y dulces
4.	¿Cuál de lo siguiente ayuda a su cuerpo a absorber el hierro de los alimentos? □ a. Comerlos con alimentos con Vitamina C (por ejemplo jugo de WIC). □ b. El café y las bebidas de cola □ c. La leche y el queso
Marque 5.	e Sí o No para lo siguiente: ¿Disfrutó esta lección? □ Sí □ No
6.	Esta lección/clase ¿trató sobre un tema que le interesa? □ Sí □ No
7.	¿Aprendió algo nuevo en esta lección? Sí No
8.	¿Cambiaría lo que come basándose en esta información? □ Sí □ No
9. ¿Cóm	El instructor ¿presentó claramente la información? Sí No o pueden mejorarse las lecciones sobre la educación de la nutrición del programa WIC?

Lesson Reporting Form-Iron

Local Age	ncy Name:		
Date:			
Reporting	Period: July thru December		
1 0	January thru June		
	<u> </u>	1	
Answer K	<u>ey</u>	#	<u>%</u>
1.	Iron is important in our diet because:	_	<u></u>
	a. It helps us have better vision		
	b. It helps our hair and nails to grow	a	
	c. It helps our blood carry oxygen to our muscles and	b	
		c	
	gives us more energy		
	D 1 'd ' 0 1		
2.	People with anemia may feel:		
	a. Full of energy	a	
	D. Tired, irritable, and have a headache	b	
	c. Have dry mouth	c.	
3.	Foods that are good sources of iron include:		
	a. Fruit, milk and cheese	a.	
	□ b. Meat, leafy greens, WIC cereals	b.	
	c. Ice cream, cake and candy	c	
4	Which of the following holes your hody shooth incomfront for do		
4.	Which of the following helps your body absorb iron from food?		
	a. Vitamin C foods and WIC juice		
	☐ b. Coffee and colas	a	
	c. Milk and cheese	b	
		c	
		· <u></u>	
Please che	ck Yes or No for the following:	#	<u>%</u>
	g	<u> </u>	<u> 70</u>
5.	Did you enjoy this lesson?	Yes	
	Yes No	No	
6.	Was this lesson/class on a topic that interests you?	Yes	
	Yes No	No	
	165 110		
7.	Did you learn anything new from this lesson?	Yes	
7.	Yes No	No	
8.	Would you change what you eat based on this information?	Yes	
0.			
	☐ Yes ☐ No	No	-
0	D:14b : : : : : : : : : : : : : : : : : : :	V	
9.	Did the instructor present the information clearly?	Yes	-
	Yes No	No	
10.	Additional comments on improving WIC nutrition education.		
	(Attach additional pages if necessary)		
Percen	t of Participants who met all lesson objectives:		
A. Tot	al number of evaluations received	B/A*100=	
B. Nur	nber of evaluations with a score of 100% (#1-4)	_	-

LESSON PLAN

TITLE: Eating Right and Gaining Weight to Build a Healthy Baby

AUDIENCE: Pregnant Women

OBJECTIVES:

At the end of the lesson, the participants will be able to:

- 1) Identify healthy foods and amounts to eat during pregnancy.
- 2) Identify a healthy weight gain goal.
- 3) Describe the importance of folic acid during pregnancy.
- 4) Identify foods containing folic acid.
- 5) Identify strategies for the common complaints of pregnancy.

MATERIALS AND METHODS:

- 1) Prenatal Nutrition Lesson
- 2) Handouts: Eating Right During Pregnancy, A Peek Inside My Baby's Growth, Folic Acid, Common Complaints of Pregnancy
- 3) Fit for Two Tips for Pregnancy Brochure http://www.niddk.nih.gov/health/nutrit/pubs/fit4two/fitfortwo.htm

GROUP DISCUSSION AND EVALUATION:

- 1) CPA will engage participants in a discussion related to the various objectives.
- 2) The participant will complete the lesson evaluation form.

References: http://www.mypyramid.gov/

The American Dietetic Association

http://www.eatright.org/Public/GovernmentAffairs/92 adar1002b.cfm

The Weight Control Information Network of the National Institutes of Health

U.S. Department of Health and Human Services www.4women.gov

Prenatal Nutrition

Facilitated discussion format:

What do you think "eating healthy" means when you are pregnant?

Encourage participants to list foods they think are healthy and why. Discuss increased calorie needs in pregnancy and why it is not really "eating for two." Discuss amounts to consume, especially in dairy and protein groups, as these are nutrients of concern for pregnant women. and USDA My Pyramid messages:

- Make half your grains whole (6 oz equivalents, 3 from whole grains)
- Vary your veggies (3 cups)
- Focus on fruit (2+cups)
- Get your calcium rich foods (3-4 cups)
- Go lean with protein (6 oz equivalents)
- Find your balance between food and physical activity
 http://www.americanpregnancy.org/pregnancyhealth/effectsofexerciseonpreg.htmly

Amounts are based on a 2000 Kcal diet. Provide the 2000 Kcal Menu handout from the CD-ROM.

What are some obstacles to improving diet and making good food choices?

- Lack of time to cook
- Social pressures
- Availability of food
- Convenience
- Old food habits
- Misinformation and food related myths

What is one healthy change you could make in your diet?

How much weight should you gain?

Ask participants how they feel about gaining weight in pregnancy, and discuss individual weight gain goals. Recognize individual differences. Encourage participants to set a weight gain goal that is reasonable. Discuss obstacles or barriers to meeting their goals. Discuss the role of exercise in pregnancy.

Background information for CPA:

Low weight gain during pregnancy can lead to low birth weight and premature babies who are at increased risk for health problems during their first year of life. Complications for the pregnant women/teenagers include: high blood pressure, iron-deficiency anemia, and prolonged labor. Gaining too little weight is more dangerous for the teenagers and their babies than gaining too much weight. For women, high weight can increase risk of Cesarean section and can contribute to postnatal obesity for the mom.

Recommended weight gain during pregnancy: Normal is 25 to 30 pounds. If a woman was underweight (BMI <19.8) before becoming pregnant, she needs to gain 28 to 40 pounds. If she was overweight (BMI >26.0) before coming pregnant, she still needs to gain 15 to 25 pounds.

What have you heard about the importance of folic acid?

Discuss importance, recommendations, and food sources.

Background info for CPA:

Folic acid and folate are different terms for the same B vitamin. Folic acid is the term used when this B vitamin is artificially added to foods or is included in a prenatal supplement. Breads and breakfast cereals are often fortified with this vitamin. Folate is the term used when this B vitamin occurs naturally in foods. Examples are green leafy vegetables such as spinach and romaine lettuce. Pregnant women need folic acid for the growth of their baby's tissues and organs. When folic acid is taken before pregnancy and during the very early days (days 17-30) of pregnancy, it can reduce the risk of having a baby born with neural tube defects by up to 70%! Neural tube defects are serious malformations in the developing fetus's spinal cord (neural tube) that occur early in pregnancy and are a leading cause of infant death. Folic acid is necessary for proper cell growth and development of the neural tube.

The recommendation is 400 micrograms daily for all women of childbearing age. Many WIC cereals are excellent sources of this vitamin providing 25% of the Daily Value. In addition, other WIC foods such as dried beans and peas, peanut butter, and orange, pineapple and tomato juices are all good sources of this vitamin.

What pregnancy discomforts have you been experiencing?

Discuss discomforts, have participants share coping strategies, correct erroneous information and offer strategies not mentioned.

Background info for CPA:

Coping strategies for Nausea

- Eat 5-6 small meals daily and never go long periods of time without eating.
- Keep dry crackers or low fat ginger cookies by your bed. Eat these before getting out of bed. Do not drink anything. Wait 30 minutes and get out of bed slowly.
- Ginger has been shown to have beneficial effects and small amounts of ginger ale, diluted juice or clear soup may help with nausea between meals.
- Avoid fried and greasy foods.
- Aromas from strong smelling foods or cooking may aggravate nausea. Try cold meats and salads, or have someone else prepare the food.
- Easy to tolerate foods may include, cold chicken, noodles, potatoes, applesauce and Jell-O®.
- Prenatal vitamins should be taken 30 minutes after the largest meal of the day. If they continue
 to cause nausea, the woman may need to switch to a chewable vitamin but should check with
 her doctor first.
- Some individuals may experience relief with non-conventional choices like potato chips and lemonade. Remember-if you find something that works for you, stick with it until the symptoms pass.
- The American College of Obstetricians and Gynecologists recommends taking vitamin B6 or vitamin B6 plus doxylamine (an antihistamine) as a first line treatment for nausea and vomiting of pregnancy. ⁴⁶ Caution women to discuss and check with their own physician before taking any medications during pregnancy.

^{46.} http://www.acog.org/from home/publications/press releases/nr03-29-04-1.cfm

Symptoms usually improve as the pregnancy continues. As symptoms improve, add more variety back to the diet. Encourage participants to talk to their doctor if symptoms persist or weight loss occurs, as they may need treatment that is more aggressive.

Heartburn:

Heartburn usually is a problem in the last month of pregnancy when the growing baby puts pressure on the stomach, causing stomach acids to be pushed upwards. However, the symptoms of heartburn can occur at any time during the pregnancy.

Strategies for managing or preventing heartburn include the following:

- Eat several small meals instead of three large ones.
- Limit fried and fatty foods, and switch to lower fat dairy products like 1% or skim milk.
- Limit foods that cause gas like cruciferous vegetables, beans and spicy foods.
- Limit or avoid caffeine-containing beverages like coffee and colas.
- Try to remain upright for at least one hour after eating. Avoid eating right before going to bed.

Constipation:

Constipation is usually the result of pregnancy hormones that slow down the movement of the intestinal tract. Reduced physical activity and the pressure of the growing baby on a woman's intestines also contribute to constipation.

Strategies for managing or preventing constipation include the following:

- Drink 8-10 cups of fluids daily. Include water, WIC juices (especially prune and apple), and vegetable soups.
- Eat more fiber-rich foods. Include whole grain WIC cereals (All Bran®, Wheaties®, and Total®), 100% whole wheat bread, and brown rice.
- Eat more raw fruits and vegetables.
- Eat meals at regular times each day.
- Exercise or walk daily. Physical activity can help the movement of food through the intestines. Talk to your doctor about the amount of exercise that is right for you.

REMEMBER:

Ask open-ended questions

Guide the discussion

Clarify points made

Accept individual differences and cultural preferences

Correct erroneous information in a participant centered way:

"I'm glad that worked for you. Other people have found..." "You have brought up a really interesting issue. Dietary experts have found..." "What is another option available to you based on what we talked about today?"

Lesson Evaluation-Eating Right During Pregnancy

Check T	Frue or False for the following: Pregnant women need 3-4 cups of dairy foods every day. True False
2.	Pregnant women need at least 6 oz of protein foods daily. True False
3.	Folic acid is found in WIC cereals and can help prevent Neural Tube defects. True False
4.	Folic acid is important before and during pregnancy. True False
Please c	heck Yes or No for the following:
5.	Did you enjoy this lesson? □ Yes □ No
6.	Was this lesson/class on a topic that interests you? ☐ Yes ☐ No
7.	Did you learn anything new from this lesson? ☐ Yes ☐ No
8.	Would you change what you eat based on this information? ☐ Yes ☐ No
9.	Did the instructor present the information clearly? ☐ Yes ☐ No
How c	can WIC nutrition education lessons be improved?

Evaluación de la lección — Comer adecuadamente durante el embarazo

Marque Verdadero o Falso para lo siguiente:

1.	Las mujeres embarazadas necesitan 3-4 tazas de alimentos lácteos cada día. □ Verdadero □ Falso
2.	Las mujeres embarazadas necesitan al menos 6 onzas de alimentos ricos en proteínas cada día. □ Verdadero □ Falso
3.	El promedio de aumento de peso recomendado durante el embarazo es de 25 a 35 libras. Uerdadero Falso
4.	El ácido fólico se encuentra en los cereales del programa WIC y puede ayudar a prevenir defectos del tubo neural. Uerdadero Falso
5.	El ácido fólico es importante antes de y durante el embarazo. Uerdadero Falso
Marque	Sí o No para lo siguiente:
6.	¿Disfrutó esta lección? Sí No
7.	Esta lección/clase ¿trató sobre un tema que le interesa? □ Sí □ No
8.	¿Aprendió algo nuevo en esta lección? Sí No
9.	¿Cambiaría lo que come basándose en esta información? □ Sí □ No
10.	El instructor ¿presentó claramente la información? □ Sí □ No
¿Cómo	pueden mejorarse las lecciones sobre la educación de la nutrición del programa WIC?

Lesson Reporting Form-Eating Right During Pregnancy

Local Agency Name:				
Date:				
Answer Key		<u>%</u>		
1. Pregnant women need 3-4 cups of dairy foods every day. True False	T F			
2. Pregnant women need at least 6 ounces of protein foods daily. ☐ True ☐ False	T F			
3. The average recommended weight gain for pregnancy is 25-35 lbs. ☐ True ☐ False	T F			
4. Folic acid is found in WIC cereals and can help prevent Neural Tube defects. ☐ True ☐ False	T F			
5. Folic acid is important before and during pregnancy. True False	T F			
Please check Yes or No for the following:	<u>#</u>	<u>%</u>		
6. Did you enjoy this lesson? Yes No	Yes			
7. Was this lesson/class on a topic that interests you? Yes No	Yes			
8. Did you learn anything new from this lesson? Yes No	Yes			
9. Would you change what you eat based on this information? \[\subseteq \text{Yes} \subseteq \text{No} \]	Yes			
10. Did the instructor present the information clearly? Yes No	Yes			
11. Additional comments on improving WIC nutrition education. (Attach additional pages if necessary)				
Percent of Participants who met all lesson objectives: A. Total number of evaluations received				
B. Number of evaluations with a score of 100% (#1-5)	B/A*100= _			

LESSON PLAN

TITLE: Sweet Tooth

AUDIENCE: All adult WIC participants and caretakers of child participants.

OBJECTIVES:

At the end of the lesson, participants will be able to:

- 1) Identify three high sugar foods.
- 2) Name two ways to reduce the sugar content in one's diet
- 3) Identify two ways to prevent dental caries.

VISUAL AIDES, MATERIALS & EQUIPMENT:

- 1) Sample juice drink, soda, iced tea and punch bottles filled with the amount of sugar they contain.
- 2) Candy, snack bar and other junk food wrappers or product samples, as well as samples of low sugar snack alternatives, such as pretzels, crackers, fresh fruit, fresh vegetables etc.
- 3) Handouts: Do You Have a Sweet Tooth?
 Oral Health for Infants and Children
- 4) Website:

 $\frac{http://www.nidcr.nih.gov/HealthInformation/DiseasesAndConditions/ChildrensOralHealth/SnackSmart/}{}$

Snack Smart for Healthy Teeth

5) Website: http://www.cdc.gov/oralhealth/pdfs/brushuptips.pdf
Brush Up on Healthy Teeth Tip Sheet

CONTENT OUTLINE:

1.	Introduction: 2 minutes
II.	Content for Discussion: 7 minutes
	 A. Excess dietary sugar may lead to overweight and other health problems B. Dental caries C. Identify high sugar foods and beverages D. Healthy snacking
III.	Activity: Identify foods high in sugar
IV.	Summary 2 minutes
V.	Evaluation4 minutes
	Total 20 minutes

References: The Centers for Disease Control http://www.cdc.gov/oralhealth

The National Institutes of Health http://www.nidcr.nih.gov/health/pubs

CONTENT

I. Introduction (Background for CPAs)

Sure, sugary snacks taste great but we all know they aren't so great for your body or your teeth. **Did you know that the average American eats about 147 lbs of sugar a year?** It's not surprising that the average 17 year old in this country has more than three decayed teeth! (Ref. National Institutes of Health, 2000)

NE PROVIDER ACTIVITIES

Lesson content is provided as a review for the CPA. Information provided to participants should be tailored to their needs.

Ask: "How many of you love sweet snacks?"

Share info about typical sugar consumption.

II. Content for Discussion

A. Excess dietary sugar may lead to health problems.

Too much sugar in your diet may lead to overweight and other more serious health problems. Sugar contains a lot of calories and has no other nutritional value. It is easy to get a lot of calories from a high sugar food before you feel full.

Because of this, it is easy to become overweight, which may in turn lead to diabetes, heart disease, and stroke.

B. Dental caries

Invisible germs called bacteria live in your mouth. Some of these bacteria form a sticky material called plaque on the surface of the teeth. When you put sugar in your mouth, the bacteria in the plaque turn the sugar into acids. These acids can dissolve the enamel that covers teeth and produce a cavity. One of the best ways to prevent cavities is to brush your teeth after every meal and snack.

C. High sugar foods and beverages

Review foods that are high in sugar with participants. Be sure to identify hidden sources of sugar, such as sugar cereals, canned fruits, condiments like ketchup and certain dressings.

Provide healthy snack suggestions or alternatives to high sugar beverages and candy.

Have display of sample clear beverage bottles that show the amount of sugar in a typical can of soda, fruit drink, Iced tea, or Kool-Aid®.

Ask: "What do you think the consequences are for eating too many sweets or drinking a lot of sweet drinks?

Discuss and clarify important points.

Provide and review Handout: Oral Health for Infants and Children

Have available samples of high sugar foods like candy, cookies, cakes, fruit bars etc. Also, have available samples of healthy snack suggestions.

III. Activity: Identify foods high in sugar

Ask participants to identify the sample snack with the highest amount of sugar.

Discuss alternative healthy snacks.

IV. Summary

Healthy snacks like fresh fruits and vegetables, pretzels and crackers are less likely to promote tooth decay, or overweight than are some of the heavily sugared foods children often consume between meals. They also have greater nutritional value than sweets and will better promote your child's growth and development. However, any foods eaten in excess can cause weight gain and any food particles that remain on the teeth after a meal can promote tooth decay. Your child's meals and snacks should include a variety of foods from the food guide pyramid, and children should always brush their teeth after eating.

Review key points from discussion

Ask participants to identify one dietary change they could make to reduce the amount of sugar they or their children consume.

CONTENT	NE PROVIDER ACTIVITIES
V. Evaluation	
The CPA will solicit participants' feedback on the lesson evaluation form and discuss the correct answers with participants.	Distribute evaluation forms.

Lesson Evaluation-Sweet Tooth

Check the best answer:

1.	Which food is high in sugar? □ a. Fruit and cereal bar □ b. Pretzel □ c. Cheese
2.	Which of the following is a low sugar, healthy snack? ☐ a. Popsicle ☐ b. A fruit roll up ☐ c. Fresh vegetables with low fat dressing
3.	Which drink has the most added sugar? ☐ a. Fruit punch ☐ b. 100% fruit juice ☐ c. Milk
4.	Which of the following helps prevent tooth decay? ☐ a. Taking a vitamin ☐ b. Brushing your teeth after meals and snacks ☐ c. Drinking more milk
Please c	heck Yes or No for the following:
5.	Did you enjoy this lesson? ☐ Yes ☐ No
6.	Was this lesson/class on a topic that interests you? ☐ Yes ☐ No
7.	Did you learn anything new from this lesson? ☐ Yes ☐ No
8.	Would you change what you eat based on this information? ☐ Yes ☐ No
9.	Did the instructor present the information clearly? ☐ Yes ☐ No
How c	an WIC nutrition education lessons be improved?

Evaluación de la lección – Gusto por lo dulce

Marque la mejor respuesta: ¿Qué alimento tiene alto contenido de azúcar? 1. ☐ a. Las frutas y barras de cereal ☐ b. Las galletas saladas tipo "pretzel" □ c. El queso 2. ¿Cuál de los siguientes es un bocadillo saludable con bajo contenido de azúcar? ☐ a. Helado ☐ b. Los enrollados de fruta (a fruit roll-up) ☐ c. Las verduras frescas con aderezo con bajo contenido de grasa 3. ¿A qué bebida se le añade la mayor cantidad de azúcar? ☐ a. Kool Aid® □ b. Al jugo de frutas al 100% □ c. A la leche 4. ¿Cuál de lo siguiente ayuda a prevenir la caries dental? ☐ a. Tomar una vitamina ☐ b. Lávese los dientes después de comer. □ c Beber más leche Marque Sí o No para lo siguiente: ¿Disfrutó esta lección? 5. □ Sí □ No Esta lección/clase ¿trató sobre un tema que le interesa? 6. □ Sí □ No 7. ¿Aprendió algo nuevo en esta lección? □ Sí □ No 8. ¿Cambiaría lo que come basándose en esta información? □ Sí □ No 9. El instructor ¿presentó claramente la información? □ Sí □ No ¿Cómo pueden mejorarse las lecciones sobre la educación de la nutrición del programa WIC?

Lesson Reporting Form-Sweet Tooth

D (ncy Name:		
Date:			
Reporting	Period: July thru December		
	January thru June		
Answer K	<u>ey</u>	<u>#</u>	<u>%</u>
1.	Which food is high in sugar?	a	
1.	a. Fruit and cereal bar	a b.	
	b. Pretzel	c	
	c. Cheese	C	
	c. cheese		
2.	Which of the following is a low sugar, healthy snack?		
	a. Cheese and crackers	a	
	b. A fruit roll up	b.	
	c. Fresh vegetables with low fat dressing	c	
	C. I Tesh vegetables with low lat diessing	C	
3.	Which drink has the most added sugar?		
	⊠a. Fruit punch	a	
	b. 100% fruit juice	b	
	C. Milk	c. —	
4.	Which of the following helps prevent tooth decay?		
	a. Taking a vitamin	a	
	igstyle igy igstyle igy igstyle igy igstyle igy igy igstyle igy igy igy igy igy igy igy igy	b	
	c. Drinking more milk	c	
Please che	ck Yes or No for the following:	<u>#</u>	<u>%</u>
Please che	ck Yes or No for the following:	<u>#</u>	<u>%</u>
Please che	Did you enjoy this lesson?	# Yes	<u>%</u>
			<u>%</u>
	Did you enjoy this lesson? Yes No	Yes	<u>%</u>
	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you?	Yes	<u>9%</u>
5.	Did you enjoy this lesson? Yes No	Yes	<u>%</u>
5. 6.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No	Yes No	<u>%</u>
5.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson?	Yes No Yes No	<u>%</u>
5. 6.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No	Yes No	<u>%</u>
5. 6. 7.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No	Yes	<u>%</u>
5. 6.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No Would you change what you eat based on this information?	Yes No Yes No Yes Yes Yes	<u>%</u>
5. 6. 7.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No	Yes	<u>%</u>
5. 6. 7. 8.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No Would you change what you eat based on this information? Yes No	Yes	<u>%</u>
5. 6. 7.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No Would you change what you eat based on this information? Yes No Did the instructor present the information clearly?	Yes	<u>%</u>
5. 6. 7. 8.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No Would you change what you eat based on this information? Yes No	Yes	<u>%</u>
5. 6. 7. 8.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No Would you change what you eat based on this information? Yes No Did the instructor present the information clearly? Yes No	Yes	<u>%</u>
5. 6. 7. 8.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No Would you change what you eat based on this information? Yes No Did the instructor present the information clearly? Yes No Additional comments on improving WIC nutrition education.	Yes	<u>%</u>
5. 6. 7. 8. 9.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No Would you change what you eat based on this information? Yes No Did the instructor present the information clearly? Yes No Additional comments on improving WIC nutrition education. (Attach additional pages if necessary)	Yes	<u>%</u>
5. 6. 7. 8. 9. 10. Percen	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No Would you change what you eat based on this information? Yes No Did the instructor present the information clearly? Yes No Additional comments on improving WIC nutrition education. (Attach additional pages if necessary) t of Participants who met all lesson objectives:	Yes	<u>%</u>
5. 6. 7. 8. 9. 10. Percen	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No Would you change what you eat based on this information? Yes No Did the instructor present the information clearly? Yes No Additional comments on improving WIC nutrition education. (Attach additional pages if necessary) It of Participants who met all lesson objectives: all number of evaluations received	Yes No Yes No	
5. 6. 7. 8. 9. 10. Percen	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No Would you change what you eat based on this information? Yes No Did the instructor present the information clearly? Yes No Additional comments on improving WIC nutrition education. (Attach additional pages if necessary) t of Participants who met all lesson objectives:	Yes	

LESSON PLAN

TITLE: Cholesterol

AUDIENCE: All adult WIC participants and caretakers of child participants.

