Quarterly nutrition curriculum for California women, infants, and children participants

Martha Gloria Lopez

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QUARTERLY NUTRITION CURRICULUM FOR CALIFORNIA WOMEN, INFANTS, AND CHILDREN PARTICIPANTS

A Project
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Education:
Career and Technical Education

by
Martha Gloria Lopez
June 2005
QUARTERLY NUTRITION CURRICULUM FOR CALIFORNIA
WOMEN, INFANTS, AND CHILDREN PARTICIPANTS

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Approved by:

Joseph K. Scarcella, Ph.D., First Reader

Ronald K. Pendleton, Ph.D., Second Reader

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ABSTRACT

Obesity is a major problem facing Americans today. The material presented in this project responds to this problem by promoting healthy living habits.

This thesis project entails a curriculum targeted at providing California WIC participants, who are seen on a quarterly basis, an educational course on nutrition at each visit and a supplemental handbook. Both are designed to complement and provide related activities in accordance to each nutritional theme presented. The content was presented thematically, using the four seasons, fall, winter, spring, and summer. Learning the skills provided in this curriculum, participants will discover new ways to promote positive and healthy interaction with their children. There will also be informational content dispersed throughout each handbook which will focus on language and literacy promotion and issues relating to child safety.

With these tools, participants will be able to enjoy positive interaction with their children as well as provide fundamental information and principles that promote healthy living.
ACKNOWLEDGMENTS

The development of this project is indebted to the graciousness of the Nutrition Educators of the El Dorado County WIC Program for providing curriculum ideas, helpful hints and constant motivation; Gabriela Inigo and Eleanor Cosmos for promoting my strengths and overlooking my weaknesses; and Roseanne Smith and the rest of the Curriculum Review Committee for taking the time to proofread and provide constructive criticism of the thesis project content as well as positive moral support.

The creation of the handbooks deserves a special acknowledgement for Marie Gonzales whose expert skills in the utilization of Microsoft Publisher greatly enhanced the presentation of the written material.

Thanks are also in order, for Annette Brown, Judy Castro, Michael “Skip” Schneider, and Maria Villanueva, who have encouraged me throughout this process and who continue to be a source of strength and motivation in both my personal and professional endeavors.

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For Virginia Escobar who motivated me to pursue my Masters in Education in the Career and Technical Program;
and for my parents, Martha and Paul Wood, who supported me in my endeavor to return to school and take a leap in a new direction— a big hug, a wide smile, and a bold and prominent “Thank you!”
DEDICATION

I would like to dedicate this thesis project and curriculum to the entire California WIC community. Through the dedication of the staff and willingness of the participants, WIC continues to be a central thoroughfare disseminating positive meaningful information within each and every community it serves.
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CHAPTER ONE

BACKGROUND

Introduction

The content of Chapter One presents an overview of the project. The purpose of the project was discussed followed by the context of the problem, significance of the project, and assumptions. Next, the limitations and delimitations that apply to the project are reviewed. Finally, definitions of terms are presented.

Purpose of the Project

The purpose of the project was to develop a Quarterly curriculum for participants of the California Women, Infants, and Children Program (WIC). The aim was to reinforce the curriculum taught by supplementing it with a handbook designed to keep the nutritional information present in the thoughts of the participants during their three month lapse between visits.

Context of the Problem

The context of the problem was to address the needs of nutrition education for California WIC participants who qualify for triple issuance of monthly food vouchers. Since their office visits are limited to four times a year, this curriculum provides take home handbooks which
reinforce the nutritional content presented at each visit and promote positive family interaction and discussion opportunities related to healthy eating and healthy living.

Significance of the Project

The significance of the project was that there was a lack of public awareness in regards to nutrition education because of the limited amount of visits made to the WIC office by these participants. Therefore, the inclusion of supportive take home material was needed.

The take home material was designed to reinforce the curriculum taught in the WIC classroom. It was also created to provide suggestions and activities which promote family togetherness and opportunities to discuss and implement healthy eating and healthy living habits for WIC families.

Assumptions

The following assumptions were made regarding the project:

1. That the nutrition educators are comprehensible with the needs of California WIC participants.
2. Participants are choosing to attend each class.
3. Participants want information regarding healthy living habits for their families.

4. This curriculum, and its corresponding handbooks, respects all cultural values.

Limitations and Delimitations

During the development of the project, a number of limitations and delimitations were noted. These limitations and delimitations are presented in the next section.

Limitations

The following limitations apply to the project:

1. The classroom curriculum was designed for California WIC participants who are not considered high-risk participants.

2. The classroom curriculum was designed for participants who visit California WIC offices four times a year.

3. The series of handbooks was created to accompany the classroom curriculum.

4. The series of handbooks was directed for California WIC families eligible to attend WIC classes on a quarterly basis.
Delimitations

The following delimitations apply to the project:

1. Although, the curriculum was intended for the use of California WIC participants, it is easily adaptable into curriculum designed for promoting healthy eating and healthy living habits for all families with children.
2. Although, the classroom curriculum was designed for participants who visit California WIC offices four times a year, it is readily suited for WIC participants of other states who also visit their WIC office four times a year.
3. Although, the series of handbooks was created to accompany the classroom curriculum, each is available to be used individually without accompanying classes.
4. Although, the series of handbooks was intended to be made available for CA WIC participants, it can be used to complement this curriculum in classroom settings which promote healthy living and healthy eating.
Definition of Terms

The following terms are defined as they apply to the project.

**Curriculum** - A fixed series of studies required, as in a college, for graduation, qualification in a major field of study (Anges, 2001).

**Instructor** - One who instructs, teaches and trains (Anges, 2001).

**Nutrition Risk** - Medical based risk such as anemia, underweight, maternal age, history of pregnancy complications, or poor pregnancy outcomes; diet based risk such as inadequate dietary pattern (FNS, 2004).

**Obesity** - refers to adipose tissue (Sherwood, 2000).

**Overweight** - refers to excess weight for height (Sherwood, 2000).

Organization of the Thesis

The thesis portion of the project was divided into four chapters. Chapter One provides an introduction to the context of the problem, purpose of the project, significance of the project, limitations and delimitations and definitions of terms. Chapter Two consists of a review of relevant literature. Chapter Three documents the steps used in developing the project. Chapter Four presents
conclusions and recommendations drawn from the development of the project. The Appendix for the project consists of the Nutrition Curriculum for California Women, Infants, and Children Participants Handbook. Finally, the project references.
CHAPTER TWO

REVIEW OF THE LITERATURE

Introduction

Chapter Two consists of a discussion of the relevant literature. Specifically, the focus was on the rise in obesity rates among children and the efforts and successes and failures of the Women, Infants, and Children program in promoting healthy eating among its participants. It also provides an overview of the inception of the WIC Program and the criteria devised by the program for eligibility and participation.

The food guide pyramid plays a paramount role in defining the acceptable constraints of a healthy diet and therefore was also discussed. The literature review will also present current programs implemented by the California Women, Infants, and Children Program which promote healthy living for the participants of the program.

History of the Women, Infants, and Children Program

The Women, Infants and Children Program was first created as a two year pilot program in 1972 by an amendment to the Child Nutrition Act of 1966. Congress
passed a bill by Senator Hubert Humphrey of Minnesota, to create the Special Supplemental Nutrition Program for Women, Infants and Children. They placed the pilot program under the control of the U.S. Department of Agriculture (USDA). The program was made permanent in 1975.

Since the late 1960’s the United States Department of Agriculture, under the run of the presidency of Lyndon B. Johnson, placed the need to help low income Americans as one of their primary focuses. The 1967 National Nutrition Survey discovered that many of our children, considered low income, suffered from anemia and inadequate growth. They were at risk of suffering physically as well as mentally because their mothers were not getting adequate nutrition during their pregnancies, or because as infants and children, they did not have enough to eat or were not eating healthy foods.

The Women, Infants, and Children Program was created to address the nutritionally at risk low income pregnant women, breastfeeding women (up to their infant’s first birthday), non-breastfeeding postpartum women (up to six months after their pregnancy ends), infants until their first birthday, and children up to their fifth birthday.

The Food and Nutrition Service Division of the USDA, reports that, currently, WIC serves forty five percent of
all infants born in the United States (USDA, 2004). They list benefits provided to WIC participants as supplemental nutritious foods, nutrition education and counseling at WIC locations, and screening and referrals for other health, welfare and even social services.

Since WIC is not an entitlement program, participation is not permitted for every eligible individual. There simply is not enough funding to accommodate all those who are eligible. Income eligibility guidelines (effective July 1, 2004 through June 30, 2005), state that the applicants’ gross income must fall at or below 185 percent of the U.S. Poverty Income Guidelines. In addition to being in a category served by the WIC program and meeting the Income Eligibility Guidelines, eligibility is also based on state residency and to be individually determined to be at “nutritional risk” by a health professional.

For the fiscal year 2003, 7,631,008 participants were served in the United States, American Samoa, District of Columbia, Guam, Puerto Rico, and the Virgin Islands (Food & Nutrition Service [FNS], 2004). Persons who fall in categories served by WIC and who participate in the Food Stamp Program, Temporary Assistance for Needy Families (formerly known as the Welfare Program) and those being
served by Medicaid automatically meet the income eligibility requirement (FNS, 2004).