OBJECTIVES:

At the end of the lesson, participants will be able to:

- 1) Identify dietary sources of cholesterol.
- 2) Identify heart healthy, low-cholesterol foods.
- 3) Identify two ways to lower blood cholesterol.

VISUAL AIDES, MATERIALS & EQUIPMENT:

Handouts: "Cholesterol: Know the Facts?"

"Top Ten Ways to Help Children Develop Healthy Habits" On CD-ROM

Total 20 minutes

"A Parents Guide To Physical Play"

Display: A collage of activities, exercises with children and adults.

CONTENT OUTLINE:

I.	Intr	roduction:	2 minutes
II.	Dis	scussion Content:	13 minutes
	a. b. c. d. e.	What is Cholesterol? What causes high blood cholesterol? What foods contribute to high cholesterol? Dietary strategies to reduce cholesterol. The role of exercise.	
III. IV.		nmaryaluation	

References: The American Heart Association http://www.americanheart.org

The National Cholesterol Education Program Recommendations

CONTENT

I. Introduction (Background info. For CPA)

There is compelling evidence that the atherosclerosis (ath'er-o-skleh-RO'sis) (fatty deposits of plaque in artery walls) begins in childhood and progresses slowly into adulthood. It often leads to coronary heart disease, the single largest cause of death in the United States. Furthermore, there is evidence that

- Elevated cholesterol levels early in life may play a role in the development of heart disease in adults.
- Eating patterns and genetics affect blood cholesterol levels and coronary heart disease risk.
- Lowering cholesterol levels in children and adolescents may be beneficial to reducing heart disease risk.

Many laboratory studies have clearly established that high blood cholesterol levels play a role in developing coronary heart disease in adults. Several studies also have shown that fatty buildup in arteries begins in childhood and is more likely to occur with higher blood cholesterol levels. http://www.americanheart.org

NE PROVIDER ACTIVITIES

Lesson content is provided as a review for the CPA. Information provided to participants should be tailored to their needs.

To begin class Ask: "What do you know about cholesterol?"

Write responses on chalkboard or flip chart. Discuss and clarify.

Ask: "If your cholesterol is too high, what can happen?"

Present this information on a poster or display board for easy reference.

II. Discussion Content

a. What is cholesterol?

Cholesterol is a waxy substance that the body makes for it to work properly. Cholesterol is also found in foods that come from animals like meat, eggs, and milk.

b. What causes high blood cholesterol?

- Eating too much fat or saturated fat.
- Too little exercise
- A family history of high cholesterol or heart disease.

c. What foods contribute to high cholesterol?.

Limit:

Beef, pork, chicken with the skin, shellfish and other meats, butter, mayonnaise and lard.

Plant foods that contain saturated fats are solid shortening, coconut, and palm oils.

d. Dietary strategies to reduce cholesterol

Eat more fruits and vegetables Choose whole grains instead of processed Choose vegetable oil (olive, canola) instead of butter Bake and broil instead of fry Avoid high fat donuts, muffins and bakery products Have display of the food guide pyramid.

Ask: "What foods contain cholesterol?"

Discuss

Ask: "Besides food, are there other factors that can cause high cholesterol?"

Provide handout:

Cholesterol: Know The Facts

Ask: "What are some ways to reduce cholesterol in the diet?"

(Possible answers: use skim milk vs. whole milk with WIC cereals; use peanut butter vs. butter on bread; prepare rice and beans with vegetable oil; use margarine vs. butter)

Discuss other strategies participants may have heard of such as including increasing fiber and oat products, green tea, garlic, red wine etc.

CONTENT

e. The role of exercise:

controls weight
reduces blood pressure
raises HDL ("good") cholesterol
reduces the risk of diabetes and some kinds of cancer
improved psychological well-being, including gaining
more self-confidence and higher self-esteem

To **reduce disease risk** AHA and USDA recommend that all children age 2 and older should participate in at least 30 minutes of enjoyable, moderate-intensity activities **every day**. **NOTE:** For weight loss, the recommendation is increased to 60 minutes of moderate to vigorous activity on all or most days of the week.

If your child or children don't have a full 30-minute activity break each day, try to provide at least two 15-minute periods or three 10-minute periods in which they can engage in vigorous activities appropriate to their age, gender and stage of physical and emotional development.

Top Ten Ways to Help Children Develop Healthy Habits CPA can review Handout with participants.

Optional Activity:

Ask participants to make a **Heart Healthy Pledge** (attached)

III. Summary Info.

Review key points of discussion and strategies to lower blood cholesterol.

- Watch your caloric intake by eating a wide variety of foods low in saturated fat and cholesterol.
- Eat a wide variety of colorful fruits and vegetables every day.
- Choose whole grain or oat cereals, breads, and pastas.
 (Avoid cookies and crackers with trans fats on label)
- Eat fish, poultry without skin and leaner cuts of meat instead of fatty ones.
- Choose nonfat or 1% milk dairy products rather than whole-milk dairy products.
- Enjoy 30–60 minutes of moderate to vigorous activities on most (or all) days of the week.
- Maintain a healthy weight.

IV. Evaluation

The CPA will solicit participants' feedback on the lesson evaluation form and discuss correct answers with participants.

NE PROVIDER ACTIVITIES

Ask: What are some ways to help you or your children be more active?

Ensure the discussion includes the following points.

- Physical activity should be increased by reducing sedentary time (e.g., watching television, playing computer video games, or talking on the phone).
- Physical activity should be fun for children and adolescents.
- Parents should try to be role models for active lifestyles and provide children with opportunities for increased physical activity.

Provide Handout:

Top Ten Ways to Help Children Develop Healthy Habits OR

A Parents Guide to Physical Play

Information for reference: Cholesterol levels in children and adolescents 2-19 years old

Category	Total Cholesterol (mg/dl)	LDL Cholesterol (mg/dl)
Acceptable	less than 170	less than 110
Borderline	170-199	110-129
High	200 or greater	130 or greater

HDL levels should be greater than or equal to 35 mg/dl and triglycerides should be less than or equal to 150 mg/dl

Distribute evaluation forms to participants.

Healthy Heart Pledge

Ι, _	pled	lge to do at least three of the following
thi	ngs to help lower my, and my family's cholesterol and i	risk for heart disease and stroke:
• • • • • • • • • • • • • • • • • • •	To know what my cholesterol should be and try to kee Children<170 mg/dl) To read food labels at the grocery store and to buy foo saturated fat. To take measures to maintain a healthy weight. To participate in moderately intense physical activity minutes on most or all days of the week. On days whe few 20-minute segments during the day. To encourage my children to be physically active, and To increase the amount of fruits and vegetables my far To provide heart healthy foods at meal and snack time To quit smoking, or ask my doctor for help quitting. will recruit my family members to help me.	ods that are low in cholesterol and (like brisk walking) for at least 30-60 on I don't have time, I'll do the activity in a llimit T.V. time. mily and I eat. c.
He	elper's Names	What I Will Ask Him/Her To Do
Ιv	vill reward myself and my helpers by (be specific):	
	our Signature	Witness Signature

Lesson Evaluation-Cholesterol

Check the best answer:

1.	Cholesterol is found in: ☐ a. Fruits and vegetables ☐ b. Animal products like meat and dairy ☐ c. Beans		
2.	What WIC foods below support a healthy heart? □ a. WIC cereals □ b. Ice Cream □ c. Potato Chips		
3.	How many minutes of exercise should children and adults get each day? (to reduce the risk of disease) □ a. 60 minutes □ b. 30 minutes □ c. 10 minutes		
4.	Which of the following can help prevent high blood cholesterol? □ a. Exercise □ b. Eating more meat □ c. Frying foods		
lease c	check Yes or No for the following:		
5.	Did you enjoy this lesson? ☐ Yes ☐ No		
6.	Was this lesson/class on a topic that interests you? ☐ Yes ☐ No		
7.	Did you learn anything new from this lesson? ☐ Yes ☐ No		
8.	Would you change what you eat based on this information? ☐ Yes ☐ No		
9.	Did the instructor present the information clearly? ☐ Yes ☐ No		
How			
	can WIC nutrition education lessons be improved?		

Evaluación de la lección - Colesterol

Mar	que la mejor respuesta:
1.	
2.	¿Qué alimentos del programa WIC mencionados abajo ayudan a tener un corazón saludable? □ a. Los cereales del programa WIC □ b. Helado □ c. Frieron papas
3.	¿Cuántos minutos deben hacer ejercicio los niños y adultos cada día? (para reducir el riesgo de la enfermedad) a. 60 minutos b. 30 minutos c. 10 minutos
4.	¿Cuál de lo siguiente puede ayudar a prevenir el colesterol alto en la sangre? a. El ejercicio b. Coma más carne. c. Fría su alimento.
Man	ava Sí a Na nava la signianta.
Niar 5.	que Sí o No para lo siguiente: ¿Disfrutó esta lección? □ Sí □ No
6.	Esta lección/clase ¿trató sobre un tema que le interesa? □ Sí □ No
7.	¿Aprendió algo nuevo en esta lección? Sí No
8.	¿Cambiaría lo que come basándose en esta información? ☐ Sí ☐ No
9.	El instructor ¿presentó claramente la información? Sí □ No
ૃં(Cómo pueden mejorarse las lecciones sobre la educación de la nutrición del programa WIC?
_	

Lesson Reporting Form-Cholesterol

•	ncy Name:			
Date:				
Reporting	Period: July thru December January thru June			
Answer K	<u>ev</u>		<u>#</u>	<u>%</u>
1.	Cholesterol is found in:		_	
	a. Fruits and vegetables	a		
	🔀 b. Animal products like meat and dairy	b		
	c. Beans	c		
2.	What WIC foods below support a healthy heart?			
	🔀 a. WIC cereals	a		
	b. Skim milk	b		
	c. Beans	c		
2	How many minutes of evention should shildness and adults act such day			
3.	How many minutes of exercise should children and adults get each day			
	? (to reduce disease risk) a. 60 minutes	a b.		
	b. 30 minutes			
	c. 10 minutes	c		
	c. 10 minutes			
4.	Which of the following can help prevent high blood cholesterol?			
	🛛 a. Exercise	a.		
	b. Eating more meat	b		<u> </u>
	c. Frying foods	c		
Please che	eck Yes or No for the following:		<u>#</u>	<u>%</u>
5.	Did you enjoy this lesson?	Yes		
	Yes No	No		
	W. d. l. /l. / d.	37		
6.	Was this lesson/class on a topic that interests you?	Yes		_
	☐ Yes ☐ No	No		
7.	Did you learn anything new from this lesson?	Yes		
, .	Yes No	No		
8.	Would you change what you eat based on this information?	Yes		
	Yes No	No		
9.	Did the instructor present the information clearly?	Yes		
	Yes No	No		
10	All' 1 WIG ('' 1 C' (A))			
10.	Additional comments on improving WIC nutrition education. (Attach			
Dargan	additional pages if necessary) at of Participants who met all lesson objectives:	1		
reicen	it of ratherpairts who met an lesson objectives.			
A Tot	al number of evaluations received	B/A*1	00=	%
	mber of evaluations with a score of 100% (# 1-1)		_	

LESSON PLAN

TITLE: Fat

AUDIENCE: All adult WIC participants and caretakers of child participants.

OBJECTIVES:

- 1. Identify three types of fat in foods (saturated, unsaturated and hydrogenated.)
- 2. Identify which fats contribute to high cholesterol and/or heart disease.
- 3. Name two ways to reduce the fat content in one's diet.

VISUAL AIDS AND MATERIALS:

Handouts: Fat: Know the Facts

Lowfat Cooking Tips

Create Your Own Pizza and recipe activity

Time Allotment: 20 minutes

CONTENT OUTLINE:

I. II.	Introduction: Discussion Content:	
	a. Know your fats.b. What are dietary sources of fat?c. How much fat do we need?d. Dietary Changes	
IV. V. VI.	Activity: Create a Healthy Pizza Summary Evaluation	2 minutes

References: The American Heart Association <u>www.americanheart.org</u> Know Your Fats

http://www.mypyramid.gov/pyramid/oils.html

I. Introduction (Info. For CPA)

Fats are nutrients that the body needs in small amounts. They are very high in calories. The body uses fat for energy and it even stores it for future use. Fat also warms the body, protects body organs, is necessary for healthy skin, helps our body produce and use hormones, and makes our foods taste and smell great!

II. Discussion Content

a. Know your fats

Knowing which fats raise LDL cholesterol and which ones don't is the first step in lowering your risk of heart disease. Saturated fat, *trans* fatty acids, and dietary cholesterol raise blood cholesterol. Monounsaturated fats and polyunsaturated fats don't. Some studies suggest they might even help lower LDL (good) cholesterol slightly when eaten as part of a low-saturated-fat diet.

- Saturated fats are the main dietary cause of high blood cholesterol. They are found mostly in foods from animals, and some plants.
- Hydrogenated fats-are chemically processed fats like margarine and shortening which may raise blood cholesterol. Trans fatty acids (TFA) are a type of hydrogenated fat and are found in small amounts in some animal foods and are also formed during the process of making margarine, shortening and certain oils. On a food label, it would be listed as "Partially hydrogenated vegetable oil." Manufactures do this to make foods that will stay fresh longer.
- Unsaturated fats-include polyunsaturated and monounsaturated fats. These come from plant sources and may actually lower your blood cholesterol when used in place of other fats.

b. What are dietary sources of fat?

Review handout "Fat: Know The Facts."
Discuss the back of the handout, which gives examples of heart healthy menu substitutions.

c. How much fat do we need? (Reference only)

The American Heart Association recommends that healthy Americans over age 2 limit their intake of saturated fat to no more than 7-10% of your total calories and their total fat to no more than 30% of total calories. This translates into 67 gms. of fat for small or inactive individuals who need 2000 calories per day.

NE PROVIDER ACTIVITIES

Lesson content is provided as a review for the CPA. Information provided to participants should be tailored to their needs.

Ask: What do you think of when you hear the word "fat"?

Discuss

Ask: Can anyone think of any benefits of fat in our diet?

Ask: What have you heard about the different kinks of fat?

Prepare a flip chart or display board with the different types of fats and their simple definitions.

Use magazines and cut out pictures of foods that demonstrate the different types of fats. Have participants help assign them to the right categories of fat.

Or

Use food models

Provide and discuss handout : "Fat: Know The Facts"

Ask: "What comes to mind when you hear people talk about "Good" fat? "What are "good" fats?

Give examples:

Polyunsaturated fats "good": safflower, sesame, sunflower and corn oils, nuts and seeds.

Monounsaturated fats "good": canola, olive and peanut oil, avocadoes. Saturated and trans fats "bad": cookies, crackers, donuts, French fries, and fast foods, butter, lard, bacon grease.

Fat recommendations are for reference only-they may not be meaningful to participants.

CONTENT NE PROVIDER ACTIVITIES d. Dietary Changes Ask participants to discuss strategies to reduce total fat in the diet, as well as On the basis of current data, the American Heart Association ways to substitute "good" fats for "bad" recommends that consumers follow these tips: in cooking. Use naturally occurring, non-hydrogenated oil such as **Ask:** What are some ways to decrease canola or olive oil when possible. fat in the diet? Look for processed foods made with non-hydrogenated oil rather than hydrogenated or saturated fat. Use margarine as a substitute for butter, and choose soft margarines (liquid or tub varieties) over harder stick Shop for margarine with no more than 2 grams of saturated fat per tablespoon and with liquid vegetable oil as the first ingredient. French fries, doughnuts, cookies and crackers are examples of foods that are high in TFA. Avoid these foods. Limit the fat in your diet. If you don't eat a lot of fat, you won't be consuming a lot of TFA. Avoid commercially fried foods and commercial baked goods. Not only are these foods very high in fat, but that fat is also likely to be very hydrogenated, meaning a lot of TFA. Commercial shortening and deep-frying fats are made by hydrogenation and contain TFA. That's just one more reason to avoid fried fast food. Provide handout "Lowfat Cooking Tips" Review handout "Lowfat Cooking Tips" III. **Activity: Create a Healthy Pizza (optional)** Review pizza recipe with participants. Ask them to give Provide handout "Create a Healthy suggestions to make the pizza lower in fat. Some answers are Pizza" given at the bottom of the page. You may come up with more. IV. **Evaluation** The CPA will solicit participants' feedback on the lesson Distribute evaluation forms evaluation form and discuss correct answers with participants.

Lesson Evaluation-Fat

Check the best answer: Fats can be grouped into three categories; saturated, unsaturated and hydrogenated fats. 1. True False 2. All types of fat raise blood cholesterol. True False 3. Unsaturated fats come from plant foods and may help lower blood cholesterol. True False 4. Which of the following would reduce the total amount of fat you eat? a. Choose foods that are fried b. Drink whole milk instead of skim c. Eat fruit as a snack instead of cookies Please check Yes or No for the following: 5. Did you enjoy this lesson? □ Yes □ No 6. Was this lesson/class on a topic that interests you? □ Yes □ No 7. Did you learn anything new from this lesson? □ No □ Yes 8. Would you change what you eat based on this information? □ Yes □ No 9. Did the instructor present the information clearly? □ Yes □ No How can WIC nutrition education lessons be improved?

Evaluación de la lección - Grasa

Marque la mejor respuesta:

1.	Las grasas pueden agruparse en tres categorías, grasas saturadas, no saturadas e hidrogenadas.
	□ Verdadero □ Falso
2	
2.	Todos los tipos de grasa aumentan el colesterol en la sangre. ☐ Verdadero ☐ Falso
3.	Las grasas no saturadas se encuentran en los alimentos de las plantas y pueden ayudar a bajar los niveles del colesterol en la sangre. Uerdadero Falso
4.	Cual del siguiente es una manera de reducir las grasa en su dieta? □ a. Coma alimentos que se fríen. □ b. Beba leche entera □ c. Coma fruta en vez de las pastillas
Marque	Sí o No para lo siguiente:
5.	¿Disfrutó esta lección? □ Sí □ No
6.	Esta lección/clase ¿trató sobre un tema que le interesa? □ Sí □ No
7.	¿Aprendió algo nuevo en esta lección? □ Sí □ No
8.	¿Cambiaría lo que come basándose en esta información? □ Sí □ No
9.	El instructor ¿presentó claramente la información? Sí No
¿Cómo	o pueden mejorarse las lecciones sobre la educación de la nutrición del programa WIC?

Lesson Reporting Form-Fat

Date:	
Reporting Period:	
Answer Key	# %
1. Fats can be grouped into three categories; saturated, unsaturated	<u></u> <u>70</u>
and hydrogenated fats.	
True	T.
False	T F
2. All types of fat raise blood cholesterol.	
True	T
⊠ False	F
_	
3. Unsaturated fats come from plant foods and may help lower	
blood cholesterol.	
⊠True	<u>T</u>
□False	F
4. Which of the following would reduce the total amount of fat	
you eat?	
a. Choose foods that are fried	a
b. Drink whole milk instead of skim	b
🔀 c. Eat fruit as a snack instead of cookies	c
Please check Yes or No for the following:	<u>#</u> <u>%</u>
5. Did you enjoy this lesson?	Yes
Yes No	No
☐ Yes ☐ No	No
Yes No 6. Was this lesson/class on a topic that interests you?	No Yes
6. Was this lesson/class on a topic that interests you?	Yes
6. Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson?	Yes Yes
6. Was this lesson/class on a topic that interests you?	Yes
6. Was this lesson/class on a topic that interests you? Yes No 7. Did you learn anything new from this lesson? Yes No	Yes Yes No
6. Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No 8. Would you change what you eat based on this information?	Yes No Yes No Yes
6. Was this lesson/class on a topic that interests you? Yes No 7. Did you learn anything new from this lesson? Yes No	Yes Yes No
6. Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No Would you change what you eat based on this information? Yes No	Yes
6. Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No 8. Would you change what you eat based on this information? Yes No 9. Did the instructor present the information clearly?	Yes No Yes _
6. Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No Would you change what you eat based on this information? Yes No	Yes
6. Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No 8. Would you change what you eat based on this information? Yes No 9. Did the instructor present the information clearly? Yes No	Yes No Yes _
6. Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No 8. Would you change what you eat based on this information? Yes No 9. Did the instructor present the information clearly? Yes No 10. Additional comments on improving WIC nutrition education.	Yes No Yes _
6. Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No 8. Would you change what you eat based on this information? Yes No 9. Did the instructor present the information clearly? Yes No	Yes No Yes _
6. Was this lesson/class on a topic that interests you? Yes No 7. Did you learn anything new from this lesson? Yes No 8. Would you change what you eat based on this information? Yes No 9. Did the instructor present the information clearly? Yes No 10. Additional comments on improving WIC nutrition education. (Attach additional pages if necessary)	Yes No Yes _
6. Was this lesson/class on a topic that interests you? Yes No 7. Did you learn anything new from this lesson? Yes No 8. Would you change what you eat based on this information? Yes No 9. Did the instructor present the information clearly? Yes No 10. Additional comments on improving WIC nutrition education. (Attach additional pages if necessary) Percent of Participants who met all lesson objectives:	Yes No Yes _
6. Was this lesson/class on a topic that interests you? Yes No 7. Did you learn anything new from this lesson? Yes No 8. Would you change what you eat based on this information? Yes No 9. Did the instructor present the information clearly? Yes No 10. Additional comments on improving WIC nutrition education. (Attach additional pages if necessary)	Yes No Yes _

LESSON PLAN

TITLE: Fruits and Vegetables

AUDIENCE: All WIC participants and caretakers of child participants.

OBJECTIVES:

At the end of this lesson, the participants will be able to:

1. Identify two health benefits from eating more fruits and vegetables.

2. Identify the need for everyone to consume more fruits and vegetables.

3. Identify fruits and vegetables that are good sources of vitamin A, vitamin C, and fiber.

VISUAL AIDS AND MATERIALS:

Handouts: "Produce Playground"

"Best 5 A Day Buys - Month by Month: Top Ten Fresh Fruit &

Veggie Buys"

"Vitamin C" and "Vitamin A" (Additional resources on CD-ROM)

CDC Resources: http://www.cdc.gov/nccdphp/dnpa/5ADay/index.htm

Spanish http://www.cdc.gov/nccdphp/dnpa/5ADay/index.htm

http://www.cdc.gov/nccdphp/dnpa/5ADay/tips/basics.htm

(PDF version Five A Day Tips is on CD-ROM)

Recipes: Recipe tip cards

Suggested Activities: Coordinate with a local farmer during the season to include a food

demonstration.

Suggested Visual Aids: Display a variety of cans and/or empty bags of frozen fruits and

vegetables. Food models to illustrate portion sizes.

Time Allotment: 20 minutes (to cover content for objectives)

30-45 minutes (includes food demo and safe handling tips)

References: http://www.mypyramid.gov/pyramid/vegetables.html

http://www.mypyramid.gov/pyramid/fruits.html

Centers For Disease Control:

http://www.cdc.gov/nccdphp/dnpa/5ADay/index.htm

 $http://www.cdc.gov/nccdphp/dnpa/nutrition/nutrition_for_everyone/quick_tips/fruit_vegetable.htm$

http://www.cdc.gov/nccdphp/dnpa/nutrition/health_professionals/practice/index.htm

I. Introduction (Background info. For CPA)

It's essential to get a colorful variety of fruits and vegetables into your diet every day! Why? Because colorful fruits and vegetables provide the wide range of **vitamins**, minerals, and phytochemicals your body needs to maintain good health and energy levels.

Research has shown that low fat diets rich in fruits and vegetables can reduce risk for certain cancers and heart disease. Research also shows that most people do not eat enough fruits and vegetables, and this is especially true for children ages 2-19!

NE PROVIDER ACTIVITIES

Lesson content is provided as a review for the CPA. Information provided to participants should be tailored to their needs.

CPAs NOTE:

CDC is in the process transitioning away from the "Five A Day" message in order to be consistent with the 2005 Dietary Guidelines.

The state office will provide more information as soon as it is available. (Late fall 2006)

II. Discussion Content

- a. Benefits from eating fruits and vegetables
 - 1. Raw fruits and vegetables are low in fat and calories
 - 2. Fruits and vegetables are good sources of fiber.
 - 3. They provide a variety of vitamins and minerals needed by the body for good health and disease prevention.
 - 4. They also provide phytochemicals and antioxidants that are being shown to provide many health benefits.

<u>Phytochemicals:</u> Natural plant compounds that may provide a variety of health benefits. Many of the bright colors in fruits and vegetables come from phytochemicals.

<u>Antioxidants:</u> Plant substances that protect the body by neutralizing free radicals, or unstable oxygen molecules, which can damage cells and lead to poor health.

Ask: What have you heard about the benefits of eating more fruits and vegetables?

Discuss and add to answers provided by participants.

Ask: What "vegetable" do you think children eat the most of?

Answer: French Fries are the most consumed vegetable for toddlers, age 15-24 months, and for children ages 2-19

(Produce for Better Health Foundation) **Discuss:** Why might this be a problem?

Ask: What are some ways to get more fruits and veggies in your diet?

Use food models, measuring cups, and samples of fruits and vegetables to help participants understand.

Key Message: To meet recommendations add fruits and/or vegetables to all your meals and snacks, while decreasing consumption of low nutrient foods.

Portion size info: 1 small piece, ½ cup canned, 1-cup melon, or 15 grapes.

b. Recommended amounts to consume-fruits.

0, 110 0 0 111 0 11 0 11 0 11 0 11 0 11		
Children	2-3 years old	1 cup*
	4-8 years old	1 to 1 ½ cups*
Girls	9-13 years old	1 ½ cups*
	14-18 years old	1 ½ cups*
Boys	9-13 years old	1 ½ cups*
	14-18 years old	2 cups*
Women	19-30 years old	2 cups*
	31-50 years old	1 ½ cups*
	51+ years old	1 ½ cups*
Men	19-30 years old	2 cups*
	31-50 years old	2 cups*
	51+ years old	2 cups*

*For those who get less than 30 minutes of physical activity per day. Recommended amounts are higher for those who are more physically active.

The DG's focus is on total amounts to consume rather than # of servings.

CONTENT			NE PROVIDER ACTIVITIES
c. Recor	nmended amounts to c	consume-Vegetables	
Children	2-3 years old 4-8 years old	1 cup* 1 ½ cups*	Portion size info: ½ cup cooked or 1-cup raw
Girls	9-13 years old 14-18 years old	2 cups* 2 ½ cups*	vegetables.
Boys	9-13 years old 14-18 years old	2 ½ cups* 3 cups*	The "Foods For Your Child"
Women	19-30 years old 31-50 years old 51+ years old	2 ½ cups* 2 ½ cups* 2 cups*	brochures provide tips and portions for young children.
Men	19-30 years old 31-50 years old 51+ years old	3 cups* 3 cups* 2 ½ cups*	

d. Focus on fruits and vegetables high in vitamin A.

Vitamin A is important for vision and preventing infections.

- 1. Dark green, leafy vegetables and dark orange/red fruits and vegetables provide us with vitamin A.
- 2. Sources of vitamin A are: carrots, asparagus, broccoli, greens, sweet potatoes, pumpkin, winter squash (acorn and butternut), tomatoes, cantaloupe, apricots, nectarines, prunes, tangerines, mango, and papaya.

e. Focus on fruits and vegetables high in vitamin C.

Vitamin C is needed for healthy skin and gums, iron absorption and resisting infection.

- Sources of vitamin C are: citrus fruits (oranges, grapefruit, lemons, and limes), strawberries, WIC juices, broccoli, greens, red, and green pepper, cauliflower, potatoes, tomatoes and winter squash.
- 2. If you smoke, you need more servings of food high in vitamin C.
- 3. Care must be taken during food preparation to preserve vitamin C. Excess heat over a prolonged period, air exposure to cut surfaces, large amounts of cooking water, and exposure to baking soda reduces the level of vitamin C. Using minimal water and cooking times yields the highest nutrient value. Suggest microwave cooking of vegetables. Potatoes are best prepared in their skins in either the microwave or oven (baking).

Have food models or actual food samples and ask participants to help sort them into groups: Good source of Vitamin A

Good source of Vitamin C

Discuss how food preparation and handling can affect the vitamin C content of foods.

f. Focus on fruits and vegetables high in fiber.

Fiber helps maintain good digestion, can lower the incidence of constipation, and is associated with lowering risk for cardiovascular disease and some cancers, and is beneficial in the regulation of blood glucose.

- As you increase your fiber intake, remember to increase your fluid intake, especially water.
- Sources of high fiber are: apples and pears (with skin), potatoes (with skin), peas, dried beans, raw vegetables.

NE PROVIDER ACTIVITIES

Fiber can be discussed under "benefits of eating fruits and vegetables" OR

Content can be included as part of "Fiber" lesson

g. Ways to incorporate more fruits and vegetables into the diet.

- 1. Choose natural fruit juices, like the WIC-approved juices instead of fruit aides, drinks, soda, or punch. Choose 100% fruit juice with 100% vitamin C added.
- 2. Top your favorite WIC cereal with fresh fruit in season.
- 3. Add some lightly cooked vegetables into canned soups.
- 4. Learn new ways to incorporate beans into soups, salads, and casseroles.
- 5. Add extra vegetables to sandwiches: tomato slices, dark green lettuce, and shredded carrots.

Ask participants to make suggestions, Ask "How does WIC help?" (food package, farm market vouchers)

h. Tips for parents.

- Children need time to accept new things. Continue to offer new fruits and vegetables several times to allow a child to become familiar with the look and smell before tasting.
 Allow for several opportunities to taste. Do not rush or force the child to taste any new food.
- Children learn by example. If a caregiver eats or tries the new food without making faces or noises to indicate that they are disliked, the child has a better chance of learning to like the food.
- Show children different kinds of fruits and vegetables in the store or farmers' market. Let them help in the garden.
 Discuss with them different ways to prepare fruits and vegetables.
- Invite a child to participate in the preparation of a fruit or vegetable -- to the extent appropriate for the child.

Ask: "How do you get your kids to eat more vegetables or try new fruits?"

h. Tips on handling fresh fruits and vegetables safely.

Recently, fresh fruits and vegetables have been linked with various incidents of food-borne illness. Though these problems are not common, it is important that we as consumers handle fresh produce safely.

- 1. **Purchasing** When selecting your fresh fruits and vegetables from the supermarket or roadside stand, carefully examine each item. They should be clean, without dirt or manure still clinging. They should look and smell fresh. Handle produce gently to avoid bruising. Buy only the amount you'll use in a *few days* for most fruits and vegetables, rather than "stocking up" (Exceptions: apples, citrus fruit, and potatoes).
- 2. **Storing** Put produce away promptly. Most whole produce keeps best in perforated plastic bags in your refrigerator's crisper drawer where the humidity is highest. Certain fruits may be ripened further at room temperature before refrigeration: bananas, peaches, cantaloupe, apricots, kiwi, nectarines, pears, and plums. Potatoes are kept best in a cool, dry, dark place. Throw away fruits or vegetables that have been stored too long and smell bad, are moldy or slimy.
- 3. **Washing** Rinse whole produce thoroughly under clean running tap water *just before you use it* -- not when you store it. Rub as needed to remove surface contamination. Before washing, discard the outer leaves of leafy vegetables such as lettuce and cabbage. Wash fruits and vegetables even if you do not eat the rind or skin. When you cut into a fruit or vegetable, any bacteria that is on the outer surface can be transferred to the inner flesh. Do not wash produce with detergent. Fruits and vegetables can absorb the detergent. Detergent is not intended for use on foods and can make you sick.
- 4. **Handling Cut Produce** Store all cut fruits and vegetables covered, in containers, in the refrigerator. Store fresh cut produce above raw meat, poultry, and fish and below cooked items. Generally, quality is best if you use cut produce within a day. Discard cut produce that has been out of the refrigerator for more than four hours (including preparation, transport, and service time).

NE PROVIDER ACTIVITIES

Optional Content:

Poll participants to see what their buying preferences are (fresh, frozen, canned).

Use their answers to lead into a discussion of preparation and storage tips.

<u>CONTENT</u>	NE PROVIDER ACTIVITIES
5. Preparing - Using clean hands, clean utensils, and a clean cutting board when working with fresh produce. Especially avoid touching raw meat, poultry, and seafood before handling fresh fruits and vegetables. At events such as buffets or picnics, set out fresh food trays as needed. Keep cut produce in cold storage until just before serving.	
III. Summary The current evidence supports a significant association between fruit and vegetable intake and health. There is ample scientific data to support increasing the consumption of fruits and vegetables while decreasing consumption of processed foods and simple sugars.	Summarize KEY messages for this lesson: Everyone needs to eat more fruits and vegetables! Eat fruits and/or vegetables at all meals and snacks. Fruits and vegetables should replace other foods in the diet. (Processed foods, simple sugars, sweets, high fat snack foods, excess juice etc.)
IV. Evaluation The CPA will solicit participants' feedback on the lesson evaluation form and discuss the correct answers with participants.	Distribute evaluation forms.

Lesson Evaluation-Fruits and Vegetables

Check the best answer:

1.	Which of the following is a health benefit from eating more fruits and vegetables? □ a. Lower risk of heart disease and certain cancers □ b. Weight gain □ c. Stronger bones
2.	Most people eat enough fruits and vegetables. ☐ True ☐ False
3.	Foods high in vitamin C are: □ a. Dark green leafy vegetables □ b. Citrus fruits □ c. Meats
4.	Foods high in vitamin A are: □ a. Oranges and WIC juices □ b. Chicken and turkey □ c. Broccoli, greens and sweet potatoes
Please c	heck Yes or No for the following:
5.	Did you enjoy this lesson? ☐ Yes ☐ No
6.	Was this lesson/class on a topic that interests you? ☐ Yes ☐ No
7.	Did you learn anything new from this lesson? ☐ Yes ☐ No
8.	Would you change what you eat based on this information? ☐ Yes ☐ No
9.	Did the instructor present the information clearly? ☐ Yes ☐ No
How o	can WIC nutrition education lessons be improved?

Evaluación de la lección — Frutas y verduras

_	e la mejor respuesta:
1.	Si usted come más fruta y las verduras □ a. Usted será menos probable de obtener el cáncer o la enfermedad cardiaca □ b. Usted se engordará □ c. Usted tendrá huesos fuertes
2.	La mayoría de las personas comen suficientes fruta y las verduras. ☐ Verdadero ☐ Falso
3.	Los alimentos ricos en vitamina C son: □ a. Las verduras con hojas de color verde oscuro □ b. Las frutas cítricas □ c. Las carnes
4.	Los alimentos ricos en vitamina A son: □ a. Las naranjas y los jugos del programa WIC □ b. Pollo y pavo □ c. El brócoli, verduras y camote
Marque	e Sí o No para lo siguiente:
5.	¿Disfrutó esta lección? □ Sí □ No
6.	Esta lección/clase ¿trató sobre un tema que le interesa? □ Sí □ No
7.	¿Aprendió algo nuevo en esta lección? □ Sí □ No
8.	¿Cambiaría lo que come basándose en esta información? □ Sí □ No
9.	El instructor ¿presentó claramente la información? □ Sí □ No
¿Cóm	o pueden mejorarse las lecciones sobre la educación de la nutrición del programa WIC?

Lesson Reporting Form-Fruits and Vegetables

Local Agency Name: Date:	
Reporting Period: July thru December January thru June	
Angwan Vay	11 0/
Answer Key 1. Which of the following is a health benefits from eating more	<u>#</u> <u>%</u>
fruits and vegetables?	a
☑ a. Lower risk of heart disease and certain cancers☑ b. Weight gain	b
c. Stronger bones	c
e. outlinger contes	
Most people eat enough fruits and vegetables.	
True	T
⊠ False	F.
1	r
3. Foods high in vitamin C are:	
3. Toous high in vitainin C arc.	a.
a. Dark green leafy vegetables	b
b. Citrus fruits	c
c. Meats	
4. Foods high in vitamin A are:	
	a
a. Oranges, WIC juices	b
b. Chicken and turkey	c.
c. Broccoli, greens and sweet potatoes	
	<u># %</u>
	# <u>%</u> Yes
 ✓ c. Broccoli, greens and sweet potatoes Please check Yes or No for the following: 5. Did you enjoy this lesson? ☐ Yes ☐ No 	Yes No
 ☑ c. Broccoli, greens and sweet potatoes Please check Yes or No for the following: 5. Did you enjoy this lesson? ☐ Yes ☐ No 6. Was this lesson/class on a topic that interests you? 	Yes Yes
 ✓ c. Broccoli, greens and sweet potatoes Please check Yes or No for the following: 5. Did you enjoy this lesson? ☐ Yes ☐ No 	Yes No
Please check Yes or No for the following: 5. Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No	Yes No
 C. Broccoli, greens and sweet potatoes Please check Yes or No for the following: 5. Did you enjoy this lesson? ☐ Yes ☐ No 6. Was this lesson/class on a topic that interests you? ☐ Yes ☐ No 7. Did you learn anything new from this lesson? 	Yes No Yes Yes
Please check Yes or No for the following: 5. Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No	Yes No
	Yes No Yes Yes
	Yes No Yes No Yes No
	Yes
Please check Yes or No for the following: 5. Did you enjoy this lesson? Yes No 6. Was this lesson/class on a topic that interests you? Yes No 7. Did you learn anything new from this lesson? Yes No 8. Would you change what you eat based on this information? Yes No 9. Did the instructor present the information clearly?	Yes
	Yes
Please check Yes or No for the following: 5. Did you enjoy this lesson? Yes No 6. Was this lesson/class on a topic that interests you? Yes No 7. Did you learn anything new from this lesson? Yes No 8. Would you change what you eat based on this information? Yes No 9. Did the instructor present the information clearly? Yes No	Yes
Please check Yes or No for the following: 5. Did you enjoy this lesson? Yes No 6. Was this lesson/class on a topic that interests you? Yes No 7. Did you learn anything new from this lesson? Yes No 8. Would you change what you eat based on this information? Yes No 9. Did the instructor present the information clearly? Yes No 10. Additional comments on improving WIC nutrition education.	Yes
Please check Yes or No for the following: 5. Did you enjoy this lesson? Yes No 6. Was this lesson/class on a topic that interests you? Yes No 7. Did you learn anything new from this lesson? Yes No 8. Would you change what you eat based on this information? Yes No 9. Did the instructor present the information clearly? Yes No	Yes
Please check Yes or No for the following: 5. Did you enjoy this lesson? Yes No 6. Was this lesson/class on a topic that interests you? Yes No 7. Did you learn anything new from this lesson? Yes No 8. Would you change what you eat based on this information? Yes No 9. Did the instructor present the information clearly? Yes No 10. Additional comments on improving WIC nutrition education. (Attach additional pages if necessary) Percent of Participants who met all lesson objectives:	Yes
Please check Yes or No for the following: 5. Did you enjoy this lesson? Yes No 6. Was this lesson/class on a topic that interests you? Yes No 7. Did you learn anything new from this lesson? Yes No 8. Would you change what you eat based on this information? Yes No 9. Did the instructor present the information clearly? Yes No 10. Additional comments on improving WIC nutrition education. (Attach additional pages if necessary)	Yes

LESSON PLAN

TITLE: Fast Food

AUDIENCE: All WIC participants and caretakers of child participants.

OBJECTIVES:

At the end of this lesson, participants will be able to:

- 1. Identify health problems caused by a high-fat, high-salt diet.
- 2. Identify high-fat fast foods to avoid, or eat sparingly.
- 3. Identify at least one healthy menu choice from a fast food restaurant.

VISUAL AIDS AND MATERIALS:

Handout: "Fast Food"

Activity Material: Sample menus from local fast food restaurants

Time Allotment: 20 minutes

CONTENT OUTLINE:

1.	Introduction:	2 minutes
II.	Discussion Content:	5 minutes
	a. Review facts about fast foods.b. Identify high fat foods.	
III.	Activity: How to make better fast food choices	8 minutes
IV.	Summary	2 minutes
V.	Evaluation	
		Total 20 minutes

References: The American Heart Association Tips For Eating Fast Food

http://www.mcdonalds.com/ http://www.burgerking.com/

http://abcnews.go.com/sections/GMA/Living/GMA030605Fast_food_salads.html

VNA WIC Lesson plan: Fast Food

I. Introduction (Background for CPA)

Many families today are going out to fast food restaurants as a family activity because of the convenience of prepared meals and access to an indoor/outdoor play area and/or game room area. Excessive intake of fast foods high in fat, cholesterol, and sodium can contribute to a host of health problems such as obesity, heart disease, and high blood pressure.

Fast food used to mean fried food, but today food franchises are offering people more low-fat alternatives than ever before. Chef salads, grilled chicken sandwiches, and frozen yogurt are just a few examples.

You can eat out and eat healthy, too. Today's lesson will give you the information necessary to make healthy fast food choices for yourself and your children.

NE PROVIDER ACTIVITIES

Lesson content is provided as a review for the CPA. Information provided to participants should be tailored to their needs.

Ask: How many people here have ever eaten at a fast food restaurant?

Ask: What are some examples of a meal you might order for yourself or your child?

II. Discussion Content

a. Facts about fast foods.

- Fast foods can be high in fat, cholesterol, and sodium.
- Even "healthy" fast foods like salads can pack on the fat with dressings, and fried meats. Or they provide little in the way of nutrition when they are made up of mostly iceberg lettuce. An example, would be McDonald's California Cobb Salad, with Crispy Chicken and ranch dressing-it's a total of 670 calories and 53 grams of fat. That is only 130 calories less than a Big Mac® and small fries, which together contain 800 calories. Furthermore, the Big Mac® and small fries is 6 grams lower in fat than the salad. If you choose the four-piece chicken McNuggets® and small fries instead, it's only 430 calories and 26 grams of fat.
- Fast foods can be more expensive and less nutritious compared to a meal prepared at home.
- Meals usually include soda, which adds lots of sugar and calories to an already high calorie meal.

b. Identify high fat foods.

- 1. Fried foods absorb oil, which makes them high in fat.
- 2. Butter, mayonnaise, sour cream, extra cheese, bacon, sausage, pepperoni, and dressings pack on additional fat and calories.
- 3. Grilled burgers, like those from Burger King®, are not necessarily lower in fat or calories than those that are fried like burgers from McDonalds.

Ask: What are some of the reasons to limit fast food choices in our diet? (see reasons to the left)

Provide nutrient information from various fast food restaurants like McDonalds, Burger King, and Wendy's. (available on the internet or at most fast food restaurants)

Opportunities for more discussion:

Share this article on the link between soda consumption and obesity. http://www.sltrib.com/opinion/ci_416 4753CPAs could also provide a copy of the article to pass around to participants.

Discuss this article "Fast Food Culture serves up Super Sized Americans"

http://www.apa.org/monitor/dec01/fas tfood.html

-get participant reactions to suggestions for a "fat tax" or regulations on advertising

Show or review the movie "Super Size Me" http://www.supersizeme.com/ Discuss reactions.

III. How to make better fast food choices

a. Tips:

- 1. Beware of topping burgers with cheese, special sauce, mayonnaise, and bacon they add fat and calories.
- 2. Pickles, onions, lettuce, tomatoes, mustard, and ketchup add flavor without the fat.
- 3. Avoid fried sandwiches, especially fish, as it absorbs the fat.
- 4. A baked potato can be a healthy option, but have it plain or with low-fat yogurt instead of butter or sour cream.

Instead of	Try
Danish	Bagel (whole grain)
Jumbo cheeseburger	Grilled chicken or a regular
	2 oz hamburger with lettuce,
	tomato, pickle and onion
Fried chicken or tacos	Grilled chicken or salad bar
	(Be careful of high fat
	ingredients and dressings)
Fried chicken pieces	Chicken fajita pieces
French fries	Baked potato with vegetable or
	yogurt topping
Potato chips	Pretzels
Milkshake	100% juice, low fat or skim
	milk

NE PROVIDER ACTIVITIES

Ask: What are some ways to make your fast food meal healthier?

OR

Ask participants to identify healthier options offered at some chains. (Mandarin oranges instead of fries, low-fat milk instead of soda etc.)

OR

Activity (Optional):

- 1. Divide your group class into smaller groups of 3-5 people.
- Pass around several samples of menus from local fast food restaurants (examples: McDonald's, Burger King®, Chuck E. Cheese®, and Discovery Zone).
- 3. Have each group plan two fast food meals one high in fat and one lower in fat, and share these meals with the entire group class

IV. Summary

The reality is that more and more of us are eating out every day. Because of that, it is necessary that we learn to choose foods that fit into a healthy lifestyle. The information provided here today should give all of you the necessary information to make healthier food choices.

Review key points

V. Evaluation

The CPA will solicit participants' feedback on the lesson evaluation form and discuss the correct answers with participants.

Distribute evaluation forms.

Lesson Evaluation-Fast Food

Check the best answer:

1.	Fast foods high in fat and salt can contribute to: □ a. Weight loss □ b. Hair growth □ c. High blood pressure		
2.	Which of the following meals is a healthy, lower fat choice? □ a. Double cheeseburger, fries and a soda □ b. Cobb salad with crispy chicken, ranch dressing and a milkshake □ c. Single cheeseburger, side salad with lowfat dressing and a carton of low-fat milkshake		
3.	Which of the following is a healthy alternative to French fries? ☐ a. Chips ☐ b. A small baked potato ☐ c. Chicken nuggets		
4.	A plain hamburger is lower in fat than a taco salad with sour cream. ☐ True ☐ False		
Please	check Yes or No for the following:		
5.	Did you enjoy this lesson? ☐ Yes ☐ No		
6.	Was this lesson/class on a topic that interests you? ☐ Yes ☐ No		
7.	Did you learn anything new from this lesson? ☐ Yes ☐ No		
8.	Would you change what you eat based on this information? ☐ Yes ☐ No		
9.	Did the instructor present the information clearly? ☐ Yes ☐ No		
How	can WIC nutrition education lessons be improved?		

Evaluación de la lección – Comida rápida

Marque la mejor respuesta: Las comidas rápidas con alto contenido de grasa y sal pueden contribuir a: ☐ a. salud buena □ b. el crecimiento de pelo ☐ c. La presión arterial alta y enfermedad cardíaca 2. ¿Cuál de las siguientes comidas es una opción saludable con poco contenido de grasa? ☐ a. Hamburguesa con queso doble, papas fritas y un refresco ☐ b. Ensalada tipo Cobb con pollo crujiente, aderezo ranchero (ranch dressing) y un batido de leche ☐ c. Una hamburguesa con queso sencilla, acompañada de ensalada con aderezo con bajo contenido en grasa y un cartón de leche con bajo contenido en grasa 3. ¿Cuál de las siguientes es una alternativa saludable a las papas fritas? ☐ a. Hojuelas de papas fritas ☐ b. Una papa horneada pequeña ☐ c. Pepitas (nuggets) de pollo 4. Una hamburguesa tiene menos gordo que una taco ensalada con carne, el queso, y aliño de ensalada. ☐ Verdadero ☐ Falso Marque Sí o No para lo siguiente: 5. ¿Disfrutó esta lección? □ Sí □ No 6. Esta lección/clase ¿trató sobre un tema que le interesa? □ Sí □ No ¿Aprendió algo nuevo en esta lección? 7. □ Sí \square N 8. ¿Cambiaría lo que come basándose en esta información? \square No

¿Cómo pueden mejorarse las lecciones sobre la educación de la nutrición de	l programa WIC?
	-
	-
	-

El instructor ¿presentó claramente la información?