Of all the participants served, 1,274,489 came from the state of California. The California WIC Program serves the largest population. The average monthly food cost per participant, as reported by the WIC Program Participation And Costs Report (data as of October 21, 2004), is thirty five dollars and twenty eight cents. Children have always been the largest category of WIC participants being served.

What is "nutritional risk"? WIC recognizes two types of nutritional risk when determining eligibility for participation. The first consists of medically based risks. These are designated as "high priority" and include but are not limited to risks such as anemia, being underweight, having a history of pregnancy complications, being a certain maternal age and having poor pregnancy outcomes (FNS, 2004).

The other consists of diet based risks such as inadequate dietary patterns (FNS, 2004). These include items such as, lack of vitamin A sources in dietary intake or low amounts of protein or milk based products containing calcium. Nutritional risks are determined by
WIC staff through a free health screening for program applicants.

WIC has devised a system of priorities for those served since it cannot serve all eligible people. Local agencies are assigned a caseload. When the local agency has reached its maximum, vacancies are filled by those who fall into the highest priority levels. The Food and Nutrition Services Division, of the USDA, lists in order the following priority levels:

1. Pregnant women, breastfeeding women, and infants determined to be at nutritional risk because of serious medical problems.

2. Infants up to six months of age whose mothers participated in WIC or could have participated and had serious medical problems.

3. Children (up to age 5) at nutritional risk because of serious medical problems.

4. Pregnant or breastfeeding women and infants at nutritional risk because of dietary problems (like a poor diet).

5. Children (up to age 5) at nutritional risk because of dietary problems.

6. Non-breastfeeding, postpartum women with any nutritional risk.
7. Individuals at nutritional risk only because they are homeless or migrants, and current participants who without WIC foods could continue to have medical and/or dietary problems (FNS, 2004).

The USDA Nutrition Program Facts Sheet updated in November of 2004, lists food benefits that WIC participants receive as high in one or more of the following nutrients: iron, calcium, protein, and vitamins A and C. WIC participants are issued checks or vouchers for foods such as eggs, milk, cheese, peanut butter, dried beans/peas, tuna fish, carrots, iron fortified adult cereal, vitamin C-rich fruit or vegetable juice, infant cereal and iron fortified infant formula.

In special cases, WIC can even provide special therapeutic infant formulas and medical foods when deemed necessary by a physician for a medical condition.

Health Promotion Initiatives of the Women, Infants, and Children Program

Congress established the Farmers’ Market Nutrition Program (FMNP) in July of 1992, to provide fresh, nutritious, unprepared, locally grown fruits and vegetables to WIC participants (FNS, 2004). It also serves to promote awareness of farmers’ markets.
The FMNP is administered through a federal/state partnership in which the Food and Nutrition Service provides cash grants to State Agencies (FNS, 2004). Currently, FMNP operates in forty four states including California. During the fiscal year of 2003, more than 2.3 million WIC participants were served (FNS, 2004).

WIC participants in the following categories are eligible for participation in the program: Women, infants (over four months old), and children that are certified to receive WIC Program benefits or who are on a waiting list for WIC certification (FNS, 2004). These recipients receive a food benefit level of ten to twenty dollars a year through coupons they can use at their local farmers’ markets.

The WIC Program usually takes responsibility for educating the recipient on the value of incorporating fresh fruits and vegetables in their diet. Nutrition education provided includes how to select and prepare the fresh produce they purchase with their benefit coupons.

The Farmers’ Market Nutrition Program was allocated more than $22.8 million dollars for fiscal year 2004. Federal funds support seventy percent of the total cost of the program and the remaining thirty percent needs to be funded by the state.
Fit WIC is another health initiative devised by the WIC Program to promote health. In communities, WIC is considered a prevention program that promotes healthy eating and physical fitness to families with young children. Fit WIC is a project that took three years to create and whose research and evaluation was funded by the USDA. They developed strategies to target the individual, the family, and the community.

Fit WIC focuses on activities which include participants, staff and the community. They include special training for WIC Staff that places attention on assisting families in overcoming barriers to healthy eating and being active. They also prepare staff to discuss sensitive issues about weight with the parents of overweight children (University of California, Berkeley and the California Department of Health Services WIC Branch [UCB & CDHS WIC Branch], 2001). Fit WIC also focuses on staff wellness programs, interactive WIC classes, and providing references and referrals for parents that complement Fit WIC principles.

Fit WIC includes the community by working with health professionals to make messages about healthy eating and physical activity more consistent, collaborating with schools and Temporary Assistance for Needy Families to
encourage healthy eating choices and they help to initiate more inexpensive sports and activities available to children.

Fit WIC creates community task forces, community resource guides and community gardens and farmers’ markets near WIC sites that all aid in promoting physical activity and healthy eating (UCB & CDHS WIC Branch, 2001).

Findings from the Fit WIC Project include: Community task forces now see WIC as a leader in obesity prevention, staff feel more comfortable discussing weight issues with parents and are more likely to address the need for physical activity, and WIC staff have taken the initiative to live healthier lifestyles (UCB & CDHS WIC Branch, 2001).

Importance of the Food Guide Pyramid

The Food Guide Pyramid is used by the USDA as a guide to daily food choices. It is promoted by the WIC program as a general guide that lets you make healthy eating choices. The premise of the pyramid is to eat more from the categories at the bottom of the pyramid and decrease portions towards the categories at the top of the pyramid.

The base of the pyramid is the Bread, Cereal, Rice and Pasta Group. It is recommended that one consume six
through eleven servings of this group and that whole grain products be included in some of those servings.

Working our way from the base of the pyramid, fruits and vegetables are the next two categories. It is recommended that one consume three to five servings daily of vegetables and two to four servings daily of fresh fruit.

The milk, yogurt, and cheese group sits above the vegetable group and makes the suggestion of two to three servings daily. The meat, poultry, fish, dry beans, eggs, and nuts group is adjacent and sits above the fruit group. It recommends two to three servings of daily consumption.

At the top of the pyramid is the fats, oils, and sweets category and it recommends that these types of products be used sparingly.

Serving sizes vary by the age of the individual. For children ages two to six years, women, and some older adults, sixteen hundred calories are recommended daily (DGA, 2000).

A child should eat six servings of bread, cereal, rice and pasta, three servings of vegetables, two servings from the fruit group, and two to three servings of milk, yogurt, and/or cheese. A child should also have a combined
total of five ounces of meat, poultry, fish, dry beans, eggs, and nuts daily (DGA, 2000).

How do you apply these guidelines for children? “Encourage healthy weight by offering children grain products; vegetables and fruits; low-fat dairy products; and beans, lean meat, poultry, fish, or nuts and let them see you enjoy eating the same foods” (DGA, 2000, p. 28). The recommendations of the Daily Food Guide Pyramid along with the encouragement of promoting vigorous daily activity can keep kids healthy and help to prevent obesity.

A Rise in Childhood Obesity

Obesity is considered to be the second leading cause of preventable death in the United States. This raises concerns about associated health risks such as hypertension, type two diabetes, respiratory problems, and certain cancers for children during their youth and later years. In addition, obesity is also associated with psychosocial disorders and depression. Obese children can also be adversely impacted by discrimination as well as social bias.

According to Sherwood (2000), Obesity refers to adipose tissue, while the definition of overweight refers
to excess weight for height. Because it is often difficult to obtain these direct measures of adipose tissue, WIC looks at weight for height measures to determine whether a participant is classified as overweight or not.

In fact, this is a common practice at the doctor’s office and at the gym. It is most commonly referred to as Body Mass Index (BMI). BMI criteria has been based on mortality outcome research for adults yet it has not been established for children and youth. One reason posed by Sherwood (2000), is that it is hard to link youth weight status to chronic disease outcomes.

Barlow and Dietz (1998), state that it has been suggested by United States expert panels that for clinical evaluations of obesity and epidemiologic applications, overweight in youth be defined as a BMI greater than the ninety fifth percentile for age using national reference population data.

“Regardless of the method used to classify overweight or obesity, studies have shown high prevalence estimates among children and adolescents, and that rates have increased dramatically since the mid 1960s and continue to rise” (Mei et al., 1998). In fact, early childhood obesity is a problem of increasing prevalence concerning health in certain populations. In the Surgeon General’s Call to
Action, it is stated that weight related behaviors begin in childhood (U.S. Department of Health and Human Services, 2001).

There are few gender differences shown in national data in regards to obesity rates among children and adolescents. However, the differences in overweight prevalence have been observed when the focus is on race and ethnicity. In the third National Health and Nutrition Examination Study, it was noted that the overweight prevalence amongst U.S. youth was considerably higher for African American girls and male and female Hispanics compared to Whites.

In 1995, Troiano, Flegal, Kuczmarski, Campbell, and Johnson made reference to studies in which it has been shown that the estimates of obesity in American Indian youth is excessively high. In fact, in a recent study of over twelve thousand American Indian Youth living in the Northern Plains area, ranging in ages five through seventeen, twenty two percent of the males and eighteen percent of the females were overweight (Zephier, Himes, & Story, 1999).