 \square No

□ Sí

9.

Lesson Reporting Form-Fast Food

Local Agency Name:	
Date:	
Reporting Period:	
January thru June	
, v	" 0/
Answer Key	<u>#</u> <u>%</u>
1. Fast foods high in fat and salt can contribute to:	
a. Weight loss	a
b. Hair growth	b.
🔀 c. High blood pressure	c
2. Which of the following meals is a healthy, lower fat choice?	
a. Double cheeseburger, fries and a soda	
b. Cobb salad with crispy chicken, ranch dressing and a	a
milkshake	b
⊠ c. Single cheeseburger, side salad with low-fat	
dressing and a carton of low-fat milk	c.
3. Which of the following is a healthy alternative to French fries?	
□ a. Chips	
b. A small baked potato	a
c. Chicken nuggets	b
	c
4. A plain hamburger is lower in fat than a taco salad with sour	
cream.	
True	
False	F
Please check Yes or No for the following:	<u>#</u> <u>%</u>
5. Did you enjoy this lesson?	Yes
Yes No	No
6. Was this lesson/class on a topic that interests you?	Yes
Yes No	No
7. Did you learn anything new from this lesson?	Yes
Yes No	No
8. Would you change what you eat based on this information?	Yes
Yes No	No —
☐ Yes ☐ NO	NO
0 D:141 : 4 4 4 1 : C 4: 1 1 0	V
9. Did the instructor present the information clearly?	Yes
☐ Yes ☐ No	No
10. Additional comments on improving WIC nutrition education.	
(Attach additional pages if necessary)	
Percent of Participants who met all lesson objectives:	
A. Total number of evaluations received	
B. Number of evaluations with a score of 100% (#1-4)	

LESSON PLAN

TITLE: Calcium

AUDIENCE: All WIC participants and caretakers of child participants.

OBJECTIVES:

At the end of this less the participant will be able to:

- 1. Identify two functions of calcium in the body.
- 2. Identify dietary sources of calcium.
- 3. Identify the age group with the highest calcium requirement.
- 4. Identify two non-dairy calcium sources.

VISUAL AIDS AND MATERIALS:

Handouts/Activities: "Calcium"

"Cooking with Diary Foods"

"Circle the Foods High in Calcium"

"Nutrition Jeopardy"

Suggested Visual Aids: Food models to illustrate portion sizes

Time Allotment: 20 minutes

CONTENT OUTLINE:

I.	Intr	oduction: 2 minutes
II.	Disc	cussion Content:
	a.	The importance of calcium
	b.	Dietary sources of calcium
	c.	Vitamin D and calcium
	d.	Calcium recommendations
	e.	Tips for individuals with lactose intolerance
III.	Act	ivities: Circle the foods high in calcium, Nutrition Jeopardy 3 minutes
IV.	Sun	nmary
V.	Eva	luation2 minutes
		Total 20 minutes

References: http://www.mypyramid.gov/pyramid/milk.html
The American Dietetic Association

Dietary Recommendations for Children and Adolescents A Guide for Practitioners - American Heart Association et al 117 (2) 544. Pediatrics_files\544.htm

I. Introduction (Background info. For CPA)

Calcium is essential to a healthy diet and is critical in building bone mass in order to support physical activity and to reduce the risk of bone fracture later in life. Although the consequences of low calcium consumption may not be visible in childhood, the National Institute of Child Health and Human Development (NICHD) recognizes this problem as a serious and growing threat to children and teens later in life. The 2005 Dietary Guidelines list calcium as one of the nutrients of concern for children and adolescents.

NE PROVIDER ACTIVITIES

Lesson content is provided as a review for the CPA. Information provided to participants should be tailored to their needs.

Ask: When I say the word calcium what comes to mind?

II. Discussion Content

a. The importance of calcium.

Everyone needs calcium every day to help build and maintain bones and teeth. Without it, our bones could become hard and brittle and break easily. Calcium also helps muscles contract and relax; helps your heart beat; helps your blood clot; and helps your nerves send messages.

Did You Know That:

- Low calcium consumption and inadequate weight-bearing exercise contribute to osteoporosis, the weakening of the bone that can occur late in adulthood and causes 1.5 million bone fractures a year.
- About 10 million Americans have osteoporosis. In addition, an estimated 41 million Americans may develop osteoporosis or low bone mass by 2015 unless steps are taken to prevent, detect, and treat the disease.
- By the time adolescents finish their "growth spurt" around the age of 17, approximately 90% of their adult bone mass is established
- Half of all children under five and about 85% of females age 12-19 do not meet the 1989 Recommended Dietary Allowance (RDA) for calcium.

b. Dietary sources of calcium.

Calcium is a mineral found in many foods. Some foods high in calcium include: milk* and milk products (cheese*, ice cream, cottage cheese, yogurt, and pudding) and dark green leafy vegetables (collard greens, kale, spinach, and broccoli). Other sources of calcium include dried fruit, sardines, oranges, tofu, almonds, sesame seeds, blackberries, figs, dates, dried peas and beans*, and fortified breads and cereals*.

Point out the WIC foods* that supply calcium to participants.

Ask: Why do we need calcium in our diet?

Ask: What could happen if we don't get enough?

Make a chart like the one below to show participants the amount of calcium available in different kinds of foods.

Food	Servin g Size	Calciu m	Servings Needed to = 1 cup of Milk
Milk	1 cup	300	1.0
Spinach	1/2 cup	122	15.5
Beans, red	1/2 cup	40	14.0
Broccoli	1/2 cup	35	5.2
Green Cabbage	1/2 cup	25	5.9
Kale	1/2 cup	47	3.5
Turnip greens	1/2 cup	99	1.9
Mustard 1/2 greens cup		47	3.5
			-

(Adapted from Weaver CM, and Plawecki KL (1994).

Dietary Calcium: adequacy of a vegetarian diet. *AM J Clin Nutr*, 59(suppl):1240S))

c. Vitamin D and Calcium

Vitamin D is important for calcium absorption. Sources of vitamin D are fortified milk, exposure to sunlight, cod liver oil, and fatty fish.

When there is not enough vitamin D to regulate and maintain the blood supply of calcium and phosphorus, then soft bones develop that are unable to withstand weight-bearing stress. Vitamin D deficiency in children is called rickets, and in adults, osteomalacia. Rickets must be treated with physician-prescribed doses of vitamin D to prevent permanent skeletal abnormalities and to guard against toxicity, which can be fatal. Toxicity does not occur by the natural routes of vitamin D intake (sunlight conversion and food sources).

Supplementation with vitamin pills or high doses of fish liver oil is the cause for toxicity.

Sunlight exposure is an important means of obtaining sufficient vitamin D. The amount of sunlight needed depends on the amount of skin pigmentation one has. People with darker skin tend to block out much of the ultraviolet light from the sunlight. For lighter-skinned people, about 30 minutes of sunshine per day enables sufficient vitamin D formation. Window glass, dust, smoke, and clothing are all barriers that prevent ultraviolet rays from reaching the skin of people living in northern climates and smoggy cities. Those with darker skin are more susceptible to vitamin D deficiency. In the cities, the shade from tall building can block out the sunlight. Without sufficient sunlight exposure, a person is dependent on dietary sources of vitamin D.

NE PROVIDER ACTIVITIES

Ask: What role does vitamin D play in calcium absorption?

Ask: What foods give us vitamin D?

Discuss the role of vitamin D in calcium absorption. Food sources and role of sunlight.

Use this information for reference.

d. AAP Calcium recommendations

Toddlers (age 1-3 years) require about 500mg of calcium each day (about 2 glasses of milk).

Preschool and younger school age children (age 4-8 years) require about 800 mg of calcium each day (about 3 glasses of milk).

Older school age children and teens (age 9-18 years) require about 1300 mg of calcium each day. This higher level of calcium is especially important once they begin puberty (about 3-4 glasses of milk).

Ask: What group needs the most calcium?

Discuss increased need for calcium to support growing bones in teenage years*

Teens need even more calcium than pregnant or breastfeeding women!

CONTENT	NE PROVIDER ACTIVITIES
 e. Tips for individuals with lactose intolerance. Try smaller, but more frequent servings of dairy foods throughout the day. Drink milk with meals and snacks. Eat aged cheeses like Swiss and Cheddar; these cheeses have very little lactose. Eat yogurt; its active cultures have the necessary enzymes to break down lactose. Use lactase enzyme or lactase-treated milk/dairy products. 	Ask: What if you or your child can't drink milk? What other foods are good sources of calcium? *Discuss alternative sources of calcium provided in above chart.
 Activity "Circle the Foods High in Calcium": Ask participants to complete. "Nutrition Jeopardy": Ask participants to complete. 	Review completed activities.
Calcium helps keep bones and teeth strong and helps muscles to contract and the heart to beat. A lack of calcium results in the bone-thinning disease osteoporosis, which affects millions of American men and women. This is a good reason for adults to get the recommended 1,200 milligrams each day, and children the 800 mg they need daily. The best source of calcium is dairy products such as milk, yogurt, and cheese. A single serving of cheese can give you 20 percent of the suggested daily intake. Other foods can provide calcium, too. Try dark green vegetables, dried beans, and calcium fortified juices and cereals. Weight-bearing exercise also helps strengthen bones. Include walking, running, dancing, or other physical activity most days of the week to keep your bones strong.	Review key points
V. Evaluation The CPA will solicit participants' feedback on the lesson evaluation form and discuss the correct answers with participants.	Distribute evaluations

Lesson Evaluation-Calcium

Check the best answer:

	1.	Calcium is necessary to: □ a. Build strong bones □ b. Improve your eyesight □ c. Keep skin healthy
	2.	Calcium is found in: □ a. Fruit □ b. Dairy products, leafy greens and sardines □ c. Meat and poultry
	3.	Which group needs the most calcium? □ a. Senior citizens □ b. Teenagers □ c. Young children
	4.	Vitamin D is important for calcium absorption in the body. ☐ True ☐ False
Ple	ease ch	neck Yes or No for the following:
	5.	Did you enjoy this lesson? ☐ Yes ☐ No
	6.	Was this lesson/class on a topic that interests you? ☐ Yes ☐ No
	7.	Did you learn anything new from this lesson? ☐ Yes ☐ No
	8.	Would you change what you eat based on this information? ☐ Yes ☐ No
	9.	Did the instructor present the information clearly? ☐ Yes ☐ No
	How ca	an WIC nutrition education lessons be improved?

Evaluación de la lección - Calcio

Marq	ue la mejor respuesta:
1.	El calcio es necesario para: □ a. Desarrollar huesos fuertes □ b. Mejorar su vista □ c. Para mantener piel sana
2.	El calcio se encuentra en: □ a. Las frutas □ b. Los productos lácteos, hojas verdes y sardinas □ c. La carne y carne de aves
3.	¿Qué grupo necesita más calcio? a. personas más viejas b. Los(as) adolescentes (Teenagers) c. Niños pequeños
4.	La vitamina D es importante para la absorción de calcio en el cuerpo. ☐ Verdadero ☐ Falso
Marq	jue Sí o No para lo siguiente:
5.	¿Disfrutó esta lección? Sí No
6.	Esta lección/clase ¿trató sobre un tema que le interesa? □ Sí □ No
7.	¿Aprendió algo nuevo de esta lección? Sí No
8.	¿Cambiaría lo que come basándose en esta información? □ Sí □ No
9.	El instructor ¿presentó claramente la información? □ Sí □ No
¿C	ómo pueden mejorarse las lecciones sobre la educación de la nutrición del programa WIC?

Lesson Reporting Form-Calcium

	ency Name:		
Date:			
Reporting			
	January thru June		
Answer I	Key	<u>#</u>	<u>%</u>
1.	Calcium is necessary to:		
	a. Build strong bones	a.	
	b. Improve your eyesight	b.	
	c. Keep skin healthy	c	
	C. Peop skin neurony	C	
2.	Calcium is found in:		
	a. Fruit	a	
	b. Dairy products, leafy greens and sardines	b.	
	c. Meat and poultry	c	
	C. Medi did poditiy	C	
3.	Which group needs the most calcium?		
	a. Senior Citizens	a.	
	b. Teenagers	b.	
	c. Young children	c	
	_ v. 10ang viniaton	·	
4.	Vitamin D is important for calcium absorption in the body.		
	⊠ True	T	
	False	F	·
	_		
Please ch	eck Yes or No for the following:	<u>#</u>	<u>%</u>
Please ch			<u>%</u>
	Did you enjoy this lesson?	<u>#</u> Yes	<u>%</u>
		Yes	<u>%</u>
	Did you enjoy this lesson? Yes No	Yes	<u>%</u>
5.	Did you enjoy this lesson?	Yes	<u>%</u>
5.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you?	Yes Yes	<u>%</u>
5.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you?	Yes Yes	<u>%</u>
5. 6.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? No	Yes No	<u>%</u>
5. 6.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson?	Yes No Yes	<u>%</u>
5. 6.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No	Yes No Yes	<u>%</u>
5. 6. 7.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson?	Yes No	<u>%</u>
5. 6. 7.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No Would you change what you eat based on this information?	Yes	<u>%</u>
5. 6. 7.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No Would you change what you eat based on this information? Yes No	Yes	<u>%</u>
5. 6. 7. 8.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No Would you change what you eat based on this information? Yes No Did the instructor present the information clearly?	Yes	<u>%</u>
5. 6. 7. 8.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No Would you change what you eat based on this information? Yes No Did the instructor present the information clearly?	Yes	<u>%</u>
5. 6. 7. 8.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No Would you change what you eat based on this information? Yes No Did the instructor present the information clearly?	Yes	<u>%</u>
5. 6. 7. 8. 9.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No Would you change what you eat based on this information? Yes No Did the instructor present the information clearly? Yes No	Yes	<u>%</u>
5. 6. 7. 8. 9.	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No Would you change what you eat based on this information? Yes No Did the instructor present the information clearly? Yes No	Yes	<u>%</u>
5. 6. 7. 8. 9. Addit pages	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No Would you change what you eat based on this information? Yes No Did the instructor present the information clearly? Yes No	Yes	<u>%</u>
5. 6. 7. 8. 9. Addit pages	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No Would you change what you eat based on this information? Yes No Did the instructor present the information clearly? Yes No ional comments on improving WIC nutrition education. (Attach additional if necessary)	Yes No	
5. 6. 7. 8. 9. Addit pages Perce	Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No Would you change what you eat based on this information? Yes No Did the instructor present the information clearly? Yes No ional comments on improving WIC nutrition education. (Attach additional if necessary)	Yes	

LESSON PLAN

TITLE: Your Baby's First Year

AUDIENCE: Caretakers of Infants

OBJECTIVES:

At the end of this lesson, participants will be able to:

- 1) Identify at what age introduction to solid food is appropriate.
- 2) Identify what additional developmental milestones are necessary before the introduction to solid food.
- 3) Identify the rate and order of introduction of new foods.
- 4) Identify the age at which a cup should be introduced.
- 5) Identify foods that should be avoided in the baby's first year.

VISUAL AIDES, MATERIALS & EQUIPMENT:

- 1) Videotape: Feeding Your Baby to Prevent Obesity Film Ideas Inc. (This video in English and Spanish has been ordered for all Admin. Sites)
- 2) Handout: NJ WIC Infant Feeding Guide

TIME ALLOTMENT:

I.	Introduction	1 minute
II.	Discussion	19 minutes
	Solid Foods: What and When?	
	Video (Feeding Your Baby to Prevent Obesity)	
	General guidelines for introducing solid foods	
III.	Summary	1 minute
IV.	Evaluation	
		Total 25 minutes

NOTE: This lesson plan may be shortened to 15 minutes by eliminating the video.

References: The American Academy of Pediatrics http://www.aap.org/parents.html

USDA Food and Nutrition Service, Infant Feeding Guidelines

I. Introduction (Background info. For CPA)

The first year of your baby's life is a very important one. Your baby will be growing more rapidly in this first year than at any other time in his/her life. The WIC Program provides you with the most up-to-date information on feeding your baby. WIC follows the guidelines established by the American Academy of Pediatrics, an association of doctors who specialized in caring for infants and children.

NE PROVIDER ACTIVITIES

Lesson content is provided as a review for the CPA. Information provided to participants should be tailored to their needs.

Ask: What are some of your concerns about feeding your baby?

II. Discussion Content

Solid foods: What and When? a. Infants 1-3 months:

Human milk provides your baby with everything he/she needs in the first six months.

Formula fed infants should receive 30-32 ounces of ironfortified formula a day.

NO SOLIDS AT THIS TIME DO NOT ADD CEREAL TO THE BOTTLE

b. Infants 4-6 Months:

- 1) Continue to exclusively breastfeed.
- 2) Solids should not be introduced before a baby's fourth month. Prior to starting solids a baby should be able to:
 - Sit with support
 - Have good head and neck control
 - Be able to move food from the front of the mouth to the back of the mouth.

If your baby cannot do **all** of these things, delay solids and try again when the baby is a little older (>= six months).

Ask: When do you think is a good time to start solids?

Blow up the Infant Feeding Guide to poster size and use as a display during class.

Ask: What foods should you feed first?

- 3) A baby's gut is not fully able to digest solid foods until after four months. Early introduction of solid foods can cause your baby to have difficulty with digestion or a reaction such as a rash, diarrhea, constipation or vomiting.
- 4) Iron-fortified infant rice cereal is the first solid to introduce. This is because it is easy to digest and provides iron. Additional iron is necessary at this point, because the baby's iron stores are used up by 6 months of age.
- The rice cereal should be mixed with breastmilk or 5) formula to a thin consistency. Only 1-4 Tbsp, fed by spoon is necessary, split into two feedings. DO NOT PUT CEREAL IN THE BOTTLE. This can cause choking and overfeeding.

NE PROVIDER ACTIVITIES

Have boxes of infant rice cereal on display as well as sample infant spoons, cups, and bowls.

Video: Feeding Your Baby to Prevent Obesity

Guidelines for Introducing Solid Foods

- Solids should be introduced slowly and one food at-a-time. A new food should be fed for a period of five days before another food is introduced. This is to determine if the infant has a reaction to the new food. If there is no reaction, a new food can be introduced.
- 2) If the infant develops a skin rash, hives, vomiting, diarrhea, or any other reaction, the caregiver should stop the new food and contact their pediatrician immediately.
- 3) When introducing a new food to a breastfed baby, breastfeed first to take the edge off the baby's hunger.
- 4) If an infant should refuse a new food, do not force the issue but reintroduce the food at a later time

a. Fruits:

Fruits may be offered between 6-8 months. Offer plain, strained fruits, one at a time. Mashed banana, or cooked. mashed apples, peaches and pears, or jarred fruits are appropriate. Avoid fruit desserts or blends, or those with sugar added.

b. Vegetables:

Vegetables may be offered between 6 and 7 months of age. Mild tasting vegetables such as cooked, mashed squash, peas, carrots, and green beans are appropriate.

If they are well tolerated, additional vegetables like sweet potatoes and spinach may be introduced

Optional: Contact the State office for anticipated delivery date of this video

Ask: What are some suggestions for introducing new foods? Why should caregivers wait a few days before starting a new food?

Ask: When should infants be given fruits and vegetables? Which should be offered first?

c. Juices and other beverages:

Diluted clear juice, like apple juice, can be introduced from a cup at about 6 months of age. Juice can continue to be diluted for the first year and beyond. Limit juice to 4 ounces per day.

Acidic juices, like orange juice and nectars, should be avoided during a baby's first year.

Kool-aid®, fruit punch, soda, tea, coffee and juice drinks should NEVER be fed to your baby.

d. Meat/Protein foods:

Plain, strained meats may be introduced into the diet at about 8 months of age. Home prepared, baked, broiled, stewed, or poached meats without seasonings may be trimmed of fat and pureed, then strained. The cooking liquid, breastmilk, formula, or water may be used to reach the desired consistency. Jarred plain meats are also appropriate. Avoid mixed or combination dinners. These have fillers and other ingredients your baby may not have had yet.

NE PROVIDER ACTIVITIES

Ask: What do you think about giving juice to a baby?

Ask: What are the benefits from offering juice in a cup instead of bottle?

Ask: When do you think it's OK to offer strained meats to your baby?

e. Beans:

Dried beans are a good source of protein, less expensive than meats and very nutritious.

Beans should be soaked overnight, cooked thoroughly until soft then pureed with cooking liquid to desired consistency.

f. Eggs:

Cooked egg whites should be avoided until after the baby's first year as they can cause an allergic reaction in babies. Egg yolks may be hard cooked and mashed and small amounts provided to babies after 9 months of age.

g. Finger foods:

These should be avoided until:

- The baby has at least 4-6 teeth.
- Is tolerating other solids well.
- Can pick the food up and self-feed.

Examples would be zwieback toast, soft cooked chopped fruits, and vegetables, dry, unsweetened cereal.

The increased texture of these foods will develop chewing skills, and hand to mouth coordination.

Ask: What about finger foods and baby cookies? What have your moms or grand-moms suggested?

h. Foods to AVOID in an infants' first year:

Choking hazards: hot dogs, peanut butter, grapes, berries, nuts, raisins, seeds, hard candies, raw vegetables, and popcorn.

Honey should be avoided because it can cause infant botulism, a food poisoning that can be fatal.

i. Drinking from a cup:

Most infants should be able to drink from a cup by 12 months of age.

Extended use of bottles can result in overfeeding and tooth decay

Therefore:

- 1) Introduce a cup at 6 months of age.
- 2) Initially provide water and diluted juice in the cup.
- 3) Formula fed babies can start to receive their formula in a cup after 9 or 10 months of age.
- 4) Spill proof cups are ok to start with but use open holed cups with supervision to teach the baby how to stop the flow of liquid with their tongue.

NE PROVIDER ACTIVITIES

Ask: Are there any foods you would definitely not feed your baby in the first year? Why?

Ask: When do you think is the best time to wean you baby off the bottle? Why?

III. Summary

The American Academy of Pediatrics recommends starting solids at around six months of age. The chance of developing allergies is greater during infancy. Limiting an infants' diet for as long as possible reduces the risk of introducing allergens. At six months of age, an infant's digestive tract is able to tolerate new foods with less risk of an allergic reaction.

The first year of an infant's life is an important one. What and when you feed your baby can impact health and eating habits that last a lifetime.

IV. Evaluation

The CPA will solicit participants' feedback on the lesson evaluation form and discuss the correct answers with participants.

Distribute lesson evaluation form.

Lesson Evaluation-Your Baby's First Year

Check the best answer:

1.	Pureed fruits and vegetables should be introduced in an infant's diet: ☐ a. At one year of age ☐ b. At four months of age ☐ c. At six months of age
2.	Prior to receiving solid food a baby should be able to: □ a. Laugh □ b. Sit with support and have good head control □ c. Roll over
3.	What food should be introduced first? ☐ a. Infant cereal ☐ b. Puréed fruit ☐ c. Puréed vegetables
4.	A cup should be introduced at 6 months of age. ☐ True ☐ False
5.	The following foods should be avoided in an infant's first year: □ a. Infant cereal □ b. Hot dogs □ c. Applesauce
Please c	heck Yes or No for the following:
6.	Did you enjoy this lesson? ☐ Yes ☐ No
7.	Was this lesson/class on a topic that interests you? ☐ Yes ☐ No
8.	Did you learn anything new from this lesson? ☐ Yes ☐ No
9.	Would you change what you feed your baby based on this information? ☐ Yes ☐ No
10.	Did the instructor present the information clearly? ☐ Yes ☐ No
	can WIC nutrition education lessons be improved? may use the back of this form to write your answer)

Evaluación de la lección – El primer año de su bebé

Marque la mejor respuesta:

1.	Las frutas y verduras deberán iniciarse en la dieta del bebé: ☐ a. Al año de edad
	□ b. A los cuatro meses de edad□ c. A los seis meses de edad
2.	Antes de recibir alimentos sólidos el bebé debe ser capaz de: □ a. Reir □ b. Sentarse con apoyo y tener buen control de la cabeza □ c. Dar vuelta
3.	¿Qué alimentos deben iniciarse primero? ☐ a. Cereal para bebé ☐ b. Puré de frutas ☐ c. Puré de verduras
4.	Dar de beber en taza debe iniciarse a los 6 meses de edad. ☐ Verdadero ☐ Falso
5.	Los alimentos siguientes deberán evitarse durante durante el primer año de vida del bebé □ a. el cereal del niño □ b. Perros calientes (Hot dogs) □ c. la salsa de manzanas
Marque	Sí o No para lo siguiente:
6.	¿Disfrutó esta lección?
7.	Esta lección/clase ¿trató sobre un tema que le interesa? □ Sí □ No
8.	¿Aprendió algo nuevo en esta lección? Sí No
9.	¿Alimentaría a su bebé diferentemente a causa de esta información? □ Sí □ No
10.	El instructor ¿presentó claramente la información? Sí No
	o pueden mejorarse las lecciones sobre la educación de la nutrición del programa WIC? e usar el reverso de este formulario para escribir sus respuestas)

Lesson Reporting Form-Your Baby's First Year

	ncy Name:		
Date:			
Reporting	Period:	_	
Answer K	ey	#	<u>%</u>
1.	Pureed fruits and vegetables should be introduced in an infant's diet:	_	
	a. At one year of age	a.	
	b. At four months of age	b	
	□ c. At six months of age	c	
	a corresponding of age	<u> </u>	
2.	Prior to receiving solid food a baby should be able to:		
	a. Laugh	a.	
	b. Sit with support and have good head control	b.	
	c. Roll over	c	-
	C. Roll over	C	
3.	What food should be introduced first?		
3.	□ a. Infant cereal		
		a	
	b. Puréed fruit	b	
	c. Puréed vegetables	c	
4.	A cup should be introduced at 6 months of age.		
		T	
	False	F	
5.	The following foods should be avoided in an infant's first year:		
	a. Infant cereal	a.	
	👿 b. Hot dogs	b	
	c. applesauce	c	
	e. appresauce	·	
Please che	ck Yes or No for the following:	<u>#</u>	<u>%</u>
6.	Did you enjoy this lesson?	Yes	
0.	Yes No	No	
		NO	
7	W 41:1 /1 / 1 / 2 / 3 / 4 / 4 / 9	37	
7.	Was this lesson/class on a topic that interests you?	Yes	<u> </u>
	☐ Yes ☐ No	No	
8.	Did you learn anything new from this lesson?	Yes	
	☐ Yes ☐ No	No	
9.	Would you change what you feed your baby based on this	Yes	
	information?	No	
	☐ Yes ☐ No		
10.	Did the instructor present the information clearly?	Yes	
10.	Yes No	No	
			
۸ ططنین	onal comments on improving WIC nutrition education.		
	a additional pages if necessary)		
`			
	t of Participants who met all lesson objectives:	B/A*100= _	<u>%</u>
A. Total number of evaluations received			
B. Nur	nber of evaluations with a score of 100% (# 1-5)		

LESSON PLAN

TITLE: Oral Health

AUDIENCE: Participants and caretakers of WIC infants and children

OBJECTIVES:

- 1) Identify three ways to prevent baby bottle tooth decay in infants.
- 2) Identify one mineral and one vitamin necessary for healthy teeth.
- 3) Identify the age at which a child should see a dentist.
- 4) Identify the foods and snacks that contribute to cavities.

VISUAL AIDES AND MATERIALS:

Resources:

- ❖ Oral Health for Infants and Children Resource List, NAL/FNIC, available at www.nal.usda.gov/wicworks/Topics/index.html under "oral health"
- ❖ Brush Up on Oral Health: Simple Steps for Kids' Smiles poster, Centers for Disease Control and Promotion, Division of Oral Health. Available at www.cdc.gov/oralhealth/pdfs/BrushUpPoster.pdf
- Causes of Dental Cavities and the Role of Good Nutrition, National Head Start Bulletin. See www.headstartinfo.org/publications/hsbulletin71/hsb71 06.htm
- **❖ National Maternal and Child Oral Health Resource Center** http://www.mchoralhealth.org/

Additional Education Materials:

http://www.mchoralhealth.org/materials/index.lasso

Handouts: (On SNEP CD-ROM)

- Oral Health for Infants and Children.
- Snack Smart for Healthy Teeth
- Brush Up on Healthy Teeth Tip Sheet
- Teaching Your Baby To Use A Cup

Visual aids:

- Healthy snacks (apples and cheese or cheese and crackers)
- Posters
- Tooth models

Time Allotment: 15-30 minutes

References: USDA and the WIC Works Resource System

National Maternal and Child Oral Health Resource Center http://www.mchoralhealth.org/

CDC www.cdc.gov/oralhealth

CONTENT FOR DISCUSSION

I. Introduction (Background for CPAs)

Did you know that according to the Surgeon General's Oral Health Report 2000, dental decay is the single most common chronic childhood disease in America? This preventable health problem begins early, affecting nearly 20% of preschoolers. And studies show that low-income children are at increased risk of dental caries. In addition, parents need to be reminded that baby teeth are important because they hold a place for adult teeth, help shape the face and jaw, keep adult teeth straighter, and keep the bite in correct position.

II. Facts about Tooth Decay:

- 1. Sucking on a bottle filled with liquids (formula, fruit juice, drinks that contain sugar, and milk) can cause tooth decay.
- 2. Teeth can decay as soon as they appear in the mouth.
- 3. Once a tooth has come through, certain foods can cause or prevent tooth decay or cavities.
- 4. Some children seem to get more cavities than others, suggesting that there may be a genetic component.
- 5. Teeth cannot repair themselves. Tooth destruction by decay is permanent.
- 6. Decayed teeth can cause pain and be expensive to repair.
- 7. Decayed teeth can cause problems with speaking clearly, eating and chewing food properly, and affect appearance and self-esteem.
- 8. If decayed baby teeth are lost, adult teeth may crowd and be crooked.

NE PROVIDER ACTIVITIES

Lesson content is provided as a review for the CPA. Information provided to participants should be tailored to their needs.

Ask: What are your concerns about the oral health of your children? Or Why do you think oral health is important?

Use a flip chart to record answers.

Have display board or poster: Brush Up on Healthy Teeth

Have on display sippy cups, small plastic cups without lids, spill proof cups and child, infant and adult toothbrushes. These can be used throughout class as visual aids.

III. Foods, Snacking and Oral Health

Foods and beverages that are kept for long periods in the mouth or on the teeth, or are consumed with high frequency within a time period, are more likely to cause dental caries than foods that are eliminated quickly from the mouth.

Fermentable carbohydrates or acid producing foods, like starchy, sticky or sugary foods should not be eaten alone. These foods should be combined with protein foods like dairy that can buffer the acids.

IV. The Role of Good Nutrition

Calcium, a mineral found in dairy products and other foods, is necessary for healthy teeth. In addition, vitamins D and C also play a role in developing healthy teeth and gums. Foods and snacks rich in these nutrients can help build strong teeth and protect against tooth decay.

Cheese (sliced not cubed), including aged cheddar, Monterey Jack and Swiss, have been shown by research to stimulate saliva production, which clears and neutralizes the harmful acids that can promote tooth decay. Examples of "tooth-safe" snacks:

- Cheese and crackers
- Turkey and cheese roll ups
- Milk and crackers
- Apples and cheese
- Milk and peanut butter crackers

NE PROVIDER ACTIVITIES

Ask: How can what you eat affect your teeth?

Ask: What foods are the most likely to cause cavities? Ask participants to name some healthier alternatives.

Examples:

Examples.			
Do not cause	Cause cavities		
cavities			
Cheeses	Candy		
Meat sticks	Cookies		
Plain milk	Cakes		
Vegetables	Fruit roll ups, dried fruit		
Popcorn	Breakfast bars		

.

V. How to Prevent Baby Bottle Tooth Decay in Infants

- Do not put honey, sugar, or syrups in the bottle or dip pacifiers into them
- Do not give Kool-aid®, sweetened drinks, or soda.
- Never lay the infant down with a bottle. Remove the bottle from the infant's mouth as soon as feeding is finished. Propping the bottle can promote tooth decay by leaving remains of liquid in mouth.
- Do not let your child use the bottle as a pacifier. The liquid stays on the teeth for a long time and may lead to bottle tooth decay.
- Clean the baby's teeth with a damp cloth after feeding.
- Check with your township to verify if water is fluoridated. Check with your physician about giving a supplement with fluoride if the water supply is not fluoridated. The AAP Committee on Nutrition recommends fluoride supplementation according to the following schedule:

FLUORIDE SUPPLEMENTATION DAILY DOSAGE (MG)

Age	Water Fluoride <0.3 ppm	Water Fluoride 0.3-0.6 ppm
6 months – 3 years old	0.25	0.00
3 years – 6 years old	0.50	0.25

 Begin to teach baby to use a cup at six months; wean from all bottle use by 12 months of age. **Ask:** What are some ways to prevent tooth decay in babies?

Ask: What have you heard about fluoride supplementation? What does your dentist recommend?

VI. How to Prevent Tooth Decay in Children

- Limit sweetened drinks.
- Eat a variety of nutritious foods and snacks daily.
- Foods to avoid:
 - Hard foods, such as popcorn kernels and ice, can damage teeth.
 - Foods that stick to teeth such as cream-filled cookies, cupcakes, candy, fruit roll ups, fruit breakfast bars, french fries, and white bread.
 - Raisins are also considered a sticky food, however, they are a good source of iron. These should be eaten as part of a meal when the flow of saliva is greatest to prevent dental decay.
 - Hard candies, cough drops, and lollipops stay in the mouth for a long time and keep bathing the teeth in sugar, which promotes decay.
- Dental check-ups should be initiated at 1 year of age, earlier if problems develop.
- Brush teeth after each meal or at least twice daily. A soft bristle brush is recommended.
- Children should start brushing around one year of age or when most teeth are in. If the child is unable to tolerate a brush, continue wiping the mouth. The parent should put a pea-sized drop of fluoride toothpaste on the toothbrush. The child should spit out, not swallow, the toothpaste. Brush with water until the child is able to spit.
- Children need help brushing until they are 6-7 years old.

VII. Summary and Evaluation

The CPA will solicit participant feedback on the lesson evaluation form and discuss the correct answers with participants.

NE PROVIDER ACTIVITIES

Ask: What are some ways to prevent tooth decay in young children?

Provide tooth-friendly snacks to participants.

Ask: When should you take your child to the dentist?

Summarize key points.

Distribute the lesson evaluation forms

Lesson Evaluation-Oral Health

Check the best answer:

1.	Which of the following is a way to prevent baby bottle tooth decay? ☐ a. Clean baby's teeth after feeding ☐ b. Put baby to bed with a bottle ☐ c. Start using a cup at 12 months of age
2.	The first time your child should see the dentist is at the age of: □ a. One year old □ b. Two years old □ c. Three years old
3.	Which of the following snacks contribute to dental caries? □ a. Fruit roll ups □ b. Apples □ c. Cereal
4.	Vitamin D and calcium, which are found in fortified dairy products, are necessary for healthy teeth. ☐ True ☐ False
Please o	check Yes or No for the following:
5.	Did you enjoy this lesson? □ Yes □ No
6.	Was this lesson/class on a topic that interests you? ☐ Yes ☐ No
7.	Did you learn anything new from this lesson? ☐ Yes ☐ No
8.	Would you change what you eat based on this information? ☐ Yes ☐ No
9.	Did the instructor present the information clearly? ☐ Yes ☐ No
How	can WIC nutrition education lessons be improved?

Evaluación de la lección – Salud oral

Marque la mejor respuesta:

1.	Para prevenir el decaimiento de diente de botella de bebé o cavidades ☐ a. Limpiar los dientes del bebé después de alimentarlo ☐ b. Colocar su bebé en la cama con un biberón ☐ c. Utilice una taza cuando el bebé es un año
2.	La primera vez que su niño debe ser visto por el dentista es a la edad de: ☐ a. Un año ☐ b. Dos años ☐ c. Tres años
3.	¿Cuál de los siguientes bocadillos contribuye a la formación de caries dental? a. Bocado gomoso "gummy snacks" b. Manzanas c. Cereal
4.	La vitamina D y el calcio que se encuentran en los productos lácteos enriquecidos, son necesarios para la salud dental. ☐ Verdadero ☐ Falso
Marqu	e Sí o No para lo siguiente:
5.	¿Disfrutó esta lección? Sí No
6.	Esta lección/clase ¿trató sobre un tema que le interesa? Sí No
7.	¿Aprendió algo nuevo en esta lección? Sí No
8.	¿Cambiaría lo que come basándose en esta información? □ Sí □ No
9. ¿Cón	El instructor ¿presentó claramente la información? Sí No no pueden mejorarse las lecciones sobre la educación de la nutrición del programa WIC?

Lesson Reporting Form-Oral Health

Local Age Date:	ncy Name:		
Reporting	Period:		
Answer K	Čev	#	%
1.	Which of the following is a way to prevent baby bottle tooth decay?	<u>"</u>	<u> 70</u>
	a. Clean baby's teeth after feeding		
	b. Put baby to bed with a bottle		
	c. Start using a cup at 12 months of age	a	
	c. Start using a cup at 12 months of age	b	
		c	
2.	The first time your child should see the dentist is at the age of:		
	🔀 a. One year old	a	
	☐ b. Two years old	b	
	c. Three years old	c	
3.	Which of the following snacks contribute to dental caries?		
	🛛 a. Fruit roll ups	a.	
	b. Apples	b	
	c. Cereal	c	
		·	
4.	Vitamin D and calcium, which are found in fortified dairy products, are		
	necessary for healthy teeth.		
	⊠ True	T	
	False	F.	
	eck Yes or No for the following:	#	%
5.	Did you enjoy this lesson?	Yes	_
	☐ Yes ☐ No	No	
6.	Was this lesson/class on a topic that interests you?	Yes	
	☐ Yes ☐ No	No	
7.	Did you learn anything new from this lesson?	Yes	
	☐ Yes ☐ No	No	
8.	Would you change what you eat based on this information?	Yes	
	Yes No	No	
			<u> </u>
9.	Did the instructor present the information clearly?	Yes	
	☐ Yes ☐ No	No	
10.	Additional comments on improving WIC nutrition education.		
	(Attach additional pages if necessary)		
Percer	nt of Participants who met all lesson objectives:		
A. Tot	tal number of evaluations received	B/A*100= _	%
13 15	l	i e	

LESSON PLAN

TITLE: Smoking and Pregnancy

AUDIENCE: Pregnant women (particularly smokers) and their children

OBJECTIVES:

At the end of this lesson, participants will be able to:

- 1) Identify a negative effect of smoking on the unborn baby.
- 2) Identify the dangers of secondhand smoke to themselves and their children.
- 3) Identify strategies to quit smoking.

VISUAL AIDES, MATERIALS & EQUIPMENT:

- Chalkboard and chalk or flipchart with marker
- Flip chart for health care providers "Smoking and Pregnancy" (American Lung Association)
- "I Love Not Smoking" an activity book for non-smoking children. AMC Media Corp. 1800 667-6119
- "Because You Love Your Baby" American Lung Association

TIME ALLOTMENT:

I.	Introduction of topic for Discussion:	2 minutes
II.	Smoking and Pregnancy	2 minutes
III.	Secondhand Smoke	
IV.	What Can You Do To Stop Smoking	4 minutes
V.	Reasons to Quit	1 minute
VI.	Summary	2 minutes
VII.	Evaluation	2 minutes
		Total 15 minutes

Total 15 minutes

References: The American Lung Association http://www.lungusa.org/tobacco/smosmpreg.html#quitting

AMC Media Corp. "I Love Not Smoking" 1-800-667-6119

I. Introduction (Background info. For CPAs)

Smoking-related diseases claim an estimated 400,000 American lives each year. Smoking costs the United States almost \$100 billion each year in health-care costs and lost productivity. It is directly responsible for 87 percent of lung cancer cases and causes most cases of emphysema and chronic bronchitis.

II. Smoking and Pregnancy

Cigarette smoking during pregnancy can cause serious health problems to an unborn child.

Smoking during pregnancy has been linked to:

- Pre-mature labor
- Breathing problems and fatal illness among infants.
- Low-birth weight babies
- Preterm deliveries
- 10 percent of all infant deaths

Smokers inhale nicotine and carbon monoxide, which reach the baby through the placenta and prevent the fetus from getting the nutrients and oxygen needed to grow.

Maternal smoking during and after pregnancy has been linked to asthma among infants and young children.

Secondhand smoke also adds a risk to pregnancy.

III. Secondhand Smoke

Effects on children:

The odds of developing asthma are twice as high among children whose mothers smoke more than 10 cigarettes a day. Almost one million asthmatic children have their condition worsened by exposure to secondhand smoke.

The odds of children developing asthma are twice as high when their mothers smoke more than 10 cigarettes a day.

No one should ever smoke while holding a child, or in the same room or car as a child.

Even if you can't stop smoking, it is better to breastfeed and smoke than it is to smoke and not breastfeed. You will be giving your baby immunities to fight illness and all the other wonderful benefits of breastfeeding. Do your best to stop or reduce the number of cigarettes you smoke while breastfeeding.

NE PROVIDER ACTIVITIES

Lesson content is provided as a review for the CPA. Information provided to participants should be tailored to their needs.

Ask: What are some concerns for women who smoke when they are pregnant? What are the risks to the baby?

List on a flip chart or chalk board

Develop your own display with the dangers of smoking on one side and the tips for quitting on the other.

Ask: What have you heard about secondhand smoke?

Ask: What would be the benefits and or risks of breastfeeding if you smoke?

CONTENT NE PROVIDER ACTIVITIES IV. **Reasons to Quit Ask:** What would be some reasons The most effective way to protect the fetus is to quit smoking. If a to quit smoking? woman plans to conceive a child in the near future, quitting is A woman who guits within the first three or four months of Pass out the "I Love Not Smoking" pregnancy can lower the chances of her baby being born premature activity/coloring book to any children and to parents to take home or with health problems related to smoking. to their children Pregnancy is a great time for a woman to quit. No matter how long she has been smoking, her body benefits from her quitting because it lessens her chances of developing future tobacco-related health problems, such as lung and heart disease, and cancer. V. What you can do to stop smoking **Ask:** Can you share some suggestions for women who want to 1. You can ask for help from your doctor or nurse and from family quit? and friends. 2. You can make a list of reasons for wanting to quit, for yourself as well as for the baby. 3. Set a Quit-Date; the sooner the better. If you are not ready to set a date, you can begin to cut down on smoking. Then, you can make a plan to stop all smoking in the near future. 4. Ask for stop-smoking materials and read them. A smoker needs to learn about her own smoking habit and plan ways to cope with urges to smoke after she quits. You can try the four D's: Delay, Deep Breathe, Drink Water, and Do Something Else. List the four D's on a chalkboard or 5. If you slip and go back to smoking, first find out what caused the flip chart. slip and then you can keep trying to quit again until you make it for good. The only failure is if you stop trying. 6. When you stop smoking, you show that you want to raise your baby in a smoke-free world. If you want more information: Contact your local American Lung Association (ALA) at 1-800-LUNG-USA (1-800-586-4872). ALA knows how to help pregnant smokers stop smoking for good. VI. **Evaluation** Summarize key points. The CPA will solicit participants' feedback on the lesson evaluation Distribute lesson evaluation forms.

forms and discuss the correct answers with participants.

Lesson Evaluation-Smoking and Pregnancy

Check the best answer:

1.	Which of the following are effects of smoking on the unborn baby? □ a. Diabetes □ b. Sickle cell disease □ c. Breathing problems and serious illness
2.	Which of the following is a risk to children from breathing secondhand smoke? □ a. Stroke □ b. Increased risk of developing asthma □ c. Diabetes
3.	Anyone who smokes risks the following: □ a. Lung cancer and heart disease □ b. Diabetes □ c. Obesity
4.	The four D 's can help you quit smoking, they are: D elay, D eep breath, D rink water, and D o something else. ☐ True ☐ False
Planca (check Yes or No for the following:
5.	Did you enjoy this lesson?
	☐ Yes ☐ No
6.	Was this lesson/class on a topic that interests you? ☐ Yes ☐ No
7.	Did you learn anything new from this lesson? ☐ Yes ☐ No
8.	Will you try to stop smoking based on this information? ☐ Yes ☐ No
9.	Did the instructor present the information clearly? ☐ Yes ☐ No
How	can WIC nutrition education lessons be improved?

Evaluación de la lección – Fumar y embarazo

Marque la mejor respuesta:

1.	¿Cuáles de los siguientes son efectos de fumar, en un bebé que aún no ha nacido? □ a. La diabetes □ b. Enfermedad de sangre □ c. Problemas respiratorios y enfermedades graves □ d. Todos los anteriores
2.	¿Cuál de lo siguiente es un riesgo que puede resultar de la respiración de humo de segunda mano? □ a. La diabetes □ b. Riesgo aumentado de desarrollar asma □ b. Cardiopatías
3.	Cualquier persona que fuma corre el riesgo de padecer de lo siguiente: □ a. Cáncer de pulmón y cardiopatía □ b. Enfisema y bronquitis crónica □ c. Obesidad □ d. Ambas a y b
4.	Las cuatro R que pueden ayudarle a dejar de fumar son: R etrasar, R espirar profundo, R efrescarse bebiendo agua y R ecrearse haciendo algo. □ Verdadero □ Falso
Marque	Sí o No para lo siguiente:
5.	¿Disfrutó esta lección?
6.	Esta lección/clase ¿trató sobre un tema que le interesa? □ Sí □ No
7.	¿Aprendió algo nuevo en esta lección?
8.	¿Dejará de fumar usted a causa de esta información? □ Sí □ No
9.	El instructor ¿presentó claramente la información? Sí Do
¿Cóm	o pueden mejorarse las lecciones sobre la educación de la nutrición del programa WIC?

Lesson Reporting Form-Smoking and Pregnancy

Local Agency Name:				
Date:				
Reporting Period:				
	January thru June			
A marriam IV	AV.	ш	0/	
Answer K		<u>#</u>	<u>%</u>	
1.	Which of the following are effects of smoking on the unborn			
	baby?			
	a. Diabetes	a		
	b. Sickle cell disease	b		
	□ c. Breathing problems and serious illness	c		
2.	Which of the following is a risk to children from breathing			
	secondhand smoke?	a.		
	a. Stroke	b.		
	b. Increased risk of developing asthma	c.		
		C		
	c. Diabetes			
3.	Anyone who smokes risks the following:			
3.				
	a. Lung cancer and heart disease	a		
	b. Diabetes	b		
	c. Obesity	c		
4.	The four D 's can help you quit smoking, they are: D elay, D eep			
	breath, Drink water, and Do something else.			
	∑ True	T		
	False	F		
Please che	ck Yes or No for the following:	<u>#</u>	<u>%</u>	
5.	Did you enjoy this lesson?	Yes		
	☐ Yes ☐ No	No		
6.	Was this lesson/class on a topic that interests you?	Yes		
	☐ Yes ☐ No	No		
7.	Did you learn anything new from this lesson?	Yes		
	Yes No	No		
8.	Will you try to stop smoking based on this information?	Yes		
	Yes No	No		
9.	Did the instructor present the information clearly?	Yes		
	☐ Yes ☐ No	No		
10.	Additional comments on improving WIC nutrition education.			
10.	(Attach additional pages if necessary)			
Percen	t of Participants who met all lesson objectives:			
	A. Total number of evaluations received B/A*100=%			
		D/A 100-	/0	
B. Nur	mber of evaluations with a score of 100% (# 1-4)			

LESSON PLAN

TITLE: Prenatal Breastfeeding Class

AUDIENCE: Pregnant Women

OBJECTIVES:

The participants will be able to:

- 1. List two benefits of breastfeeding to the baby
- 2. List two benefits of breastfeeding to the mother
- 3. Identify three situations when women should not breastfeed
- 4. Describe correct positioning
- 5. Identify baby's feeding cues and patterns
- 6. Describe adequate intake
- 7. Recognize when to call for help
- 8. Locate breastfeeding support and information

VISUAL AIDS, MATERIALS & EQUIPMENT:

- 1. Doll (preferred), or Pocket Flip Chart (Geddes Productions) or Breastfeeding Book (Childbirth Graphics)
- 2. Handouts: "Breastfeeding is Best" pamphlet, "Breastfeeding is Best" flyer, "When to Call for Breastfeeding Help," "Breastfeeding" (LLL/Kiwanis)
- 3. Optional: posters, soft breast model, breast shells.