Obesity tends to persist if present during the adolescent years according to Sherwood (2000). In general, the later into adolescence that being overweight persists,
the more severe the degree of obesity becomes. This increases the likelihood that obesity will persist in adulthood (Sherwood, 2000).

Currently, the rise in obesity and overweight rates are occurring at an "over too brief a time period for there to have been significant genetic changes in the population." Body weight is regulated by physiological processes as well as behavior and influential factors (Sherwood, 2000).

"The increasing proportion of calories from fat and increased calories of the diet in combination with reductions in physical activity levels and increases in sedentary behavior have been implicated as significant contributors to the obesity epidemic" (Dwyer et al., 1998). Research has shown that "low levels of activity are associated with higher levels of obesity and that increasing physical activity can increase weight loss in children" (Epstein, 1995). These factors are the primary focus of this thesis project. By targeting these factors early in the lives of children, it is my goal that information and ideas to maintain an active lifestyle will help to combat this current trend of obesity in our children.
Summary

The literature important to the project was presented in Chapter Two. It defined and limited the problem to the efforts of the WIC Program and its successes and failures in promoting healthy life choices throughout the years since its inception. Obesity is a major force driving the need for health education and WIC is at the forefront in promoting a healthier lifestyle within its participants through community outreach, nutrition education and supplemental food vouchers.

WIC also incorporates farmers' markets which not only benefit the participants by allowing them to purchase fresh fruits and vegetables but also aids the local economy in extra generated revenue.
CHAPTER THREE

METHODOLOGY

Introduction

Chapter Three documents the steps used in developing the project. Specifically, the focus is on following the WIC food guideline principles and tailoring the curriculum to coincide with fruits and vegetables which are in season and therefore affordable. The curriculum was designed for low literacy participants of the WIC program. The accompanying handbooks are also created for low literacy adults to promote healthy living habits with their children.

Curriculum Development

The next session of the project provides an overview of the curriculum development process. Specifically, the curriculum structure and content validation process are reviewed.

Curriculum Resources and Content Validation

The content of this curriculum was completed according to the approved format devised for nutrition educators and registered dieticians employed by the California Women, Infants, and Children Program. The content of this curriculum is in accordance with the
criteria for developing WIC education materials also set forth by the California WIC Program in July of 2002.

The criteria was divided into three main areas. These three areas are content, readability and layout. The content is accurate and current. It does not include sponsors or product bias. It promotes positive behavior and is written in conversational tone. It also presents practical information and concrete examples. The language used is simple and includes words which are familiar and comprised of one or two syllables for the low literacy learner.

Readability was the second main area of criteria focus. This curriculum is comprised of short sentences and short paragraphs. It is tailored at the appropriate reading level for WIC participants, 5th through 6th grade or lower with at least a 12-point font. The fonts have been limited to no more than two fonts per page to avoid confusion and permissible fonts for the body are Times, Times Roman and Palatino. Permissible fonts for the headings are limited to Helvetica or Arial. Finally, hyphenated words are eliminated and for emphasis, underlining and bolding was used instead of italics and using all caps.
The final area of criteria for developing WIC education materials is the layout. The layout of this curriculum is well organized and attractive. It contains appropriate illustrations and balances white space with words and illustrations. The illustrations used are relevant to the text, meaningful to the audience and appropriately located. All information is grouped under topic headings. Whenever possible, graphics depicting positive behavior are utilized.

The curriculum was developed to increase an understanding of incorporating nutritious food into the diets of participants of the Women, Infants, and Children Program run by the United States Department of Agriculture. It was also created with the intent to promote other healthy living choices such as incorporating exercise into one’s daily routine and providing activities for low literacy parents to share with their children.

This curriculum will give the participants of the Women, Infants, and Children program reinforcement tools which promote a healthy way of living. It will also promote the new Daily Food Guidelines introduced on January 12, 2005 whose specific changes are to encourage consumption of at least three servings of whole grains
daily and consider the caloric intake of each family member.

Using the dietary guidelines is useful for the development of educational materials and aids in designing and implementing nutrition related programs, including federal foods, nutrition education, and information programs such as that of the Women, Infants, and Children program.

Design

This thesis project entails a curriculum targeted at providing WIC participants, who are seen on a quarterly basis, an educational course on nutrition at each visit and a supplemental handbook designed to complement and provide related activities in accordance to each nutritional theme presented.

The content was presented thematically, using the four seasons, fall, winter, spring, and summer. Since participants will be seen once every three months, each class begins with a new theme and provides activities related to that particular season of the year. Fruits and vegetables that are in season are featured, as well as, physical activities appropriate in varying outside conditions.
Learning the skills provided in this curriculum, participants will discover new ways to promote positive and healthy interaction with their children. Communication skills, fun indoor projects, physical outdoor activities, and budget friendly nutrition laden recipes are featured. There is also informational content dispersed throughout each handbook which focusses on language and literacy promotion and issues relating to child safety.

With these tools, participants will be able to enjoy positive interaction with their children as well as provide fundamental information and principles that promote healthy living.

All parents want what is best for their children. This curriculum and each of its accompanying handbooks will facilitate that process in regards to learning about healthy eating habits and the importance of physical activity as well as provide an avenue for positive communication and interaction within the family unit. Obesity is a major problem facing Americans today. The material presented in this project responds to this problem by promoting healthy living habits.
Population Served

This curriculum was created to serve the participants of the California Women, Infants, and Children Program. These include pregnant, postpartum women up to six months after the pregnancy, breastfeeding women up to their infant turns a year of age, infants, and children up to age five who also qualify based on family income and state residency requirements. This curriculum is specifically catered to those participants of the Women, Infants, and Children program who are issued vouchers on a quarterly basis, every three months.

Summary

The steps used to develop this project were outlined. The target populations for this course are California WIC Participants. The curriculum development process including curriculum structure and content was presented. Upon completion, this curriculum guideline is appropriate for use in any California WIC Agency class structured for participants who are issued food vouchers on a quarterly basis since it was developed in accordance with the guidelines set forth by the criteria outlined for developing WIC education materials of the California WIC Program in July of 2002.
CHAPTER FOUR
CONCLUSIONS AND RECOMMENDATIONS

Introduction

Included in Chapter Four was a presentation of the conclusions gleamed as a result of completing the project. Further, the recommendations extracted from the project are presented. Lastly, the Chapter concludes with a summary.

Conclusions

The conclusions extracted from the project follows.

1. Despite the fact that there are a growing number of California WIC participants receiving triple issuance of WIC checks on a quarterly basis, there is no curriculum that concentrates solely on this WIC participant population.

2. This curriculum supports California WIC Programs attempt to promote healthy eating and healthy living habits and strategies.

3. This curriculum is user friendly and may be utilized by each California WIC agency.

4. The literature review and the increase of triple issuance by local California WIC agencies,
indicated the need for quarterly nutrition curricula.

Recommendations

The recommendations resulting from the project follows.

1. To offer this curriculum in all settings
   i. Parenting Courses
   ii. Community Colleges
   iii. Churches
   iv. Preschools
   v. Child Care Settings
   vi. Hospitals

2. Remain focused on servicing the needs of CA WIC Participants
   i. Remain updated on resources, curriculum, and current recommendations and health updates related to CA WIC participants.
   ii. Remain updated on current trends of adult education specifically of low literacy adults.
   iii. Administration and faculty recommendations.
Summary

Chapter Four reviewed the conclusions extracted from the project. They were determined from the review of literature, and the opinions from the Curriculum Review Committee.

Lastly, the recommendations derived from the project were presented. The recommendations were formed through the Curriculum Review Committee; as a result of reviewing the related literature; and examining existing curriculums designed for California WIC participants.
APPENDIX

NUTRITION CURRICULUM FOR CALIFORNIA WOMEN,
INFANTS, AND CHILDREN PARTICIPANTS
Quarterly Nutrition Curriculum for California Women, Infants, and Children Participants
Introduction

This curriculum was created to service the needs of California WIC participants who are issued WIC checks on a quarterly basis. Supplying these participants with take home supplemental handbooks aides them in encouraging healthy eating and living habits during the lapse between visits to the WIC office.

Through this series of classes, participants are introduced to healthy living concepts and given pertinent nutrition information useful in their everyday lives.

The curriculum content was introduced thematically by seasons fall, winter, spring, and summer and illustrates activities, recipes and seasonal produce.
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Lesson Plan For Fall

Falling For Apples

**Format:** This is a family centered education lesson plan. Family centered education helps children and parents interact with each other. It promotes the parent as the first teacher of the child and helps get children ready for school.

**Who:** California WIC Participants seen on a quarterly basis

**Why:** Participants of the California WIC Program need to gain awareness of affordable fruits and vegetables which are in season and promote fit bodies through the use of motion.

**Time:** 30 minutes

**Setup:** Participants to sit in a semi-circle with children in the middle. The room must be cleared of extra chairs and table(s).

**Objectives:** By the end of this session, participants will have:

- Stated the names of two fruits and/or vegetables which are in season;

- Created two healthy snacks using these seasonal fruits and/or vegetables.