TIME ALLOTMENT:

I.	Introduction: Identify self, overview of class	1 minute
II.	Discussion: Benefits of breastfeeding	2 minutes
III.	Presentation: Contraindications	1 minute
IV.	Presentation: Getting ready to breastfeed	1 minute
V.	Demonstration: Positioning, latch-on and	
	removing baby from breast	2 minutes
VI.	Presentation: Infant Feeding Cues	4 minutes
VII.	Demonstration: Discreet Breastfeeding	1 minute
VIII.	Presentation: When to Call for Help	1 minute
IX.	Presentation: Recertifying after Delivery	1 minute
X.	Participation: Conclusion with (optional)	
	Questions and Answers	2 minutes

Total 14-16 minutes

CONTENT	EDUCATOR ACTIVITIES
I. INTRODUCTION (1 minute) Hi. I'm I am a WIC breastfeeding peer counselor. Welcome to the WIC breastfeeding class. One of the most important decisions you have to make is how you will feed your baby. You may have already decided, or you might not be sure. We want to answer your questions so that you can make the best decision for you and your baby.	Introduce yourself Welcome the participants Introduce the subject
II. THE BENEFITS OF BREASTFEEDING (2 minutes) What have you heard about breastfeeding? Why do you think mothers today choose to breastfeed? Why is breastfeeding good for the baby? How is breastfeeding good for the mother?	Interactive discussion. Select one or two questions to encourage participation
 Babies are born to be breastfed – colostrum, the first milk, helps the baby fight germs and builds the immune system Human milk is the best nutrition for babies and has the perfect balance of protein, vitamins, minerals, and fat When babies are only fed human milk, there is less chance of food allergies later in life Breastfed babies have fewer colds, ear, nose and throat infections, and less vomiting and diarrhea Less trips to the doctor for sickness Human milk promotes brain growth and development so school age children who were breastfed do better on intelligence tests than children who were formula fed Less tooth decay Less infant death in first year of life Healthier babies cry less Human milk is easier to digest than any formula 	Be sure at least two benefits to baby and two benefits to mother from this list are mentioned. Use the colostrum poster, if available, as a teaching tool Explain "new" words, such as colostrum.

CONTENT	EDUCATOR ACTIVITIES
MOTHER	
 Breastfeeding is free - and mothers can make all the milk their babies need Easy and convenient night feedings (talk about how it feels to cuddle baby) Women who breastfeed have less chance of getting breast cancer and osteoporosis later in life Uterus contracts - less blood loss and tummy flattens faster Burns calories - easier to lose weight Easy - nothing to buy, mix, wash, or warm up = more free time Summarize with: The more human milk your baby gets, the greater the benefits for you and 	
your baby.	
 ■ There are only a few reasons why women should not breastfeed. ○ The Health Department recommends that pregnant women get tested for HIV. HIV positive women should not breastfeed because there is a risk of passing the virus through human milk. Before you decide to breastfeed, be sure you don't have HIV. Free testing for HIV is available at (say where). ○ Women who use illegal drugs should not breastfeed. ○ Women who abuse alcohol should not breastfeed. Binge drinking is not okay but it is okay to have a drink occasionally while breastfeeding. ○ Women with active, untreated TB should not breastfeed. ○ Women with the human leukemia virus should not breastfeed. This is an important list of cautions but it is a very short list. Women who have a cold, the flu, diabetes, asthma, high blood pressure and most other illnesses and conditions can breastfeed. Most medications, both prescription and over the counter, are okay while breastfeeding. 	Tell where the nearest counseling and testing site is.

EDUCATOR ACTIVITIES

IV. GETTING READY TO BREASTFEED

Some of the things you can do to get ready to breastfeed are:

- Read about breastfeeding the "Why Should I Nurse My Baby?" book is very good. Did you get your copies at your first visit to WIC?
- Talk to friends or relatives who have breastfed
- Tell your doctor or midwife and hospital staff that you plan to breastfeed
- Check for flat/inverted nipples. Babies can breastfeed even when their mothers have flat or inverted nipples. Breast shells can be worn during pregnancy to help to shape the nipple for baby. If you would like more information, you can ask me after class.
- Women with all shapes and sizes of breasts and nipples can breastfeed just fine.

Hold up the book, "Why Should I Nurse My Baby?" Give a copy go women who did not get it at WIC certification.

Show breast shells while describing them (optional, but preferred for a large group) or

if using the Childbirth Graphics flip chart, show the "Preparing to Breastfeed" page, pointing out the appearance of flat and inverted nipples and the shells (good for a small group)

V. POSITIONING, LATCH-ON, AND REMOVING BABY FROM BREAST (2 minutes)

Now we will talk about how to breastfeed comfortably. **Breastfeeding should not hurt!**

- You should be comfortable, so use pillows to support your back and arm and to raise baby to the level of the breast.
- Lay baby on his side with both of baby's knees touching your body.
- Place baby's nose opposite your nipple and his chin close to the breast.
- Don't lift the breast; just support it with the C hold. Keep your lower fingers away from the nipple
- Don't press down on the breast this can cause the nipple to slide out of baby's mouth.
 Babies can breathe just fine.
- Touch nipple to baby's lower lip. Wait until he opens wide, like a yawn, and then quickly bring him onto the breast. Make sure the tongue is below the nipple. Baby should take in much of the areola, especially the areola below the nipple.
- Baby's nose and chin should touch the breast and his lips should be flanged

Use doll to demonstrate correct positioning (model mothering skills by cradling doll).

Show the "C" hold by using the soft breast model and cupping it in your hand, pointing out how to keep fingers away from areola (preferred for large group) or

"Supporting Your Breast" page from Childbirth Graphics (small group)

If the group is small, let pregnant women practice holding doll.

Show "Breastfeeding Positions - lying down" page from Childbirth Graphics (optional)

CONTENT	EDUCATOR ACTIVITIES
To remove baby, break the suction by	Optional: Demonstrate or discuss the
placing your index finger in the corner of	football hold and lying down positions.
baby's mouth	(especially for Cesarean Section births)
VI. <u>INFANT FEEDING CUES</u> (4 minutes)	Presentation
Newborns are usually alert in the first hour after	
delivery so try to breastfeed then. A healthy	
baby will need lots of skin-to-skin contact with	
you in order to learn how to breastfeed.	
Babies learn how to breastfeed easily when they	
haven't had pacifiers and bottles of water or	
formula. The American Academy of Pediatrics	
says never to give water or formula to	
breastfeeding newborns unless they have a	
specific medical problem. Remind hospital staff	
that you are learning to breastfeed.	
Mothers can make all the milk their babies need.	
Healthy breastfed babies only need their mothers	
and time to learn. Pacifiers interfere with a	
breastfeeding mother's milk supply in the early	
weeks.	
X 11 (11 1 1 1 1 1 C 1 1	
Your baby tells you he is ready to feed whenever	Demonstrate how babies move hands to
he moves while asleep, makes sucking motions with his mouth, puts his fists to his mouth, or	mouth to indicate hunger.
awakens. When he does, that is a good time to	
feed your baby. The more time your baby	
spends in your arms at the breast, the quicker	
your baby will learn how to breastfeed.	
At first, the baby nurses to meet sucking needs.	
Within a few days, babies learn that	
breastfeeding is a way to satisfy hunger.	
Newborns need nutrition day and night. Their	Demonstrate size of baby's stomach by
stomachs are the size of a golf ball. Night	touching your index finger to your thumb
feedings allow your baby to have contact with	or show a golf ball
you for food and comfort and help to keep your	
breasts comfortable.	
Vanabahar will as mating a series of a series 1.	
Your baby will sometimes want several feedings close together. Breastfeeding your baby	
whenever he wants will help you make enough	
milk. Babies become more wakeful and start	

EDUCATOR ACTIVITIES

growing rapidly when they are about a week or two old. They will want to breastfeed a lot for a few days until the milk supply increases to meet their needs. Then they will go back to their regular feeding pattern. These growth spurts will happen again as they grow, usually at about six weeks, and three months.

Newborns often fall asleep at the breast. If your baby falls asleep before feeding at least 10-15 minutes on the first breast, take her off, wake her up by gently burping her, and put her back on the same breast. Do this as many times as necessary. As she grows, she will be able to stay awake during feedings. You can tell that your baby is feeding because she is sucking and swallowing. Once the sucking and swallowing stops and your baby comes off the breast by herself, you can change her diaper then offer the other side. Sometimes babies only want a "snack" and they will only feed a short time on the second breast. Sometimes babies will want the first side again. The next feeding start with the other breast. You will soon learn how to understand what your baby is telling you.

During the first month of life, most babies feed 10-12 times in 24 hours. As your baby grows, he will get more milk each day. Some babies are sleepy in the first month and don't wake to eat as often as they should. Try to wake your baby during the day for feedings. The daytime feedings should begin about two hours apart or more often. Frequent breastfeeding helps you make milk and baby to grow.

You will know your baby is **getting enough** if he has three or more bowel movements a day (dirty or soiled diapers) with 6-8 wet diapers after he is a week old. During the first week, he should have 3 wet diapers by day three, 4 wet diapers by day four, and 2 dirty diapers by day two.

One way to tell if your baby is hungry is to look at his hands and arms. If his arms are bent and hands are clenched and near his mouth, he is If using Childbirth Graphics flip chart, show the "Waking a Sleepy Baby" page (small group)

Demonstrate clenched hands and bent arms for hunger and relaxed arms and opened hands for satiety.

CONTENT	EDUCATOR ACTIVITIES
CONTENT	EDUCATOR ACTIVITIES
hungry. Feed your baby even if it has been a short time since he last fed. Don't wait or use a pacifier. Cluster feeding is when babies combine several feedings close together. It is the 10-12 feedings in 24 hours that is important.	
When healthy babies are not hungry, their hands and arms are relaxed. Crying is a late sign of hunger and baby is so unhappy that is becomes difficult to feed.	For a small group, show the "Bottle Feeding and Nipple Confusion" page from Childbirth Graphics and point out correct
If you are planning to use bottles, it is best to wait 3-6 weeks, until your baby has learned how to breastfeed. Then only offer the bottle when needed. WIC can help you if you have questions about using a breast pump and how to store human milk.	placement of the breast (right picture) and how the bottle leads to incorrect positioning of the breast (left 2 pictures).
VII. <u>DISCREET BREASTFEEDING</u>	
 (1 minute) It is not necessary to expose the breast to breastfeed. Wear two-piece outfits - lift from the bottom. Unbutton blouses from the bottom. A blanket, diaper, or shawl will provide 	Demonstrate discreet breastfeeding by placing a receiving blanket, sweater or jacket over your shoulder while cradling the doll
 coverage. Wear a bra that can be opened with one hand. Practice discreet nursing in front of a mirror. 	show the "Breastfeeding Discreetly" page from Childbirth Graphics.
VIII. WHEN TO CALL FOR HELP (1 minute) You can call for breastfeeding help any time you have a question. It is important to call when:	Small group: show "Getting Help and Encouragement" page from Childbirth Graphics.
 your baby is in the hospital or is sick and cannot breastfeed you are hospitalized without your baby you have any breast or nipple pain (breastfeeding should not hurt!) 	Provide the "When to Call for Help" handout with at least two phone numbers listed.
 your baby is not feeding well by the third day your baby is not making enough wet and dirty diapers you think your milk supply is low or your baby is not gaining weight (Say how to reach the breastfeeding helpline) 	Provide the "Breastfeeding" handout from Kiwanis and La Leche League or a similar substitute.

CONTENT	EDUCATOR ACTIVITIES
IX. RECERTIFYING AFTER DELIVERY (1 minute)	
After your baby is born, call WIC for an appointment for you <u>and</u> your baby. Be sure to use your WIC checks. They provide nutritious foods.	
Breastfeeding women stay on WIC until baby is one year old.	
The Enhanced Food Package is given to breastfeeding women whose babies do not use WIC formula; it includes more juice and cheese, both dry beans and peanut butter and, tuna and carrots.	
Breastfeeding women get more food than non- breastfeeding women; help with breastfeeding questions, and support.	Hold up a WIC Health Care Referral Form. Mention support groups if there are any available.
Ask the hospital to fill out the WIC Health Care Referral Form with your bloodwork and bring it and your baby's crib card with your baby to WIC. The WIC nutritionist will answer your	In summer, mention Farmers' Market Program if it is in effect.
questions about eating healthy foods while breastfeeding	Show the "Choices" page from Childbirth Graphics flip chart.
X. <u>CONCLUSION</u> (2 minutes)	EVALUATION
WIC is here to help you with your breastfeeding questions after your baby is born. If you have any questions that were not answered (they can ask now or they can stay and ask you privately, or call - tell how) Optional: Question and Answers	Solicit participants' evaluation of the class by asking the women to complete the "Lesson Evaluation - Prenatal Breastfeeding Education" form.

NEW JERSEY WIC SERVICES LESSON EVALUATION - PRENATAL BREASTFEEDING EDUCATION

Check $(\sqrt{\ })$ the best answer:

1.	Human milk alone provides all the nutrition your baby needs for the True False	first six months.	
2.	Your baby is correctly latching onto the breast when it hurts. True False		
3.	Women who have HIV or use illegal drugs should not breastfeed. True False		
4.	WIC provides help and more food for breastfeeding mothers. True False		
5.	A one week old baby is getting enough breast milk if: a. He has six or more wet diapers and two or more dirty diapers. b. He sleeps ten hours at night. c. He feeds 3 times a day	oers a day	
6.	Did you enjoy this lesson breastfeeding?	Yes	☐ No
7.	Were you interested in learning about breastfeeding?	Yes	☐ No
8.	Did you learn anything new in this lesson?	Yes	☐ No
9.	Did this lesson change your mind about how you will feed your bab No, I already knew I wanted to breastfeed Yes, I have decided to breastfeed my baby Maybe, I will think about breastfeeding No, I am not going to breastfeed	y?	
10.	Did the instructor present the information clearly? Yes No		
11.	How can this lesson be improved?		

SERVICIOS DEL PROGRAMA WIC DE NEW JERSEY EVALUACIÓN DE LA LECCIÓN – EDUCACIÓN PRENATAL SOBRE LA LACTANCIA

Marque con un $(\sqrt{})$ la mejor respuesta:

1.	La leche humana por sí sola proporciona toda la nutrición o meses.	que su bebé necesita durar	nte los primeros seis
	☐ Verdadero ☐ Falso		
2.	La posición correcta causa pezones dolorosos. Verdadero Falso		
3.	Las mujeres que tienen VIH o usan drogas ilegales no debe Verdadero Falso	e dar el pecho.	
4.	El programa WIC proporciona ayuda y más comida para la Verdadero Falso	as madres que están dando	el pecho.
5.	Un bebé de una semana obtiene suficiente leche materna si a. Moja seis o más pañales al día b. El duerme diez horas de noche. c. Come 3 veces en 24 horas	i:	
6.	¿Disfrutó esta lección sobre la lactancia?	☐ Sí	□ No
7.	¿Estaba interesada en aprender sobre la lactancia?	☐ Sí	☐ No
8.	¿Aprendió algo nuevo en esta lección?	☐ Sí	☐ No
9.	¿Esta lección cambió su forma de pensar sobre cómo alime No, ya había decidido que deseaba amamantar Sí, he decidido amamantar a mi bebé Puede ser, pensaré acerca de amamantar a mi bebé No, yo no amamantaré a mi bebé	entará a su bebé?	
10.	¿El instructor presentó claramente la información? Sí No		
11.	¿Cómo puede mejorarse esta lección?		

Lesson Reporting Form - Prenatal Breastfeeding Education

Grantee Name:			
Date:			
Reporting Period:	ıru June		
Instruction: complete this form by tabbing to the next field. Do not hit "Enter" at any	y time.		
Answer Key		#	%
1. Human milk alone provides all the nutrition your baby needs for the first	Т		%
six months. True	F		
False	1	-	
2. Your baby is correctly latching onto the breast when it hurts.	Т		
True	F		%
⊠ False			
3. Women who have HIV or use illegal drugs should not breastfeed. True	T		
False	F		
4. WIC provides help and more food for breastfeeding mothers.	T		
⊠ True False	F		
5. A one week old baby is getting enough breast milk if:	a.		%
a. He has six or more wet diapers and two or more dirty diapers a day	b.		
b. He sleeps ten hours at night	c.		
c. He feeds 3 times a day			
		#	%
6. Did you enjoy this lesson about breastfeeding?	Yes		%
Yes No			
7. Were you interested in learning about breastfeeding?			
Yes No	No		%
8. Did you learn anything new in this lesson?			%
Yes No	No		%
9. Did this lesson change your mind about how you will feed your baby?	No		
No, I already knew I wanted to breastfeed	Yes		%
Yes, I have decided to breastfeed my baby Maybe, I will think about breastfeeding	Maybe		₀ %
No, I am not going to breastfeed	Not		<u></u>
10. Did the instructor present the information clearly? Yes No			%
	No		/0
11. How can this less be improved? (Provide responses to this question on a separate	e sheet.)		
Percent of participants who met all lesson objectives:			
a. Total number of evaluations received	B/A*10	00 =	%
b. Number of evaluations with a score of 100% (questions 1-5)			

^{*} For questions 1-10, calculate the percent based on the total number of responses for each question, not the total number of evaluations.

NEW JERSEY WIC SERVICES

PARTICIPANTS' FEEDBACK ON BREASTFEEDING SUPPORT

(Only for mothers who Ever Breastfed their current baby)

How old is your baby?				
Are you breastfeeding your baby now?				
Please answer these questions about WIC breastfeeding	services:			
 Did you attend the WIC breastfeeding lesson while pregnant? I was not o 	☐ Yes n WIC while p	☐ No oregnant		
2. Did you know you could ask WIC for help with breastfeeding?	☐ Yes	☐ No		
3. Did WIC give you a book or literature about breastfeeding?	☐ Yes	☐ No		
4. Did you receive the WIC food package with tuna and carrots?	☐ Yes	☐ No		
5. Did you have any questions or problems with breastfeeding?	☐ Yes	☐ No		
6. Did you ask for help with breastfeeding questions or problems?	Yes	☐ No		
7. If you answered "Yes" to question # 6: Who did you ask for help	o with breastfe	eding?		
 WIC breastfeeding staff Other WIC staff Doctor's office or clinic office The hospital La Leche League Friends or family Someone else:				
8. What was the most important thing that WIC did to help you bre	eastfeed your	baby?		
	·			
9. What else can WIC do to help mothers breastfeed?				
10. What would you like to tell us about WIC breastfeeding services?				

RESPUESTAS DE LAS PARTICIPANTES SOBRE EL APOYO A LA LACTANCIA MATERNA

(Sólo para las madres que en algún momento amamantaron a su bebé actual)

ΩŚ	,Qué edad tiene su bebé?		
ΑŚ	Amamanta actualmente a su bebé?	☐ Sí	☐ No
	Por favor conteste estas preguntas sobre los servicios c imamantar:	lel progran	na WIC para
1.	. ¿Asistió a las lecciones del programa WIC para amamantar du	ırante su em	barazo?
2.	2. ¿Sabía que podía solicitar ayuda al programa WIC para aman ☐ Sí ☐ No	nantar?	
3.	B. ¿Le proporcionó el programa WIC un libro o información sobre ☐ Sí ☐ No	la lactancia	materna?
4.	l. ¿Recibió el paquete de alimentos del programa WIC que inclu ☐ Sí ☐ No	ía atún y zan	ahorias?
5.	5. ¿Tuvo algunas preguntas o problemas acerca de la lactancia?		
6.	6. ¿Pidió ayuda para resolver las preguntas o problemas acerca	de la lactand	ia?
7.	7. Si respondió "Sí" a la pregunta # 6 ¿A quién pidió ayuda acer	ca de la lacta	ancia?
	Al personal encargado de los servicios de lactancia del A otro personal del programa WIC Al consultorio u oficina del médico Al hospital A La Leche League A amigos o familiares A alguien más:	programa W	/IC
8.	3. ¿Qué fue lo más importante que el programa WIC hizo para a	yudarle a am	amantar a su bebé?
9.	9. ¿Qué más puede hacer el programa WIC para ayudar a que la	as madres ar	namanten?
10.	0. ¿Que le gustaría decirnos sobre los servicios del programa W	C acerca de	la lactancia?

Lesson Reporting Form - Breastfeeding Support

Grantee Name: Date of report:				
Reporting Period:				
Age range of babies: from months to months	Total # evaluations:	Tallies Number # I	Percent %	
Are you breastfeeding your baby now?		Yes		
Did you attend the WIC breastfeeding lesson while p Yes No I was not on WIC while pregnant.	oregnant?	Yes No Not on WIC	<u></u>	
Did you know you could ask WIC for help with brea Yes No	stfeeding?	Yes		
3. Did WIC give you a book or literature about breastfe Yes No	eeding?	Yes		
4. Did you receive the WIC food package with tuna and Yes No	d carrots?	Yes No		
5. Did you have any questions or problems with breastf Yes No	feeding?	Yes		
Did you ask for help with breastfeeding questions or Yes No No problems	problems?	Yes No None	=	
7. If you answered "Yes" to question # 6: Who did you ask for help with breastfeeding?	WIC breastfeeding staff Other WIC staff Doctor's office or clinic office The hospital La Leche League Friends or family Someone else:			
8. What was the most important thing that WIC did to help you breastfeed your baby? *				
9. What else can WIC do to help mothers breastfeed?				
10. What would you like to tell us about WIC breastfeeding services? *				

^{*} Questions 8-10 may be summarized in the space provided or on a separate page.

LESSON PLAN

TITLE: Individual Breastfeeding Education

AUDIENCE: Pregnant WIC Participants

(This Lesson is a condensed version of the Breastfeeding Class. Please refer to that lesson for complete information.)

LEARNING OBJECTIVES: The participant will be able to:

- 1. List two benefits of breastfeeding to the baby
- 2. List two benefits of breastfeeding to the mother
- 3. Identify three situations when women should not breastfeed
- 4. Recall that correct positioning prevents soreness
- 5. Describe adequate intake
- 6. Locate breastfeeding support and information
- 7. Recognize when to call for help

VISUAL AIDS, MATERIALS, AND EQUIPMENT

- 1. Doll or Pocket Flip Chart (Geddes Productions) or Childbirth Graphics "Breastfeeding" book or "Guide to Breastfeeding" or a pamphlet that shows correct positioning
- 2. Optional: soft breast model, breast shells, doll
- 3. Handouts: "Breastfeeding is Best" pamphlet, "Breastfeeding is Best" flyer, "When to Call for Breastfeeding Help," "Breastfeeding" (LLL/Kiwanis)

CONTENT	EDUCATOR ACTIVITIES
VIII. Hello, I am the WIC breastfeeding peer counselor. I am to talk to you about breastfeeding.	ng Introduce yourself and the topic.
IX. (Some questions to so information): What have you heard about breastfeeding Is this your first baby? Did you breastfeed before? How was breastfeeding for you and you baby? 3. If the woman does not seem receptive.	participant: Ask open-ended question Affirm her feelings Provide information as she is receptive to it (see Policy and Procedure 2.04, Attachment B)
information, address whatever barries she may mention and thank her for harme.	ers
 4. Provide information: Discuss two benefits of breastfeedin baby and two benefits to mother. 	g to
There are some times when women should not breastfeed: if she uses illed drugs, abuses alcohol, or has HIV. Department of Health recommends to pregnant women get tested for HIV. positive women should not breastfeed because there is a chance of passing virus through breastmilk. Before you decide to breastfeed, be sure you don have HIV. If you haven't been tested you can be tested at (say where)." This is an important list of cautions is a very short list. Women who have cold, the flu, diabetes, asthma, high pressure and most other illnesses and conditions can breastfeed. Most medications, both prescription and of the counter, are okay while breastfeed.	egal The chat HIV ed the u n't d, but it ve a blood d
 Teach correct positioning in the crack hold and proper latch-on (wide-open mouth, flanged lips). 	
 No bottles before 3-4 weeks of age 	

- No pacifiers
- Give examples of when to call for breastfeeding help
- Describe adequate intake:

feeds per day, # wet diapers and stooling, hunger cues feed early and often

- Remind her to tell her healthcare provider that she plans to breastfeed.
- Encourage her to return to WIC with her baby. Breastfeeding mothers can stay on WIC until their babies are one year old. Food packages for breastfeeding mothers have more food than food packages for non-breastfeeding women. An Enhanced Food Package is given to breastfeeding women whose babies do not use WIC formula (includes more juice and cheese, both dry beans and peanut butter, and tuna and carrots). Encourage her to use the WIC checks. They provide nutritious foods. The WIC nutritionist will answer your questions about eating healthy foods while breastfeeding.
- Ask the hospital to fill out a WIC Health Care Referral Form with your bloodwork and bring it and your baby's crib card with your baby to WIC.
- Encourage her to attend a class or breastfeeding support group for more information.

EDUCATOR ACTIVITIES

Go over and provide the handout, "When to Call for Help" (give at least two phone numbers where breastfeeding information is available)

Provide the handout, "Breastfeeding" (from Kiwanis and La Leche League)

Appropriate additional information to cover as time permits or questions arise is contained in the lesson for the "Prenatal Breastfeeding Class."

EVALUATION: Solicit participants' evaluation of the lesson by asking the women to complete the "Lesson Evaluation - Prenatal Breastfeeding Education" form.

LESSON PLAN

TITLE: Let's Get Physically Active

AUDIENCE: All WIC participants and caregivers of WIC participants

OBJECTIVES:

At the end of this lesson the participant will be able to:

- 1. Define physical activity.
- 2. List two benefits of regular physical activity.
- 3. Identify two diseases that regular physical activity and healthy eating are protective against.
- 4. Recognize that physical activity is necessary to maintaining a healthy weight.
- 5. Identify two safety tips for exercising.

VISUAL AIDES AND MATERIALS:

Handouts: Parents Guide to Physical Play

True/False Quiz on physical activity

Reference: Get Fit New Jersey

> An easy to read guide on better health and fitness for people of all ages. Produced by members of the NJ Council on Physical Fitness and Sport.

Available for download at:

http://www.state.nj.us/health/fhs/njcpfs/getfit.shtml

TIME ALLOTMENT:

I.	Introduction of Topic for Discussion	3 minutes
II.	Definitions	1 minute
III.	Benefits of Physical Activity	5minutes
IV.	Discussion: What can parents/guardians do to	
	Increase physical activity	3 minutes
V.	Discussion: How to keep safe during physical activities	2 minutes
VI.	Activity	3 minutes
VII.	Evaluation	3 minutes
		Total 20 minutes

Total 20 minutes

National Institute of Diabetes & Digestive & Kidney Diseases References:

http://www.niddk.nih.gov/health/nutrit/pubs/physact.htm

The President's Health and Fitness Initiative www.fitness.gov

The Surgeon Generals Report on Physical Activity and Health http://www.cdc.gov/nccdphp/sgr/contents.htm

Healthy People 2010 http://www.healthypeople.gov/

New Jersey Council on Physical Fitness and Sport http://www.state.nj.us/health/fhs/njcpfs/getfit.shtml

I. Introduction (Background for CPAs)

Did you know that: Results from the 1999-2000 National Health and Nutrition Examination Survey (NHANES) indicate that an estimated 64 percent of U.S. adults are either overweight or obese and an estimated 15 percent of children and adolescents ages 6-19 years are overweight. For this reason, two of the national health objectives for the year 2010 are to:

- 1. Reduce the prevalence of obesity among adults to less than 15%.
- 2. Reduce the proportion of children and adolescents who are overweight or obese to <5%.

One of the ways we can reduce overweight is by increasing our levels of physical activity. Physical activity reduces the risk of premature death, and specifically reduces the risk of coronary heart disease, hypertension, colon cancer, and diabetes mellitus. Physical activity also improves mental health and is important for the health of our muscles, bones, and joints.

Despite all the benefits, more than 60 percent of American adults are not regularly physically active. In fact, 25 percent of all adults are not active at all. In addition, nearly half of American youths 12-21 years of age are not vigorously active on a regular basis and physical activity declines dramatically during adolescence.

For all of these reasons we need to get more physically active.

NE PROVIDER ACTIVITIES

Lesson content is provided as a review for the CPA. Information provided to participants should be tailored to their needs.

Ask: Why do you think everyone is always talking about physical activity?

Statistics on the prevalence of obesity and physical activity trends could be displayed on a poster.

II. Definitions

Physical activity - is any bodily movement produced by skeletal muscles that results in energy expenditure.

Physical activity is doing anything rather than just sitting. Health benefits can come from accumulating just 30 minutes of activity on most days of the week. Even moderate amounts of activity such as brisk walking, vacuuming the house, or dancing to music can help reduce the risk of developing chronic disease.

Exercise - is a subset of physical activity that is planned, structured and repetitive.

Physical fitness- is what you acquire by being physically active.

<u>Health-related fitness</u> includes strengthening your heart and lungs, building muscular strength and flexibility. <u>Skill-related fitness</u> includes balance, quickness, power, reaction time, and coordination.

Ask: What does physical activity mean?

Answers can be written on a chalkboard or flip chart.

III. Benefits of physical activity

- 1. Regular physical activity reduces the risk of developing coronary heart disease, hypertension, colon cancer, and diabetes some of the leading causes of illness and death in the United States.
- Regular physical activity burns calories while preserving lean muscle mass - muscle that would have been lost by adhering to low-calorie diets alone.
- 3. Regular physical activity is a key component of any weight-loss or weight-management effort.
- 4. Regular physical activity improves one's mood, helps relieve depression, and increases feelings of well-being.
- 5. Regular physical activity improves aerobic endurance and muscular strength. This means you have more energy to exercise longer.
- 6. Regular physical activity decreases blood pressure in adolescents with borderline hypertension.
- 7. Regular physical activity decreases the degree of overweight among obese children and may prevent obesity.
- 8. Weight-bearing exercise increases bone density.

IV. What parents can do to increase physical activity

- 1. Parents and guardians can try to be role models for physical activity behavior
- 2. Start early. Keep pre-schoolers active, encourage dancing, jumping, running, twirling, etc.
- 3. Parents can plan and participate in family activities, such as going to the community swimming pool, or using the community trails for bicycling and walking.
- 4. Parents can encourage their children to be active by jumping rope or playing ball with their friends.
- 5. Children's participation in sedentary or quiet activities, such as watching television or playing video games, can be monitored and replaced with physical activity. Limit these activities to less than 2 hours.
- 6. Parents can encourage their children to play outside in safe places and in supervised playgrounds and parks.

NE PROVIDER ACTIVITIES

Ask: What are some benefits of being more physically active?

Ask: How could you get your kids to be more active?

TIPS

Tips to Being More Active

- Walk, cycle, dance, jog, or skate to work, school, the store, or church.
- Park the car farther away from your destination.
- Get on or off the bus several blocks away.
- Take the stairs instead of the elevator or escalator.
- Walk the dog.
- Play with the kids.

Download, print and provide to participants:

Kids in Action-Fitness for Children http://fitness.gov/action.pdf

And/or

10 Tips for Healthy eating and Physical Activity http://fitness.gov/kidstips.pdf

CONTENT NE PROVIDER ACTIVITIES At work take fitness breaks—walking or doing desk exercises—instead of taking cigarette or coffee breaks. Perform gardening or home repair activities. Take the stairs instead of the elevator. Use leg power--take small trips. Exercise while watching TV with an exercise video. Watch less than two hours of TV/day. Ask: Are their any risks of being **Keeping Safe During Physical Activity** V. more active? 1. Protective gear and athletic equipment should be frequently **Ask:** What are some ways to prevent inspected, and be replaced if worn, damaged, or outdated. injury? Heat-related illnesses can be prevented by insuring that young people frequently drink cool water, have adequate rest and shade, play during cool times of the day, and are supervised by people trained to recognize the early signs of heat exhaustion and heat stroke. Ensuring that children wear many layers of clothing for outside play and exercise can prevent cold-related illnesses. Use indoor facilities during extremely cold weather, and check for proper water temperature for swim activities. **Tips for Avoiding Injury** Listen to your body - monitor your level of fatigue, heart rate, and physical discomfort. • Be aware of the signs of overexertion. • Be aware of the warning signs and signals of a heart attack. • Use the appropriate equipment and clothing for the activity. Take 3-4 minutes at the beginning of any physical activity to properly warm up your muscles through increasingly more intense activity, such as stretching or jogging. As you near the end of the activity, cool down by decreasing the level of intensity through walking or stretching. • Start at an easy pace - increase time or distance very gradually.

• Drink plenty of water throughout the day to replace lost

active.

Drink a glass of water before you get moving, and drink another half cup for every 15 minutes that you remain

CONTENT	NE PROVIDER ACTIVITIES
 Use a sensible approach by starting out slowly. Check with your health care provider before starting an exercise program. Begin by choosing moderate-intensity activities you most enjoy. Gradually build up the duration of the activity, adding a few minutes every few days or so, until you can comfortably perform a minimum recommended amount of activity. As the minimum amount becomes easier, gradually increase either the length of time performing an activity or increase the intensity of the activity, or both. 	Ask: What if you haven't been active in a while? How should you get started?
VI. Activity (Optional) 1. Are You Physically Active True/False Quiz	Provide and review with participants Provide "Examples of Physical Activity for Young People"
VII. Evaluation The CPA will solicit participants' feedback on the lesson evaluation form and discuss the correct answers with participants.	Ask: Name one thing you will do tomorrow that will increase your activity for the day. Distribute lesson evaluation form.

EXAMPLES OF PHYSICAL ACTIVITY AND EXERCISE FOR YOUNG PEOPLE

Walking, bicycling, playing actively (i.e., unstructured physical activity), participating in organized sports, dancing, gardening, doing active household chores, and working at a job that has physical demands.

Places or Settings for Physical Activity or Exercise

Home, school, playgrounds, public parks and recreation centers, private clubs and sports facilities, bicycling and jogging trails, summer camps, dance centers, and religious facilities.

Get Involved in Your Community

- Physical activity among young people is associated with having access to convenient play spaces, sports equipment, and transportation to sports or fitness programs.
- Participate in forming a self-paced walking club in your neighborhood.
- Advocate for sidewalks, better street lighting, or for access to school track or playing fields during evening hours.
- Advocate for converting downtown centers into pedestrian malls. Advocate for safe, well lighted walking, jogging, and bicycle paths.

Lesson Evaluation-Physical Activity

Check the best answer:

1.	Physical activity is: ☐ a. Any movement including walking and cleaning ☐ b. Sleeping ☐ c. Sitting
2.	Which are benefits of physical activity? ☐ a. Increased bone density, muscle strength and weight loss ☐ b. Healthy skin ☐ c. Healthy teeth
3.	Regular physical activity decreases a persons risk for: ☐ a. Skin disease ☐ b. Diabetes and heart disease ☐ c. Anemia
4.	Regular physical activity is necessary to maintain a healthy weight. □ True □ False
5.	To avoid injury when exercising you should: □ a. Exercise as hard as you can □ b. Warm up before exercising and drink plenty of water □ c. Only exercise once a month
Please	check Yes or No for the following:
6.	Did you enjoy this lesson? ☐ Yes ☐ No
7.	Was this lesson/class on a topic that interests you? ☐ Yes ☐ No
8.	Did you learn anything new from this lesson? ☐ Yes ☐ No
9.	Would you change your level of activity based on this information? ☐ Yes ☐ No
10.	Did the instructor present the information clearly? ☐ Yes ☐ No
Но	w can WIC nutrition education lessons be improved?

Evaluación de la lección – Actividad física

Marque la mejor respuesta:

-	 La actividad física es: □ a. Todo movimiento de los músculos (inclusive andar y limpiar) □ b. Sentar □ c. dormir
2	 ¿Cuáles son los beneficios de la actividad física? ☐ a. Aumento de la densidad ósea, fuerza, y pérdida de peso ☐ b. La piel sana ☐ c. Dientes sanos
3	 3. La actividad física habitual disminuye el riesgo de las personas de padecer de: □ a. Pele la enfermedad □ b. Diabetes y Cardiopatías (heart disease) □ c. Hipertensión arterial
2	 4. La actividad física habitual es necesaria para mantener un peso saludable. ☐ Verdadero ☐ Falso
	5. Para evitar lesionarse cuando hace ejercicio, debe: □ a. Ejercite tan duramente como sea posible □ b. Beber abundante agua antes y durante el ejercicio □ c. Ejercite un tiempo por mes
Mar	que Sí o No para lo siguiente:
(6. ¿Disfrutó esta lección? □ Sí □ No
•	7. Esta lección/clase ¿trató sobre un tema que le interesa? □ Sí □ No
8	8. ¿Aprendió algo nuevo en esta lección? ☐ Sí ☐ No
Ģ	9. ¿Ejercitaría usted diferentemente basado en esta información? ☐ Sí ☐ No
	10. El instructor ¿presentó claramente la información? ☐ Sí ☐ No
ć	¿Cómo pueden mejorarse las lecciones sobre la educación de la nutrición del programa WIC

Lesson Reporting Form-Physical Activity

Local Agency Name:	
Date: July thru December	
January thru June	
Answer Key	# %
	<u>#</u> <u>70</u>
1. Physical activity is:	
a. Any movement like walking or cleaning	a b.
b. Sleeping	c.
c. Sitting	
2. Which are benefits of physical activity?	
a. Increased bone density, muscle strength and weight loss	a.
b. Healthy Skin	b.
	c.
c. Healthy teeth	
3. Regular physical activity decreases a persons risk for:	
a. Skin Disease	a
□ b. Diabetes and Heart Disease	b
c. Anemia	c
4. Regular physical activity is necessary to maintain a healthy weight.	
True	Т
False	T F
raisc	1
5 To avoid injury when averaging you should:	
5. To avoid injury when exercising you should:	
a. Exercise as hard as you can	a b.
b. Warm up before exercising and drink plenty of water	
c. Only exercise once a month	c
c. Only exercise once a month	c
D. Warm up before exercising and drink plenty of water c. Only exercise once a month Please check Yes or No for the following:	
C. Only exercise once a month Please check Yes or No for the following:	c
C. Only exercise once a month Please check Yes or No for the following:	c
C. Only exercise once a month Please check Yes or No for the following:	# <u>%</u>
C. Only exercise once a month Please check Yes or No for the following: 6. Did you enjoy this lesson?	c. <u>#</u> <u>%</u> Yes
☐ c. Only exercise once a month Please check Yes or No for the following: 6. Did you enjoy this lesson? ☐ Yes ☐ No	C. # % Yes
☐ c. Only exercise once a month Please check Yes or No for the following: 6. Did you enjoy this lesson? ☐ Yes ☐ No 7. Was this lesson/class on a topic that interests you?	# % Yes Yes Yes
☐ c. Only exercise once a month Please check Yes or No for the following: 6. Did you enjoy this lesson? ☐ Yes ☐ No	C. # % Yes
☐ c. Only exercise once a month Please check Yes or No for the following: 6. Did you enjoy this lesson? ☐ Yes ☐ No 7. Was this lesson/class on a topic that interests you? ☐ Yes ☐ No	# % Yes No Yes No
□ c. Only exercise once a month Please check Yes or No for the following: 6. Did you enjoy this lesson? □ Yes □ No 7. Was this lesson/class on a topic that interests you? □ Yes □ No 8. Did you learn anything new from this lesson?	# % Yes No Yes Yes Yes
☐ c. Only exercise once a month Please check Yes or No for the following: 6. Did you enjoy this lesson? ☐ Yes ☐ No 7. Was this lesson/class on a topic that interests you? ☐ Yes ☐ No	# % Yes No Yes No
□ c. Only exercise once a month Please check Yes or No for the following: 6. Did you enjoy this lesson? □ Yes □ No 7. Was this lesson/class on a topic that interests you? □ Yes □ No 8. Did you learn anything new from this lesson? □ Yes □ No	# % Yes
□ c. Only exercise once a month Please check Yes or No for the following: 6. Did you enjoy this lesson? □ Yes □ No 7. Was this lesson/class on a topic that interests you? □ Yes □ No 8. Did you learn anything new from this lesson? □ Yes □ No 9. Would you change your level of activity based on this information?	# % Yes No Yes Yes Yes
□ c. Only exercise once a month Please check Yes or No for the following: 6. Did you enjoy this lesson? □ Yes □ No 7. Was this lesson/class on a topic that interests you? □ Yes □ No 8. Did you learn anything new from this lesson? □ Yes □ No	# % Yes
□ c. Only exercise once a month Please check Yes or No for the following: 6. Did you enjoy this lesson? □ Yes □ No 7. Was this lesson/class on a topic that interests you? □ Yes □ No 8. Did you learn anything new from this lesson? □ Yes □ No 9. Would you change your level of activity based on this information?	# % Yes
□ c. Only exercise once a month Please check Yes or No for the following: 6. Did you enjoy this lesson? □ Yes □ No 7. Was this lesson/class on a topic that interests you? □ Yes □ No 8. Did you learn anything new from this lesson? □ Yes □ No 9. Would you change your level of activity based on this information? □ Yes □ No	# % Yes
□ c. Only exercise once a month Please check Yes or No for the following: 6. Did you enjoy this lesson? □ Yes □ No 7. Was this lesson/class on a topic that interests you? □ Yes □ No 8. Did you learn anything new from this lesson? □ Yes □ No 9. Would you change your level of activity based on this information? □ Yes □ No 10. Did the instructor present the information clearly?	# % Yes
□ c. Only exercise once a month Please check Yes or No for the following: 6. Did you enjoy this lesson? □ Yes □ No 7. Was this lesson/class on a topic that interests you? □ Yes □ No 8. Did you learn anything new from this lesson? □ Yes □ No 9. Would you change your level of activity based on this information? □ Yes □ No 10. Did the instructor present the information clearly?	# % Yes
C. Only exercise once a month	# % Yes
C. Only exercise once a month	# % Yes
C. Only exercise once a month	# % Yes
C. Only exercise once a month	# % Yes
C. Only exercise once a month	# % Yes
C. Only exercise once a month	# % Yes
C. Only exercise once a month	# % Yes
C. Only exercise once a month	# % Yes

LESSON PLAN

TITLE: **Making Food Safe**

AUDIENCE: All WIC participants and caregivers of WIC participants involved in food handling, storage, and preparation.

OBJECTIVES:

At the end of this lesson the participant will be able to:

- 1. Identify one consequence of unsafe food handling.
- 2. Identify the four steps to safe food handling and their importance.
- 3. Describe proper hand washing techniques.
- 4. Identify one thing they will do to improve food safety in their home.

VISUAL AIDES AND MATERIALS:

Handouts:	Clean	http://www.fi	ightbac.org/	'ndf/clean.nd
manuvuts.	Cican	11ttp.// w w w.11	igiituac.uig/	pui/cican

http://www.fightbac.org/pdf/separate.pdf Separate http://www.fightbac.org/pdf/chill.pdf Chill Cook http://www.fightbac.org/pdf/cook.pdf

The Pennsylvania State University Extension produced a Fight BACTM Brochure in English and Spanish that summarize all four of the handouts above:

> Spanish http://nirc.cas.psu.edu/pdf/s-broch.pdf English http://nirc.cas.psu.edu/pdf/e-broch.pdf

Note: All of the above handouts are included on the CD-ROM of nutrition education handouts for each local agency

TIME ALLOTMENT:

I.	Introduction of Discussion Topic	2 minutes
II.	The Facts	3 minutes
III.	Clean, Separate, Chill and Cook	10 minutes
	Summary and Evaluation	
		Total 20 minutes

Total 20 minutes

For additional materials and resources:

The Partnership for Food Safety Education http://www.fightbac.org/main.cfm The Penn State Nutrition Information and Resource Center http://nirc.cas.psu.edu/fightbac.cfm

I. Introduction (Background info for CPAs)

THE INVISIBLE ENEMY: BACTERIA

Despite the fact that America's food supply is among the safest in the world, the unappetizing fact is that sometimes, the food we eat can make us sick. Why? Because under the right conditions, an invisible enemy called "BAC" (bacteria) may be present on foods when purchased or get into food during preparation, cooking, serving or storage. In fact, even though we may not see BAC - or smell him or feel him - this creature and millions more like him may already be on a sponge, a cutting board, or the food itself.

Most cases of food-related illness can be prevented if everyone who handles and prepares food learns how to Fight BAC!TM Although BAC is everywhere, he can be stopped with a little know-how and such everyday weapons as soap and hot water, a refrigerator, and a food thermometer.

NE PROVIDER ACTIVITIES

Lesson content is provided as a review for the CPA. Information provided to participants should be tailored to their needs.

Ask: What does "Food Safety" mean to you?

Have the Fight BACTM! Logo displayed on a bulletin board or poster. The graphics can be downloaded from the website. http://www.fightbac.org/graphics.cfm

II. The Facts

Scientists have been studying bacteria and other tiny organisms that cause food-related illness for a long time. They have learned these important facts:

- Bacteria are a part of all living things and are found on all raw agricultural products;
- Harmful bacteria can be transferred from food to people, people onto food, or from one food to another;
- Bacteria can grow rapidly at room temperature:
- Growth of harmful bacteria in food can be slowed or stopped by refrigerating or freezing;
- Food-related illness can produce symptoms from mild to very serious. Illness can occur from 30 minutes to two weeks after eating food containing harmful bacteria;
- People who are most likely to become sick from food-related illness are infants and young children, senior citizens and people with weakened immune systems.

Ask: What can happen if we don't handle food properly?

Ask: What causes food related illness?

These facts can be written on a chalkboard or flip chart.

III. Fighting BAC! Four simple steps

To Fight BAC!TM, food safety experts recommend that everyone think about food safety at each step in the food handling process - from shopping to storing leftovers. What this really means is always following these four simple steps:

1. CLEAN - Wash hands, utensils, and surfaces in hot soapy water before and after food preparation, and especially after preparing meat, poultry, eggs, or seafood to protect adequately against bacteria. Use a disinfectant cleaner or a mixture of bleach and water on surfaces and antibacterial soap on hands to provide some added protection.

Remember that in order to kill the bacteria, hands need to be washed vigorously for at least 20 seconds.

2. SEPARATE - Keep raw meat, poultry, eggs, and seafood and their juices away from ready-to-eat foods; never place cooked food on a plate that previously held raw meat, poultry, eggs, or seafood.

If possible, use one cutting board for fresh produce and a separate cutting board for raw meat, fish, and chicken.

Keep raw foods separate from other foods in your shopping cart and in the refrigerator.

Sauce that is used to marinate raw foods should not be used on cooked foods unless it is boiled first

3. COOK - Cook food to the proper internal temperature (this varies for different cuts and types of meat and poultry) and check for doneness with a food thermometer. Cook eggs until both the yolk and white are firm.