**Lesson Overview:**

**Lesson Overview:**

1. Welcome and Introduction (5 minutes)
   
   • Introduce self

   • Conduct ice breaker and have families introduce themselves
• Distribute handout packet for lesson
• Note that class is for both adults and children

2. Handout Sharing: Fall Handbook (5 minutes)

3. Learning Apple Basics (5 minutes)
• Participants learn and share about the nutritional information of apples

4. Physical Activity (5 minutes)

5. Planning Healthy Snacks with Apples (5 minutes)
• Using ideas from the handout, participants plan a healthy snack that can be made with apples

6. Recipe Sharing and Tasting/Evaluation (5 minutes)

Materials:

• Fall Handbook
• Apple Food Models
• Food Guide Pyramid Poster
• Coupons for Farmer’s Market
• Recipe Ingredients (see recipe)
• Napkins for recipe tasting
• Coloring sheet for children to use during the lesson
• Big color crayons
• Incentives: Apple Magnets with Local WIC Agency phone number listed (if available)
Lesson Plan For Winter

Win Win WINter!

Format: This is a family centered education lesson plan. Family centered education helps children and parents interact with each other. It promotes the parent as the first teacher of the child and helps get children ready for school.

Who: California WIC Participants seen on a quarterly basis

Why: Participants of the California WIC Program need to gain awareness of keeping their bodies in motion during the winter season to prevent weight gain and sedentary lifestyle habits.

Time: 30 minutes

Setup: Participants to sit in a semi-circle with children in the middle. The room must be cleared of extra chairs and table(s).

Objectives: By the end of this session, participants will have:

- Created flash cards of various fruits and vegetables to share with their children;
- Stated two indoor activities to keep their bodies in motion.

Lesson Overview:

1. Welcome and Introduction (5 minutes)
   - Introduce self
   - Conduct ice breaker and have families introduce themselves
   - Distribute handout packet for lesson
• Note that class is for both adults and children

2. Handout Sharing: Winter Handbook (5 minutes)

3. Flash Card Activity- Parents teach children how to pick precut fruit and vegetable pictures and both glue them onto index cards. (7 minutes)

4. Cold weather restrictions on physical movement- Real and Perceived (5 minutes)

5. Physical Activities- parents and children use water bottles as weights and class participates in walking in place and stretching exercises. (5 minutes)

6. Class comes to a close as participants enjoy the water bottles as a gift for attending the class. (3 minutes)

Materials:

• Winter Handbook
• Precut pictures of fruits and vegetables
• Non toxic glue
• Small paper cups
• Wet paint brushes
• Index cards
• Markers
• Ziploc bags to take project cards home
• 16oz water bottles
• Butcher paper to cover children’s floor area
• Tape
• Big Color Crayons
• Exercise Poster
Lesson Plan For Spring

Spring Into Action

Format: This is a family centered education lesson plan. Family centered education helps children and parents interact with each other. It promotes the parent as the first teacher of the child and helps get children ready for school.

Who: California WIC Participants seen on a quarterly basis

Why: Participants of the California WIC Program need to gain awareness of the seasonal berries and melons available during the Spring Season. Also, Participants need to be encouraged to incorporate physical activity into their daily lives.

Time: 30 minutes

Setup: Participants to sit in a semi-circle with children in the middle. The room must be cleared of extra chairs and table(s).

Objectives: By the end of this session, participants will have:

- State the name of at least one berry in season;
- State the name of at least one melon in season;
- State the name of at least one activity that promotes physical fitness.

Lesson Overview:

1. Welcome and Introduction (5 minutes)
   - Introduce self
   - Conduct ice breaker and have families introduce themselves
- Distribute handout packet for lesson
- Note that class is for both adults and children

2. Handout Sharing: Spring Handbook (5 minutes)

3. Physical movement basics-emphasis outdoor activities like walking, skipping, counting as you stroll (5 minutes)

4. Spring Into Action! – physical activity (5 minutes)

5. Create healthy travel snack using WIC cereal as main ingredient-custom trail mix (5 minutes)

6. Emphasize importance of drinking eight glasses of water daily (2 minutes)

7. Close with WIC water bottle and enjoyment of trail mix (3 minutes)

Materials:

- Spring Handbook
- Ziploc bags
- WIC dry cereals (all varieties)
- Raisins
- Dried cranberries
- Peanuts
- Dried mango
- Dried pineapple
- Yogurt covered almonds
- Plastic gloves
- Box of two ounce paper cups
- Four metal round trays to pass out ingredients for trail mix
- Large trash can near exit door
- Case of WIC water bottles (with local agency promotion information)
- Hand sanitizer
• Napkins
• Exercise Poster
• Example board displaying a pedometer, person walking with comfortable shoes and carrying a water bottle.
• Sippy cups for children under age three
• WIC fanny packs for distribution (if available)
Lesson Plan For Summer

Summer Healthier Snacks Than Others!

Format: This is a family centered education lesson plan. Family centered education helps parents and children interact with each other. It promotes the parent as the first teacher of the child and helps to get children ready for school.

Who: California WIC Participants seen on a quarterly basis.

Why: Participants of the California WIC Program need to gain awareness of selecting healthy snacks such as fruits instead of high calorie prepackaged snack foods.

Time: 30 minutes

Setup: Participants to sit in a semi-circle with children in the middle. The room must be cleared of extra chairs and table(s).

Objectives: By the end of this session, participants will have:

• Created a collection of healthy snack ideas and recipes;
• Stated the names of two portable fruit and vegetable snacks.

Lesson Overview:

1. Welcome and Introduction (5 minutes)
   • Introduce self
   • Conduct ice breaker and have families introduce themselves.
   • Distribute handout packet for lesson.
   • Note that class is for both adults and children

2. Handout Sharing: Summer Handbook (5 minutes)
3. Summer Healthy Choices, Summer Not- Choosing portable fruit and vegetable snacks instead of calorie laden prepackaged snacks. (5 minutes)

4. Creating Healthy Smoothies Activity- WIC Staff call up parents to create smoothies using various fruits and nonfat yogurt and let their children taste test the personalized creations. (7 minutes)

5. Recipe Card Physical Selection Activity- parents and children choose recipe card of named fruit, place it in a recipe box, child takes the box as fast as he can to the front table, he then chooses the correct food model and walks back as fast as he can to place that food model in the selected fruit basket at the opposite end of the room. Parent/child team utilizes the time given to place as many fruits in their selected fruit basket. When time is over, everyone wins a prize. (5 minutes)

6. Class comes to a close as participants enjoy the water bottles as a gift for attending the class. (3 minutes)

Materials:

- Summer Handbook
- Recipe Cards
- Recipe Boxes
- Fruit Models
- Fruit Baskets
- Blenders (min 5)
- Plain Non Fat Yogurt Containers
- Strawberries
- Blueberries
- Peaches
- Bananas
- Apple Juice
- Frozen Mango Slices
- Pineapple Chunks
- Coconut Milk
- Mini cups
- Napkins
- Smoothie Recipe Handout
- Assorted WIC Logo Promotional Items
- Water Bottles
- Two Large Tables (one at each end of room)
- Large Trash Can (placed at door entrance)
Nutrition Curriculum for California
Women, Infants, and Children

Participants Handbook

The development of this handbook is indebted to the graciousness
of the nutrition educators of the Women, Infants, and Children
Program and the early childhood educators I have had the
opportunity to work with for providing curriculum ideas and helpful
hints, as well as opportunities for learning through example. Thank
you.
Fall Handbook
Volume 1
Apples

Fall Handbook
Volume I

Fall for Apples

Apples come in several different varieties. Harvesting typically lasts from the middle of July through the end of August. One medium apple is:

- About 80 calories
- Fat-Free
- Saturated Fat-Free
- Sodium-Free
- Cholesterol Free
- Provides 20% Daily Value of Fiber
- Tastes Great!

Gala apples have a light texture, are crisp, and have a nicely rounded shape. Gala apples are the first apples of the season and are available from mid-July to December.

Granny Smith apples are both sweet and tart. They are great for snacks and cooking, too! They keep well and are available mid-August through June.

Fuji apples are tasty, sweet, and aromatic. They come in different colors and are wonderful for baking. Look for Fuji apples from mid-September through April.
Apple Snacks

Apples taste great just plain but here are a few ways to spruce them up:

Place them on a toasted bagel with cheese
Cut them in wedges and sprinkle them with cinnamon
Dip them in honey
Dip them in Peanut Butter
Use them in a fruit salad
Slice them thin and add them to a turkey wrap with cheese

Apple-Stuffed Meatballs

Ingredients:

- 1/2 lb. low-fat turkey sausage
- 1/2 lb. low-fat turkey, ground
- 1 cup plain bread crumbs
- 1 medium apple, shredded
- 1 egg, beaten
- 1/2 cup onion, chopped
- 1/2 cup water
- 1/2 teaspoon ground sage

Directions:

Combine sausage, ground turkey, bread crumbs, sage, apple, egg, and onion in bowl. Mix well and form into round balls. Place in skillet. Lightly brown all sides. Remove meatballs from skillet, drain; place in 3-quart casserole. Pour water over meatballs. Cover, bake in oven for 45 minutes at 350 degrees. Serves 6.

Apple Salsa Pita

- 1 cup shredded apple
- Prepared salsa
- 1 cup shredded WIC cheese
- 1/2 cup shredded carrots
- 1/4 cup chopped celery
- 4 pita breads, halved

Lightly mix apples, cheese, carrots, and celery; refrigerate until lunch time.

To serve, fill pita halves with apple filling and salsa.

Makes 4 servings.
KIDS IN ACTION-HELPING CHILDREN STAY FIT

Daily physical activity is part of a child's foundation for a long, healthy life. Helping children adopt an active lifestyle early will have a tremendous impact on their physical, intellectual and emotional development.

Getting involved in a child's physical activity routine early in life will demonstrate your caring and help foster an enjoyable, happy relationship with the child. As adults, we have a responsibility to be role models for our children to share with them the pleasures and benefits of a physically active lifestyle as well as healthy eating habits.

READY...SET...GO PLAY!

PLAY EVERY DAY
Your toddler or preschooler needs 60 minutes or more each day of active free playtime. Going outside every day is one of the best ways to accomplish this. If you can't be outside, active play inside is the next best thing.

BUILD YOUR SKILLS
Your toddler needs at least 30 minutes a day of planned physical activity. Your preschooler needs at least 60 minutes. Help your child practice skills like jumping, tumbling, balancing and catching every day.

EXPLORE YOUR COMMUNITY
Getting to know his neighborhood will help your child feel safe and confident. Instead of watching TV on Saturday mornings, make a play-date at the park or take the family for a walk around the block.

INFANTS (0-12 MONTHS OLD):
From birth, give your baby safe opportunities to move and explore. Babies love "floor time" where they can reach, roll and crawl. Try not to keep her in her infant seat, crib or playpen for too long at one time.
> Games to play together: peek-a-boo, pat-a-cake

TODDLERS (1-3 YEARS OLD):
Toddlers are learning to control their own bodies and develop skills like running and jumping. Active play helps your toddler tap into his creativity and imagination too.
> Games to play together: follow the leader, marching band, ring around the rosy, dancing to music

PRESCHOOLERS (3-5 YEARS OLD)
Preschoolers are developing confidence in movement skills that will prepare them for more advanced physical activities like school sports.
> Games to play together: hide and seek, kickball, freeze tag, hopscotch, catch
Help Your Child Develop a Lifelong Habit of Activity and Healthy Eating!

One of the most important things you can do as a caregiver is to help your children lead healthy lives. Caregivers can make a positive difference in their children's health just by setting a good example!

MAKE ACTIVITY FUN!
Help your child enjoy activity because it's fun!

Ideas from WIC families:
1) "I blow bubbles and my toddler chases them."
2) "I make an obstacle course in the living room."
3) "When they are young, just a walk around the block can be fun."
4) "Sometimes we just put music on and dance around the living room."

IT IS COMMON FOR TODDLERS TO EXPLORE THEIR OWN IDEAS ABOUT EATING:
>They may not want to try new foods, unless they can learn about them slowly.
>They will usually learn to like new foods as they see it on the table and see you eating it.
>They will test foods many times before they know it well enough to eat it.

IT IS COMMON FOR TODDLERS TO HAVE IRREGULAR EATING PATTERNS:
>What they eat one day, they may not eat the next.
>They can eat a lot one day and hardly anything the next.
>They usually eat one or two foods at a meal.

HIDE AND SEEK WITH A TWIST!
Make it a game; hide some items around a room in the house or outdoors. Use a watch and time how fast it takes the kids to find the items. Try it several times and see if the kids can improve their times. Kids love a challenge and really enjoy seeing themselves improve!

WHY TURN OFF THE TV?
Your kids are more likely to:
Be more creative
Read more books
Do better in school
Eat healthier foods

Lentil Soup
(6 servings, about 2 cups each)
Ingredients:
1) Tablespoon vegetable oil
2) cup chopped onion
3) cups dried lentils, rinsed
4) cup chopped carrots
5) cups diced tomatoes, fresh or canned (14 ounces)
6) cups of water or broth
7) cup shredded Mozzarella cheese

Directions:
1) In large pot, heat oil over medium heat. Cook onion in oil until soft and lightly brown (about 5 min.)
2) Add lentils, carrots, and tomatoes.
3) Add water. Stir.
4) Bring ingredients to boil.
5) Reduce heat to low and simmer for about 45 minutes or until lentils are tender.
6) Spoon into soup bowls. Top with cheese.

REMEMBER THE 1-HOUR GUIDELINE!
1 Hour or more of active play a day-and
1 hour or less of TV or video games a day!
TURKEY CHOWDER
Ingredients:
2 cups cooked turkey, chopped
2 tbsp. butter
1 small onion, diced
1 celery stalk, diced
2 carrots, diced
2 tsp. all-purpose flour
3 cups chicken or turkey stock
1 potato, peeled and diced
3/4 cup frozen corn
1/2 tsp. thyme

CRUSTLESS PUMPKIN PIE
Ingredients:
1 lb can solid pack pumpkin
1 12oz can evaporated milk
2 whole eggs
2 egg whites
3/4 cup sugar
1 tsp ground cinnamon
1/4 tsp ground allspice
1/4 tsp ground ginger
1/8 tsp salt
1/2 cup graham-cracker crumbs
1/2 cup vanilla wafer crumbs
1 cup whipped cream (optional)

APPLESAUCE BRAN MUFFINS
Ingredients:
1 1/2 cups all-purpose flour
1/3 cup brown sugar, firmly packed
1 tsp ground cinnamon
1/2 tsp baking soda
1/2 tsp baking powder
1/2 tsp salt
1 cup all bran cereal
1/4 cup milk
1 cup applesauce
1/3 cup vegetable oil
1 egg
1/2 cup raisins (optional)
1/2 cup chopped walnuts (optional)

Directions: In a fry pan, heat butter and cook onion, celery and carrots for 1 minute. Remove from heat and add flour. Stir and cook on low for 1 minute. Add stock and bring to a boil. Add turkey, potato, corn and thyme. Cook over low heat 15 minutes, or until potato is cooked. Season with salt and pepper to taste.
Makes 4 servings
Nutrient analysis per serving:
282 calories; 9g fat; 27g protein; 22g carbohydrates.

Makes 10 servings
Nutrient analysis per serving:
166 calories; 9g fat; 5g protein; 27g carbohydrates

Directions: Heat oven to 375°F. Grease and flour two 12-cup muffin tins or line with paper liners. Combine flour, brown sugar, cinnamon, baking powder, baking soda and salt in a large mixing bowl; set aside. In a medium bowl, combine bran cereal, milk applesauce, oil and egg; mix well. Add the bran mixture to the dry ingredients mixing just until moistened. Fold in nuts and raisins, if desired. Fill prepared muffin tins three-fourths full. Bake for 18 to 20 minutes or until muffins test done. Cool in pan on wire rack.
**Fruit Salad** is a bingo style game where the player calls out "Fruit Salad" when he has four in a row; horizontally, vertically or diagonally.

Note: Blackout is not recommended since each game card is a variation of the same fruits.
### Fruit Salad Game Pieces - Cut squares and call out items.

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Fruit Salad
Fruit Salad

- Cherry
- Grapes
- Apple
- Pear
- Lemon
- Strawberry
- Raspberry
- Blueberries
- Orange
- Tangerine
- Pineapple
- Banana
- Melon
- Watermelon
- Apple
- Kiwi
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*Fruit Salad*
Winter Handbook
Stop the Spread of Bacteria in Your Kitchen!
Wash your hands before preparing or eating any food. Use hot, soapy water.

Be sure counter tops and utensils are clean before using them to prepare food.

After preparing food, especially raw meat, fish and poultry, wash your hands, counter tops, utensils, cutting board, and anything else that may have gotten dirty.

Sanitize or change your kitchen towels and sponges often.

Safety Tips About Fish
Fish has protein and healthy fats, but some fish contain harmful chemicals like mercury, PCBs and DDT. Young children, pregnant and breastfeeding women, and women who could become pregnant, need to limit how much fish they eat. Use these tips to eat fish safely.

- Never eat: shark, swordfish, tilefish, or king mackerel. These fish are highest in mercury.
- Eat a variety of other fish.
- Limit amounts. Eat fish only 1 or 2 times per week.
- Eat only the fillet (flesh/meat) of the fish. Throw away the head, guts, kidneys, liver, fat and skin.
- Broil, grill, bake, or steam fish on a rack. Throw away the drippings or juice.
- Choose chunk light canned tuna. It has less mercury than white or albacore canned tuna, or tuna steaks.
- If you catch fish, follow the health and fishing advisories in your area. Contact your local Public Health Department with questions.

For more information, visit FDA’s Food Safety website at www.cfsan.fda.gov

Fit WIC Corner: 10,000 Steps

How many steps do you walk each day? Maybe you have heard the guidelines about walking 10,000 steps per day. How far is 10,000 steps anyway? The average person’s stride length is approximately 2.5 feet long. That means it takes just over 2000 steps to walk one mile, and 10,000 steps is close to 5 miles.