Foods are properly cooked when they are heated to a high enough temperature - and for a long enough time - to kill harmful bacteria that can cause food borne illness.

Keep foods hot before and while serving. On a buffet table, hot foods should be kept at 140°F or higher.

NE PROVIDER ACTIVITIES

Ask: What should be done first before handling food?

Recommend that parents teach their small children to recite the following rhyme while washing their hands:
Say it TWO TIMES through, every time you wash your hands. That way, the germs will all go away!

WE WASH OUR HANDS TO KEEP THEM CLEAN . . . THE CLEANEST HANDS YOU'VE EVER SEEN! USE SOAP AND WATER THAT'S THE WAY TO CHASE THOSE YUCKY GERMS AWAY!

The rhyme can be provided to parents to take home and practice with their children.

Ask: If I'm going to prepare vegetables and slice some raw meat, Which should I do first? Why?

Ask: How do we know when different foods are cooked enough?

Encourage participants to read labels and follow cooking instructions carefully.

Download Thermy materials at http://www.fsis.usda.gov/food_safet y_education/Thermy_For_Educators/index.asp

CONTENT NE PROVIDER ACTIVITIES 4. CHILL - Refrigerate or freeze perishables, prepared food and **Ask:** Do you usually put hot foods leftovers within two hours and make sure the refrigerator is set at no right in the refrigerator or do you let higher than 40°F and that the freezer unit is set at 0°F. them sit out awhile to cool? How cold should the refrigerator be? Bacteria grow most rapidly in the Danger Zone-the unsafe temperatures between 40°F and 140°F. Cold temperatures slow the growth of most harmful bacteria so be sure to refrigerate foods quickly. Refrigerate or freeze prepared foods and leftovers within 2 hours of preparation. Repeat the steps of safe food handling to participants: CLEAN, Don't risk problems when these simple steps will help you reduce food-SEPARATE, COOK and CHILL. related illness. IV. **Evaluation** Summarize key points. Distribute lesson evaluation form. The CPA will solicit participants' feedback on the lesson evaluation form and discuss the correct answers with participants.

Lesson Evaluation-Making Food Safe

Check the best answer:

1.	Which of the following are related to unsafe food handling practices? □ a. Asthma □ b. Illness, vomiting and diarrhea □ c. Skin rash
2.	What are the four steps to safe food handling? □ a. Wash, fix, mix and eat □ b. Clean, separate, cook, and chill □ c. There are only two steps, cook and eat
3.	In order to kill bacteria hands need to be washed for at least: □ a. 20 seconds □ b. 10 seconds □ c. 60 seconds
4.	To improve food safety in my home I will
5.	Would you now consider using a food thermometer? ☐ Yes ☐ No
Please c	heck Yes or No for the following:
6.	Did you enjoy this lesson? ☐ Yes ☐ No
7.	Was this lesson/class on a topic that interests you? ☐ Yes ☐ No
8.	Did you learn anything new from this lesson? ☐ Yes ☐ No
9.	Will you change how you handle and prepare food based on this information? ☐ Yes ☐ No
10.	Did the instructor present the information clearly? ☐ Yes ☐ No
How o	can WIC nutrition education lessons be improved?

Evaluación de la lección – Cómo preparar los alimentos en forma segura

TA //	1		•		4
Viaro	me Is	a me	inr i	resni	uesta:
IVIAI 9	uc i	4 IIIC.	loi i	Copi	ucsta.

1.	¿Cuál de lo siguiente está relacionado con las prácticas de manipulación de alimentos inseguras? □ a. Asma □ b. La enfermedad, el vómito y la diarrea □ c. Pele la enfermedad
2.	¿Cuáles son los cuatro pasos a seguir para la manipulación segura de los alimentos? □ a. Lavar, preparar, mezclar y comer □ b. Limpiar, separar, cocinar y refrigerar □ c. Solamente hay dos pasos, cocinar y comer
3.	Para eliminar las bacterias de las manos necesita lavarse al menos: □ a. Durante 20 segundos □ b. Durante 10 segundos □ c. Durante 60 segundos
4.	Para mejorar la seguridad de los alimentos en mi casa, haré lo siguiente
5.	¿Consideraría ahora usar un termómetro para alimentos? Sí No
Marque 6.	Sí o No para lo siguiente: ¿Disfrutó esta lección? □ Sí □ No
7.	Esta lección/clase ¿trató sobre un tema que le interesa? □ Sí □ No
8.	¿Aprendió algo nuevo en esta lección? Sí No
9.	¿Preparará comida diferentemente basado en esta información? □ Sí □ No
10.	El instructor ¿presentó claramente la información? □ Sí □ No
¿Cómo	pueden mejorarse las lecciones sobre la educación de la nutrición del programa WIC?

Lesson Reporting Form-Making Food Safe

Local Age	ncy Name:			
Date:				
Reporting	Period:			
	January thru June			
A 17.7	·	T		0./
Answer K			<u>#</u>	<u>%</u>
1.	Which of the following are related to unsafe food handling practices?			
	a. Asthma	a		
	oxtimes b. Illness, vomiting and diarrhea	b		
	c. Skin rash	c		
2.	What are the four steps to safe food handling?			
	a. Wash, fix, mix and eat	a		
	☑ b. Clean, separate, cook and chill	b		
	c. There are only two steps, cook and eat	c		
3.	In order to kill bacteria hands need to be washed for at least:			
3.	\boxtimes a. 20 seconds	a.		
	b. 10 seconds	b. –		
		_		
	c. 60 seconds	c		
4.	To Improve food safety in my home I will		-	onses on a
		separ		neet and
		attacl	i to repo	rt
5.	Would you navy consider using a food thermemeter?	Yes		
3.	Would you now consider using a food thermometer?			
	☐ Yes ☐ No	No		
Please che	ck Yes or No for the following:		#	<u>%</u>
	5		<u>'''</u>	<u> 70</u>
6.	Did you enjoy this lesson?	Yes		
0.	Yes No	No		
		110		
7	Was this lesson/closs on a tonic that interests you?	Yes		
7.	Was this lesson/class on a topic that interests you?			
	☐ Yes ☐ No	No		
8.	Did you learn anything new from this lesson?	Yes		
	☐ Yes ☐ No	No		
9.	Will you change how you handle and prepare based on this information?	Yes		
	Yes No	No		
		1,0	-	
10.	Did the instructor present the information clearly?	Yes		
10.	Yes No	No		
		110	-	
A 1 11.1		1		
	onal comments on improving WIC nutrition education. (Attach additional			
pages	f necessary)			
Percen	t of Participants who met all lesson objectives:			
	al number of evaluations received	B/A*	100= _	<u>%</u>
B. Number of evaluations with a score of 100% (Questions 1-4)				

LESSON PLAN

TITLE: The Facts of Dietary Fiber

AUDIENCE: All adult WIC participants and caretakers.

OBJECTIVES:

At the end of the lesson participants will be able to:

- 1. Define dietary fiber.
- 2. Identify the benefits of fiber in the diet.
- 3. Identify an appropriate amount of daily dietary fiber.
- 4. Identify foods that are high in fiber.
- 5. Identify dietary substitutions to increase fiber intake.

VISUAL AIDS & MATERIALS:

Display: Several empty boxes of high fiber WIC cereals and a bag of beans on display during

lesson.

Website: http://www.eatright.org search: fiber.

Website: http://www.cnpp.usda.gov/Pubs/Brochures/GRAINTRAIN-PRINT.pdf
http://www.bellinstitute.com/Nutrition/assets/shared/search bw.pdf

Handouts: "Which has more Fiber?" (see Appendix)

"Get on the Grain Train" (printed from cnpp website)

Optional: "In Search of a Whole Grain" (printed from Bell Institute website)

Samples: Request product samples of General Mills WIC approved cereals for distribution to

participants of the lesson:

http://www.bellinstitute.com/nutrition/hn/nem_pfp.htm

submit request at least 60 days prior to lesson.

Recipe: Banana Raisin Wheat Muffins

CONTENT OUTLINE:

I.	Introduction	2 minutes
II.	Presentation	.15 minutes

- a. Description of fiber
- b. The benefits of fiber
- c. Fiber recommendations
- d. Sources of fiber
- e. Suggestions for increasing fiber intake
- III. Summary 1 minute
 IV. Evaluation 2 minutes

References: 1. The American Dietetic Association: http://www.eatright.org

- 2. General Mills, Inc.: www.generalmills.com
- 3. Kellogg Company: <u>www.kelloggs.com</u>
- 4. National Digestive Disease Information Clearinghouse: www.niddk.nih.gov
- 5. Sizer F, Whitney E. Fiber In: Nutrition Concepts and Controversies. 103-107.

I. Introduction (Background for CPAs)

Fiber is a very important component in proper nutrition. Diets with increased fiber are reported to be protective against constipation, diverticulosis, and hemorrhoids. Fiber serves as a natural laxative and may protect against colon and rectal cancers. Dietary fiber in recommended amounts also lowers blood cholesterol levels. Most Americans do not consume the recommended 20-35 grams of fiber. The average American consumes an estimated 12-17grams of fiber per day. It can be easy to increase your fiber intake especially when you incorporate fiber into every meal.

For more information check out these websites: http://digestive.niddk.nih.gov/ddiseases/pubs/constipation_ez/

http://digestive.niddk.nih.gov/ddiseases/pubs/ibs_ez/

http://digestive.niddk.nih.gov/ddiseases/pubs/hemorrhoids/

NE PROVIDER ACTIVITIES

Lesson content is provided as a review for the CPA. Information provided to participants should be tailored to their needs

Ask: What is fiber? Display examples of WIC approved high fiber cereal boxes (empty) and a bag of beans during the lesson.

Provide Handout: Get on the Grain Train

Use magazines to cut out pictures of foods that demonstrate good fiber sources, at the top of the poster indicate the goal of 20-35 grams of fiber per day.

Or

Use food models

II. Discussion and Presentation

What is fiber?

Dietary fiber refers to any substance (usually a plant product) which remains undigested as it enters the large intestine. Fibers are present in the cell walls of all plants. There are two types of fiber: soluble and insoluble. Soluble fiber is the part of a plant that dissolves or swells in water. Soluble fiber is found in oats, peas, beans, and certain fruits. Insoluble fiber is the structural part of a plant that does not dissolve in water. Insoluble fiber is found in foods such as wheat bran, corn, bran cereals and other whole grains and vegetables.

NE PROVIDER ACTIVITIES				
Food	Serving size	Total fiber grams	Soluble fiber grams	Insoluble fiber grams
Cheerios	1 cup	3	1	2
Multi-Bran Chex	1 cup	7	.5	6.5
Whole- wheat bread	1 slice	2.5	0.5	2.0
White rice, cooked	$^{1}/_{2}$ cup	0.5	0	0.5
Bran flake cereal	$^{3}/_{4}$ cup	5.5	0.5	5.0
Corn flake cereal	1 cup	1.0	0	1.0
Oatmeal, cooked	$^{3}/_{4}$ cup	3.0	1.0	2.0
Banana	1 medium	2.0	0.5	1.5
Apple, with skin	1 medium	3.0	0.5	2.5
Orange	1 medium	2.0	0.5	1.5
Pear, with skin	1 medium	4.5	0.5	4.0
Strawberrie s	$^{1}/_{2}$ cup	1.0	0	1.0
Broccoli	$^{1}/_{2}$ cup	2.0	0	2.0
Corn	$^{1}/_{2}$ cup	1.5	0	1.5
Potato, baked with skin	1 medium	4.0	1.0	3.0
Spinach	$^{1}/_{2}$ cup	2.0	0.5	1.5
Kidney beans	$^{1}/_{2}$ cup	4.5	1.0	3.5
Popcorn	1 cup	1.0	0	1.0
Peanut butter, chunky	2 tablespo ons	1.5	0	1.5

1. What are the benefits of fiber?

Fiber is linked to the prevention of digestive disorders, colon and rectal cancers, obesity, and cardiovascular disease. Dietary fiber increases fecal bulk, produces softer and more frequent stools, and decreases transit time through the intestine. Therefore, high fiber diets are effective in treating constipation. The decreased transit time allows less time for potential carcinogens to be in contact with the intestine, thus protecting against cancers of the large intestine.

Insoluble fiber aids in weight control if high fiber foods are substituted for high fat, high calorie foods. High fiber foods take longer to chew and provide a feeling of fullness

Fiber intake is also linked to the prevention of arteriosclerosis and coronary heart disease. Consumption of pectin, a soluble fiber that is found in partially ripened fruit has been shown to decrease serum cholesterol levels.

Fiber is an important part of a diabetic's diet as it may help control blood sugar.

2. How much fiber should I eat?

Although a "high fiber" diet is recommended, there are limits to the quantity that is considered healthful. The American Dietetic Association recommends a daily dose of 20-35 grams of fiber. Most Americans eat much less than the recommended amount, meaning that their diets may be lacking in fruits, vegetables, and whole grains. Staying within the recommended guidelines is important because too much fiber can have negative effects. Excessive fiber intake can result in decreased absorption of essential nutrients.

Along with fiber consumption, it is necessary to drink sufficient amounts of water. Inadequate water intake can result in stools which are very hard and difficult to eliminate.

NE PROVIDER ACTIVITIES

Ask: What are some benefits of getting more fiber in you diet?

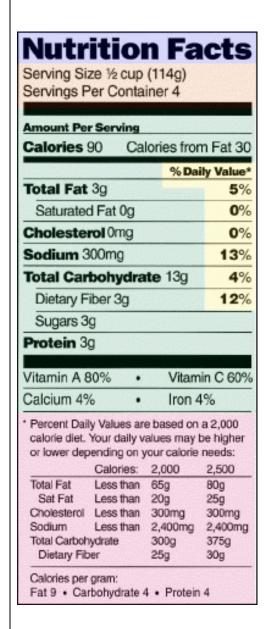
Ask: How Much fiber is beneficial? **Ask:** Are there any concerns with getting too much fiber?

3. Where can I get fiber?

All plant foods contain fiber. This includes whole-grain breads & cereals, beans, fruits and vegetables. Some foods that contain the highest amounts of fiber include: bran cereals, prunes, and beans. Other good sources of fiber are: whole-grain bread, bran muffins, broccoli, carrots, baked potatoes with skin, and apples with the peel.

Ask: What are some foods high in Fiber?

Show participants where to find the grams of fiber in a product on the food label.



4. Making substitutions..... **Ask** for suggestions on how to incorporate more fiber into their current diet. Try this: **Instead of this:** Suggest if participants do not like the taste whole wheat bread white bread of high fiber cereal that they mix a high brown rice white rice fiber cereal into their current cereal. baked potato with skin mashed potatoes applesauce Unpeeled apple Orange segments orange juice Whole grain cereals sweetened cereals Popcorn potato chips III Summary **Ask** participants if they can think of any high fiber substitutions they could have made in what they ate today. Dietary fiber is an important part of a healthy diet. The recommended goal of 20-35 grams of fiber/day is Provide handout "Which has more Fiber?" easy to achieve when fiber is added to every meal. A diet with adequate fiber may aid in the prevention of Activity (Optional): heart disease, colon cancer, constipation, and Divide your group class into smaller hemorrhoids. Adequate fiber may also help control blood groups of 3-5 people. sugar and promote weight loss. 2. Pass around samples of food diaries By making some substitutions such as eating popcorn that can be altered to increase fiber. instead of potato chips or eating whole wheat bread 3. Have each group discuss changes to instead of white bread are just some of the easy ways to the diet to increase the amount of fiber increase fiber in the diet. consumed. As fiber is increased in the diet, water consumption Activity (Optional): should be increased also. 1. Display a large jar of dried beans. 2. Have participants guess on paper how many grams of fiber are in the jar. Collect guesses in a small box. 3. At the end of the period designated for the Fiber Lesson Plan, determine which participant guessed the amount closest to the actual amount of fiber \square . Contact participant to claim fiber related prize e.g.: a basket with various high fiber foods or a high fiber cookbook. IV Evaluation Distribute evaluation forms The CPA will solicit participants' feedback on the lesson Offer fiber recipe to any participants evaluation form and discuss the correct answers with interested in making Banana Raisin Wheat Muffins (see attached). participants.

Lesson Evaluation-Dietary Fiber

Recipe

Banana Raisin Wheat Muffins

1 1/4 cups flour 1 tablespoon baking powder

1/4 teaspoon salt cereal

1 cup WIC approved Kellogg's Frosted Mini-wheats, crushed

1 cup fat free milk

1 egg

1 cup mashed ripe banana (2 large)

1/3 cup firmly packed brown sugar 2 tablespoon margarine, melted

1/2 cup raisins

Heat oven to $400 \square F$.

Mix flour, baking powder, and salt in large bowl. Mix crushed cereal and milk in another large bowl; let stand 5 minutes.

Stir in egg, banana, sugar, and margarine. Add to flour mixture; stir just until moistened. (Batter will be lumpy.) Stir in raisins. Spoon batter into muffin pan which has been sprayed with no stick cooking spray, filling each cup two-thirds full

Bake 20 minutes or until golden brown. Serve warm.

Makes 12 muffins.

Nutrition Information Per Serving: 150 calories, 2.5 grams total fat, 0.5 grams saturated fat, 20 milligrams cholesterol, 210 milligrams sodium, 30 grams carbohydrate, 2 grams dietary fiber, 13 grams sugars, 3 grams protein

Lesson Evaluation-Dietary Fiber

Check the best answer:

1.	Fiber is an important part of a healthy diet because:
	 a. It can relieve constipation and help lower cholesterol. b. It helps improve vision. c. It is a good source of protein.
2.	Which food is a good source of fiber?
	a. Chicken b. Beans c. Milk
3.	It is important to drink more water when you include more fiber in the diet.
	☐ True ☐ False
4.	Americans are eating adequate amounts of fiber.
	☐ True ☐ False
Plea	ase check Yes or No for the Following:
5.	Did you enjoy this lesson?YesNo
6.	Was this lesson/class on a topic that interests you? YesNo
7.	Did you learn anything new from this lesson? YesNo
8.	Would you change what you eat based on this information? YesNo
9	Did the instructor present the information clearly? YesNo
How ca	n WIC nutrition education lessons be improved?

Lesson Reporting Form-Fiber

Local Agency Name:	
Date:	
Reporting Period:	
January thru June	
Answer Key	<u>#</u> <u>%</u>
2. Fiber is an important part of a healthy diet because:	
a. It can relieve constipation and help lower cholesterol.	a
b. It helps improve vision.	b
c. It is a good source of protein.	c
2 Which feed is a good source of Charles	
2. Which food is a good source of fiber?	
_	a
b. Beans	b
□ c. Milk	c
3. It is important to drink more water when you include more fiber in	
your diet.	T
True	F
False	· —
4. Americans are eating adequate amounts of fiber.	
True	T
▼ False	F
Please check Ves or No for the following:	# 0/2
Please check Yes or No for the following:	<u>#</u> <u>%</u>
	# <u>%</u> Yes
5. Did you enjoy this lesson? Yes No	YesNo
5. Did you enjoy this lesson?	Yes
5. Did you enjoy this lesson? Yes No	YesNo
5. Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No	Yes
 5. Did you enjoy this lesson? Yes No 6. Was this lesson/class on a topic that interests you? Yes No 7. Did you learn anything new from this lesson? 	Yes
5. Did you enjoy this lesson? Yes No Was this lesson/class on a topic that interests you? Yes No	Yes
5. Did you enjoy this lesson? Yes No No Was this lesson/class on a topic that interests you? Yes No 7. Did you learn anything new from this lesson? Yes No	Yes No
5. Did you enjoy this lesson? Yes No No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No No Would you change what you eat based on this information?	Yes No Yes No Yes
5. Did you enjoy this lesson? Yes No No Was this lesson/class on a topic that interests you? Yes No 7. Did you learn anything new from this lesson? Yes No	Yes No
5. Did you enjoy this lesson? Yes No 6. Was this lesson/class on a topic that interests you? Yes No 7. Did you learn anything new from this lesson? Yes No 8. Would you change what you eat based on this information? Yes No	Yes
5. Did you enjoy this lesson? Yes No No Was this lesson/class on a topic that interests you? Yes No Did you learn anything new from this lesson? Yes No No Would you change what you eat based on this information? Yes No Did the instructor present the information clearly?	Yes
5. Did you enjoy this lesson? Yes No 6. Was this lesson/class on a topic that interests you? Yes No 7. Did you learn anything new from this lesson? Yes No 8. Would you change what you eat based on this information? Yes No	Yes
5. Did you enjoy this lesson? Yes No 6. Was this lesson/class on a topic that interests you? Yes No 7. Did you learn anything new from this lesson? Yes No 8. Would you change what you eat based on this information? Yes No 9. Did the instructor present the information clearly? Yes No	Yes
5. Did you enjoy this lesson? Yes No 6. Was this lesson/class on a topic that interests you? Yes No 7. Did you learn anything new from this lesson? Yes No 8. Would you change what you eat based on this information? Yes No 9. Did the instructor present the information clearly? Yes No Additional comments on improving WIC nutrition education. (Attach	Yes
5. Did you enjoy this lesson? Yes No 6. Was this lesson/class on a topic that interests you? Yes No 7. Did you learn anything new from this lesson? Yes No 8. Would you change what you eat based on this information? Yes No 9. Did the instructor present the information clearly? Yes No	Yes
5. Did you enjoy this lesson? Yes No 6. Was this lesson/class on a topic that interests you? Yes No 7. Did you learn anything new from this lesson? Yes No 8. Would you change what you eat based on this information? Yes No 9. Did the instructor present the information clearly? Yes No Additional comments on improving WIC nutrition education. (Attach	Yes
5. Did you enjoy this lesson? Yes No 6. Was this lesson/class on a topic that interests you? Yes No 7. Did you learn anything new from this lesson? Yes No 8. Would you change what you eat based on this information? Yes No 9. Did the instructor present the information clearly? Yes No Additional comments on improving WIC nutrition education. (Attach additional pages if necessary) Percent of Participants who met all lesson objectives:	Yes
5. Did you enjoy this lesson? Yes No 6. Was this lesson/class on a topic that interests you? Yes No 7. Did you learn anything new from this lesson? Yes No 8. Would you change what you eat based on this information? Yes No 9. Did the instructor present the information clearly? Yes No Additional comments on improving WIC nutrition education. (Attach additional pages if necessary)	Yes

Appendix of Handouts

(All handouts provided in English and Spanish except where indicated)

A	
A Parent's Guide to Physical Play	J
A Peek Inside - My Baby's Growth	J
Activity Pyramid	K
Are You Physically Active?	L
B	Lowfat Cooking Tips
Best 5 A Day Buys - Month by Month	
Breastfeeding (LLL/Kiwanis)	M
Brush Up on Healthy Teeth Tip Sheet	N
C	Nutrition Jeopardy
Calcium	0
Cholesterol: Know the Facts Circle the Foods High in Calcium	Oral Health for Infants and Children
Common Complaints of Pregnancy	
Cooking With Dairy Foods	P
Create Your Own Pizza Activity	Q
D	R
Do You Have a Sweet Tooth?	
E	S
Eating Right During Pregnancy	T
F	The Strength of Iron
Fast Food	The Top Twenty Fiber Foods
Fat: Know the Facts	True/False Quiz on Physical Activity
Folic Acid	\mathbf{U}
Foods For Your Child 1-3 yrs.	\mathbf{V}
Foods For Your Child 4-6 yrs	Vitamin A
G	Vitamin A Vitamin C
H	\mathbf{W}
Healthy Heart Pledge	When to Call For Breastfeeding Help
I	Which Food Has More Fiber?
Infant Feeding Guide (Eng, Sp, Vi, Fr)	Y
Iron (Low Literacy)	Z

Additional Lessons On SNEP CD-ROM

Family Mealtime
Fit WIC
Fitness for Families
Grocery Shopping
Lead
Downsizing Your Portions
Smart Snacking
Time for a Cup
Vegetarian Eating