If you are a sedentary person you may only average about 2000 to 3000 steps a day. Adding steps has many health benefits including weight control, improved blood pressure and cholesterol levels and a decrease in the risk of cancer, diabetes, osteoporosis and heart disease.

A reasonable goal for most people is to increase average daily steps each week by 500 per day until you can easily average 10,000 per day. (Example: if you currently average 3000 daily steps your week one goal is 3500 each day. Week 2 goal is 4000 each day. Continue to increase each week and you should be averaging 10,000 steps by the end of 14 weeks.)

Wearing a pedometer is an easy way to track your steps. Start by wearing a pedometer every day for a week. Put it on when you get up in the morning and wear it until bed time. Record your daily steps in a notebook. By the end of the week you will know your average daily steps. You might be surprised how many (or how few) steps you get in each day.
FOOD SAFETY

Food borne illness is when you get sick from food contaminated by harmful bacteria (germs) and molds. Some common symptoms of food borne illnesses are nausea (upset stomach), diarrhea, and vomiting. It can feel like you have a bad flu. If you ever had food poisoning, you know how terrible it feels! Now, imagine if you were a small child. Children do not have strong immune systems like adults and therefore it is harder for them to fight the infection. This is why it is especially important to protect your children from these harmful bacteria.

Have you ever seen mold on cheese or bread?

We can see some molds, however, most of the time we cannot see, smell or taste the bacteria that causes food borne illnesses!
*Throw away moldy foods such as bread, cornmeal, fruit, jam, and soft cheeses such as cottage cheese—you cannot safely remove molds from these foods.
*You can cut mold off hard cheeses such as cheddar - be sure to cut off and discard mold plus at least1/2 inch all around the moldy area.
Bacteria grows rapidly in foods left out at room temperature.

*Cold slows (but does not stop or kill) the growth of most harmful bacteria.
*So keep cold foods in the refrigerator or freezer.
*Your refrigerator should be set at 33—41 degrees Fahrenheit.
*In the refrigerator, keep raw meats, fish, and poultry on a plate and on the bottom shelf to keep their juices off other foods—bacteria can spread to other foods, this is called cross contamination.

Thaw meat, poultry, and fish in the refrigerator. If they are thawed in room temperature, bacteria will begin to grow on the warmer outside of the meat before the inside is even thawed.

**Make sure you cook your meat thoroughly to kill the existing bacteria!**

- Cook all meat, poultry and fish until their juices run clear and there is no pink in the center.

- Cook poultry until there is no red around the bones (to prevent salmonella poisoning). *NOTE: In the United States it is conservatively estimated that 70% of the chicken we buy in the grocery store is already infected with salmonella!*

- Ground meats are especially important to cook thoroughly.

- Fish should flake easily.

It is best to cook eggs until the yolk is not runny. *NOTE: No raw eggs in dressings!*
LOOKING AT STORAGE TIMES

<table>
<thead>
<tr>
<th>REFRIGERATOR</th>
<th>FREEZER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butter</td>
<td>1-2 weeks</td>
</tr>
<tr>
<td>Cottage cheese</td>
<td>5 days</td>
</tr>
<tr>
<td>Yellow cheese</td>
<td>3 - 4 weeks</td>
</tr>
<tr>
<td>Processed cheese</td>
<td>3 - 4 weeks</td>
</tr>
<tr>
<td>Eggs</td>
<td>2 - 3 weeks</td>
</tr>
<tr>
<td>Leftovers (meat)</td>
<td>3 - 4 days</td>
</tr>
<tr>
<td>Margarine</td>
<td>4 - 6 months</td>
</tr>
<tr>
<td>Chicken (raw)</td>
<td>1 - 2 days</td>
</tr>
<tr>
<td>Lunch meals</td>
<td>3 - 5 days</td>
</tr>
<tr>
<td>Fish (raw)</td>
<td>1 day</td>
</tr>
<tr>
<td>Hamburger/stew meat</td>
<td>1 - 2 days</td>
</tr>
<tr>
<td>Hot dogs</td>
<td>1 - 2 weeks</td>
</tr>
<tr>
<td>Baby formula &amp; opened jars of baby</td>
<td>24 hours</td>
</tr>
<tr>
<td>food</td>
<td></td>
</tr>
<tr>
<td>Homemade baby food</td>
<td>3 days</td>
</tr>
<tr>
<td>Breastmilk</td>
<td>3 - 4 days</td>
</tr>
</tbody>
</table>

You will know your baby is getting plenty of breastmilk in the first week when...

1. Your baby was on the breast as soon as possible after the delivery (ideally within one hour of birth).

2. Your baby is interested in feeding every 1½ to 2 hours. Babies have small stomachs and it is normal for them to be hungry often.

3. Your baby can be heard or seen swallowing.

4. Your baby seems satisfied and content after feeding.

5. Your breasts feel softer after each feeding.

6. Your baby has enough wet diapers and poops.

PREVENT BACTERIAL GROWTH IN BABY FORMULA & BABY FOOD

*Bacteria grows fast in baby formula. Never let opened cans of concentrated formula sit out at room temperature. Keep them in the refrigerator.

*You can keep mixed formula and opened jars of baby food for up to 24 hours in the refrigerator.

*Before refrigerating leftovers, screw the lids on tightly.

*Your saliva will promote bacteria growth in food.

*So, NEVER feed your baby directly from the jar if you plan to refrigerate any leftovers because the baby’s saliva will have gotten into it from the spoon.

*Take the desired amount of food out of the jar and put it into a bowl.

*Throw away anything left in the bowl.

*Always check the indented circle on the lid of baby food jars. This vacuum button should be inverted to indicate that the jar has been properly sealed. When you open the jar, the button should pop up with a suction releasing noise.

*Always check the expiration date stamped on jar lids or labels.

WASHING YOUR HANDS is the most important thing you can do to stop the spread of bacteria and prevent food borne illness.
There are several reasons why beans are important for the active lifestyles of adults and children. Beans are an excellent source of complex carbohydrates for energy, as well as protein for growth and repair of tissue. Many health organizations, including the American Heart Association, American Cancer Society and the American Diabetes Association recognize beans as a healthy and versatile way to meet nutritional guidelines because of these attributes:

- High in complex carbohydrates
- High in protein
- High in dietary fiber
- High in folate
- Low in fat, especially saturated types

**Eat Beans for Better Health**

New research suggests that eating just two to four cups of cooked dry beans every week can reduce your risk of developing many chronic diseases including heart disease, diabetes and certain types of cancer. As a bonus, beans were found to help people lose weight and maintain an appropriate caloric balance.

**Folate for Women**

Folate is important for all women of childbearing age and critical before and during the early months of pregnancy—when 50 percent of women aren't even aware they are pregnant—the US Public Health Service recommends that all women of childbearing age consume 499 micrograms (mcg) of folate each day. Folate plays an important role in proper cell development which occurs rapidly during the early stages of pregnancy. In addition, studies show that folate may help reduce the risk of certain birth defects, like spina bifida (the spinal cord is not completely encased in bone) and anencephaly (a major part of the brain never develops). Our bodies do not produce folate so it is important to get it from the foods we eat. Foods containing folate include dry beans, leafy green vegetables, fruit and fruit juices. Of all these foods, dry beans are the best source of folate. Eating a cup of cooked dry beans provides on average 264 mcg of folate.
Fit WIC Corner

Here are some fun activities to help keep your child physically active—even indoors!

<table>
<thead>
<tr>
<th>Play Activity</th>
<th>What You Need</th>
<th>What You Do</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juicy/Crunchy Bowling:</td>
<td>6 empty frozen juice cans or cereal</td>
<td>Set up empty cans or boxes similar to bowling pins in a bowling alley. Roll</td>
</tr>
<tr>
<td></td>
<td>cans. 1 small, soft ball.</td>
<td>ball and try to knock down cans/boxes. Count the number knocked down</td>
</tr>
</tbody>
</table>
| Scooper Catch:             | 2 plastic milk jugs with bottoms       | Toss ball back and forth between "catchers."
|                            | removed and rough edges taped.         |                                                                             |
|                            | 1 small, soft ball                     |                                                                             |
| Freeze Dancing:            | Radio, tape or CD and player           | Play music; when the music stops, everyone freezes in position.             |
|                            |                                        |                                                                             |
| Marching Band:             | Jars or plastic containers             | Make instruments with different amounts of dry beans in different kinds of   |
|                            | Dry beans                              | containers. March around the room in line, playing homemade instruments.     |
|                            | Spoon                                  |                                                                             |

A Juicy Story...

Most parents want what is best for their children. Many believe that juice is healthy and feel it is okay to give their infants and young children as much as they want. Juice does provide needed vitamins for children; however, too much of a good thing can actually be harmful.

**Why can drinking too much juice be harmful?**

- **Decrease in child’s appetite** Large amounts of juice will quickly fill a child’s stomach, leaving little room for other foods.
- **Poor weight gain** If a child drinks too much juice, he or she may not be eating foods that are important for growth. This may lead to poor weight gain.
- **Picky eater** Parents often say, "My child is a picky eater." The child does not eat well at mealtime, often because he or she prefers drinking large amounts of juice to eating a meal and trying new foods.
- **Tooth decay** The high natural sugar content of juice can cause tooth decay. Giving large amounts of juice in the bottle increases the risk for tooth decay. It is best to give small amounts (no more than four ounces) of juice in a cup—never in a bottle.

**What can you do?** Limit your child’s intake of juice. He or she only needs four ounces of juice to meet the vitamin C requirement. Give child size portions. Remember that your child’s stomach is much smaller than yours. What may seem like a small amount to you may be a lot for your child. Offer water instead of juice when your child is thirsty. If your child is hungry, offer a small snack like cheese and crackers and a small amount of milk.
Winter Activity-Pine Cone Bird Feeder

Your children will have lots of fun watching birds eat! This project is very easy to do.

What you need:

Pine Cone * Paper Plate * Butter Knife * Smooth Peanut Butter * Birdseed * Ribbon or Yarn

* Scissors

Directions:

Cut a long length of ribbon or yarn to hang the bird feeder. Tie the ribbon in a knot around the pine cone near the top (3 or 4 sections down). Tie a knot at the end of the ribbon. Use the knife to get a large clump of peanut butter on the paper plate. Use the knife to spread the peanut butter inside the pine cone and around the edges. Sprinkle the birdseed over the pine cone. Roll the pine cone in the birdseed that is on the plate. Hang the bird feeder on a tree and enjoy watching the birds eat!
Winter Gardening Activities for Children

The American Association of Nurserymen have come up with 7 activities to keep your children interested in gardening during the winter months. They are:

1. Windowsill Gardens. All you need is a sunny spot and a few containers of soil. Herbs are an excellent choice for windowsills and can be used to create healthy meals.

2. Peculiar Plants. Venus Flytraps are insect-eating plants. A visit to the library or an internet search is sure to provide more interesting information on the natural habitat of this type of plant.

3. Watch seeds sprout. Line a glass jar with a damp paper towel and insert several zucchini seeds between the glass and the towel. Place a lid on the jar, leave it on the kitchen counter, and check the paper every day to make sure it is still moist. Seeds should sprout in a few days. Or try bush beans instead of zucchini.

4. Kids’ gardening clubs. Take a visit to your local gardening center. You may be pleasantly surprised. Many centers host kid’s gardening clubs or workshops such as building birdhouses or planting seeds and caring for them.

5. Read a book. Books like Peter Rabbit or The Secret Garden can spark your child’s interest in gardening. Ask your local librarian for further suggestions.

6. Decorate while you wait. Let kids indulge their natural creativity by painting inexpensive terra cotta pots to use next spring. Use kid safe durable paints.

7. Get a jump on Spring. Plan a visit to your local garden center to buy seeds. Start seeds indoors to plant outside when Spring begins.
9 Piece Winter Puzzle
Cut along puzzle piece lines and have your child put the pieces back together.
9 Piece Winter Puzzle
Cut along puzzle piece lines and have your child put the pieces back together.
Spring Handbook
Volume 1
Spring Into Fitness

Homemade Toys and Physical Activity

NATION WIDE CRISIS

The percentage of overweight and obese children has more than tripled in the last 30 years. Incidence of Type 2 diabetes has increased by a factor of 10 in the past 15 years. 400,000 deaths annually are due to physical inactivity and poor diet. 25% of young people do not participate in any vigorous physical activity. The time students spend being active in PE classes continues to decrease. Young children watch up to 28 hours of television per week. Unhealthy snacks are usually consumed during TV viewing time.

Why is physical activity important for my child?

Increased physical activity has been associated with an increased life expectancy and decreased risk of cardiovascular disease. Physical activity produces overall physical, psychological and social benefits. Inactive children are likely to become inactive adults. And physical activity helps with:

- controlling weight
- reducing blood pressure
- raising HDL (“good”) cholesterol
- reducing the risk of diabetes and some kinds of cancer
- improved psychological well-being, including gaining more self-confidence and higher self-esteem

The American Academy of Pediatrics recommends NO TV until after the age of 2 years!
Homemade Toys for Young Children

Any parent today knows that the cost of toys is rising higher and higher each year. All one has to do is take a trip down any aisle of toys at any department store to see what kinds of prices store owners are asking. The more high tech the toys get the bigger the price tag is on those toys. There is no way any parent on a budget can keep up with the demand or the prices of today’s toys.

The worst part of paying such high prices is that a lot of times the children play with them once or twice and they are forgotten in the heap with all the other toys. There are ways to keep your child entertained and not drain your checkbook. Many everyday items can be used to make homemade toys for young children.

The "How" of Creating Homemade Toys and Activities

Even if you are not sure, try it. You will be surprised by the different uses for materials your child will dream up. Make sure all materials are safe, both in terms of texture and toxicity. Be aware of choking hazards. If you can easily put it through a toilet paper tube, the item should be considered a choking hazard. Keep in mind your child’s developmental capabilities. Here are some extremely brief descriptions of the early stages of development. The breakdowns are approximate; a great deal of overlap occurs between stages:

1. Infants (0-12 months)- explore the world through their mouths, therefore, toys/activities must be safe to mouth.
2. Toddlers (12 months-3 years) - “hands-on thinkers,” experimenters, preoccupied with cause and effect. Objects must be okay to touch, throw collect, dump, roll, bounce, etc. Mouthing toys is still a common form of exploration.
3. Preschoolers (3-5 years)- imaginative play. Think of toys/activities which appeal to their creativity and imagination.
Building Blocks

One of the all time favorite toys is building blocks. Children love to create buildings, forts, space ships and other imaginative creations with building blocks. These can be very pricey and not always of good quality. Use boxes, another childhood favorite, to make a set of building blocks for your child.

You can use boxes of all shapes and sizes. Shoe boxes, cereal boxes, pasta boxes, boxes that tools or other household items come in, all make great rectangular blocks. The round oatmeal boxes make great towers or space ship parts. Use boxes with windows in them for doors or windows of houses. You can include smaller boxes also for creating smaller structures. When using cereal boxes and other boxes that tend to be flimsy, stuff the box with newspaper until it is full but not bulging. Tape it shut with packaging tape or duct tape.

Puzzles

Puzzles are a lot of fun for the whole family. There are many ways to make puzzles at very little cost. One of the easiest is to buy those educational children's place mats and cut it into pieces. Make sure you draw the lines the way you want to cut it first and then cut on the lines. These puzzles store nicely in a gallon size zipper bag.

Another way to make a puzzled is to take the fronts of cereal boxes and cut them apart just like the place mats. This won't be as sturdy, but it works well and can be stored in a zipper bag.

Posters can be mounted on cardboard, covered with clear contact paper, and cut apart to make large floor puzzles. Children love floor puzzles and this is an easy way to make many of them for the price of one manufactured floor puzzle.
9 Piece Spring Puzzle
Cut along puzzle piece lines and have your child put the pieces back together.
Country Bean, Beef and Cabbage Soup

Ingredients:
- 1 lb ground lean ground beef
- 2 cans beef broth
- 1 (14.5 ounces) canned stewed tomatoes, undrained
- 1 cup chopped onions
- 4 cups shredded fine cabbage
- 1 teaspoon thyme
- 1/8 teaspoon black pepper
- 1 bay leaf
- 2 cups shredded fine cabbage
- 1 15 ounce can, drained red kidney beans
- 1 teaspoon vanilla extract
- 1/2 cup finely chopped green onions
- 1/4 cup all-purpose flour
- 2 cups milk
- 2 cans tuna (approx. 7 ounces each)
- 1 cup frozen peas and carrots, thawed
- 3 tablespoons bread crumbs
- 2 teaspoons dried parsley flakes
- 2 tablespoons melted butter

1. Spray inside of a large size dutch oven pot with non stick cooking spray; add ground beef.
2. Cook beef over medium heat until it's crumbly and no longer pink.
3. Add beef broth, tomatoes, onion, thyme, pepper and bay leaf.
4. Bring to boil over high heat; cover and simmer for about 15 minutes.
5. Add cabbage and beans, turn heat up to high and bring to a boil.
6. Cover and simmer on low heat for 20 minutes. Remove bay leaf and serve.

Healthy Banana Cookies

- 3 ripe bananas
- 1 cup dates (you can use raisins also)
- 2 cups rolled oats
- 1/3 cup oil
- 1 tsp vanilla extract

Preheat oven to 350 degrees. In large bowl, mash the banana in oats, dates, oil and vanilla. Mix well and allow to sit for 15 minutes. Drop by teaspoonfuls onto ungreased cookie sheet. Bake for 20 minutes (depending on your oven).

Tuna Noodle Casserole

Ingredients:
- 8 ounces medium egg noodles
- 1 clove garlic, minced
- 1/2 cup finely chopped green onions
- 3 tablespoons butter or margarine
- 1 1/4 cup all-purpose flour
- 2 cups milk
- 2 cans tuna (approx. 7 ounces each)
- 1 cup frozen peas and carrots, thawed
- 1/2 cup finely chopped green onions
- 3 tablespoons bread crumbs
- 2 teaspoons dried parsley flakes
- 2 tablespoons melted butter

Cook noodles in salted water; drain and set aside. Sauté onions and garlic in butter until onions are tender. Add flour; blend until smooth. Add milk and cook, stirring constantly, until thickened and smooth. Add tuna, peas and carrots, and salt and pepper to taste; stir in noodles. Transfer tuna noodle mixture to a 1 1/2 quart casserole. Mix crumbs and dried parsley with melted butter; sprinkle over top of casserole. Bake 350° for 15 to 20 minutes, or until heated through. Serves 6 to 8.
Did you know..

Grapes are actually considered berries.
There are an average of one hundred grape berries in a bunch.
Americans eat an average of eight pounds of grapes a year.
Fresh table grapes come in three colors: green, red, and blue-black.
There are more than fifty types of table grapes.
Green grapes are sometimes called white grapes.

Red Grapes
- Flame Seedless
- Red Globe
- Ruby Seedless
- Rouge
- Emperor
- Crimson Seedless

Green Grapes
- Perlette
- Sugraone
- Thompson Seedless
- Calmeria

Blue-Black Grapes
- Beauty Seedless
- Autumn Royal
- Ribier
- Fantasy Seedless
- Marroo Seedless
- Niabell
Beef & Grapes Asian Style

Ingredients:
- 12oz beef flank steak sliced
- 3 tablespoons soy sauce
- 1 clove garlic, minced
- 1 teaspoon cooking oil
- 1/2 cup sliced onion
- 1 cup halved seedless grapes
- 1/2 cup sliced sweet red pepper
- 2 tbsp chopped green onions
- 2 cups finely shredded cabbage

Directions:
Place sliced steak in bowl. Combine soy sauce, garlic, and oil in small bowl; mix well. Pour sauce over beef. Cover and shake well. Let set for 20 minutes. In a pan, grill onions and cook beef. Then add grapes, red pepper, and green onions and continue to cook for one minute. Line bottom of serving plates with cabbage and spoon hot beef mixture above it. Serves 4

Cauliflower Mashed Potato Style

This substitute for mashed potatoes is also low in carbohydrates.

Ingredients:
- 1 head of cauliflower, washed and chopped
- 1 clove of garlic
- 3 ounces of cream cheese or neufchatel cheese (1/3 less calories)
- 2 tablespoons butter
- 3 ounces of sour cream
- salt and pepper, to taste

Directions:
Boil or steam cauliflower and garlic until it is very tender. Drain; then mash with cream cheese, butter and sour cream until your desired consistency. Add salt and pepper to to taste. Serves about 4.
Grapes

**Fabulous Grape Salad**

**Ingredients:**
- 1 cup green seedless grapes
- 1 cup shredded WIC cheese
- 1 cup red seedless grapes
- 1 cup chopped lettuce
- 1 cup shredded carrots
- 1/4 cup honey
- 1/3 cup lime juice
- Dash of cayenne pepper

**Directions:**
Mix grapes, lettuce, cheese, and carrots in large bowl.
In a smaller bowl, combine honey, lime juice and cayenne pepper. Mix well.
Pour dressing over salad and toss to mix.
Serves about 6.

---

[Image of fish]

**Grape Tasting Fish!**

**Ingredients:**
- 2 fish fillets
- 1 cup halved seedless grapes
- 1/4 cup WIC white grape juice
- 1 tablespoon thinly sliced shallots
- 2 teaspoons olive oil
- 1/2 teaspoon dried thyme leaves, crushed

**Directions:**
Heat oil in frying pan and brown fish on each side. Remove fish and place in baking dish. Bake at 375 degrees for about 12 minutes. In frying pan, sauté shallots, stir in thyme and juice. Gently boil sauce for 2 minutes then add grapes and boil one minute more. Remove from heat and serve grape sauce over the fish. Serves 2.
It Is Time for Veggie Mix and Match

This game is to improve memory. Cut all squares, place on table face down and mix them around. Then make 6 rows of 4 cards each. Each player takes turns uncovering two cards. The objective is to match like pictures. When a player has a match, he keeps them. The winner is the one with the most pairs of cards at the end of the game.
Fruits and Vegetables

Does Your Child Eat at least 5 servings of Fruits and Vegetables per day?

What is a serving of fruit or vegetable for your child?
1-3 year old: 2 to 3 tablespoons of cooked or raw vegetables is a serving size.
1/4 to 1/2 small fresh fruit or 2 to 3 tablespoons canned or frozen or 1/2 cup juice.

4-5 year old: 1/3 to 1/2 cup cooked or raw vegetables is a serving size.
1/2 to 1 small fresh fruit or 1/3 to 1/2 cup canned or 3/4 cup juice.

Fruits and vegetables contain carbohydrates, vitamins A and C, and folic acid to keep eyes, skin and blood healthy. Fruits and vegetables are also thought to help us prevent many diseases. That is why we all need to eat at least "five-a-day": three servings of vegetables and two servings of fruits each day.

DID YOU KNOW...
Increasing fruits and vegetables in your diet can lower cancer risks and many other diseases.

Easy Tips for Eating At Least 5 a Day!

Start the day with fruits and vegetables. A 4-ounce glass of 100% juice, and/or a sliced banana or berries on your child’s cereal can give a delicious, low-fat, high-fiber head start.

Fruits and vegetables are portable. Pack an apple or bag of carrot sticks, raisins or dried apricots in your glove compartment, purse or diaper bag.

On the run? Keep fruits and vegetables within easy reach. Put a bowl of fruit on the counter in the kitchen. Make sure fruits and vegetables are clearly visible when you open the refrigerator. Cut up your favorite vegetables to store in re closable plastic bags. If your child sees it, he/she may be more likely to eat it.

Stock up for the week. Keep a variety of fruits and vegetables, fresh, frozen, canned and dried in your refrigerator, cupboard and freezer.

Fixing a meal in a hurry? The microwave is a quick and easy way to prepare vegetables while preserving nutrients. Pop a potato in the microwave at the end of a hectic day and top it with salsa for a quick meal. Add microwaved broccoli and corn to your zesty spud and you’ve got a colorful, tasty and nutritious meal. For dessert, serve a scoop of low-fat frozen yogurt topped with fresh berries or sliced peaches.
**Fit WIC Corner**

Encourage at least 30 minutes of physical activity a day.
Set a good example. Children of active parents are six times more likely to be active. By improving your fitness your also help your child.
Exercise to lively music or a video and your preschooler will want to join you.
Let your child help you garden. Children love playing in dirt. You won't get as much done, but maybe it will pay off when your little one becomes a teenager!
Limit television watching and playing computer games to a maximum of one or two hours a day.
Provide play equipment such as tricycles, wagons, pull toys, large rubber balls, doll carriages, and climbing toy. Play with your child. For example play tag, bag or hide-and-seek.
Make regular visits to parks or indoor play areas.

Don't carry a child who is able to walk.
Encourage outdoor play. Children enjoy playing outside or taking walks in all kinds of weather. Just make sure they are dressed appropriately.
Don't overuse the stroller. Encourage your child to walk whenever it is safe.
Consider enrolling your child in gymnastics, swimming, or dancing lessons.
Make sure your child's preschool or daycare encourages active play.

**Sneaky Joes**

*Here's a different version of Sloppy Joes that's a sneaky way to get vegetables into those reluctant eaters.*

1 cup bottled barbecue sauce
1 1/2 cups frozen mixed vegetables
1 1/2 pounds lean ground beef, chicken or turkey
1 small onion, chopped
6 whole wheat hamburger buns

1. Put barbecue sauce into a blender or food processor
2. Add mixed vegetables a little at a time and blend until smooth.
3. In a frying pan cook meat and onion over medium heat until partially done.
4. Stir in sauce mixture, cover the pan and simmer over medium heat, stirring frequently until meat is thoroughly done.
5. While meat simmers, butter the hamburger buns and toast them lightly under the broiler.
6. Spoon meat mixture into buns and serve.

**READING TO YOUR CHILD**

Reading to your children helps them not only learn to read, it helps them to learn to speak, improves their listening skills, expands their vocabulary and improves their memory. Here are some tips that may make reading more enjoyable.

*Find a cozy spot and limit distractions. Try to have a special time for reading—such as before bed or after dinner.*

*Read with expression. Use your voice to make the story come alive.*

*Preschoolers thrive on predictability. Reread favorite stories. Repeated phrases are especially popular.*

*Adapt a story to your needs. Shorten a long passage if your child is having difficulty paying attention.*

*Let your child "read" to you. Allow them to tell you a story based on the pictures.*

*If there are repeated sayings, let your child join you on these parts.*

*Point at each word as you read.*
But Mom, I Don’t Like Vegetables!
Add grated, chopped or pureed vegetables to soups, muffins, breads, casseroles, spaghetti sauce, etc. Serve cooked vegetables with a little cheese sauce, butter or catsup. Try raw or steamed vegetables with dips. Try Asian style stir-fried vegetables. Don’t give up-keep offering vegetables and your child will develop a taste for them. In the meantime, offer vitamin-rich fruits, such as cantaloupe, nectarines, peaches, plums, apricots and berries.

Baby Talk for Babies Birth to 1 year

Babies love hearing your voice. When you answer your child’s sounds with sounds of your own, she learns what what she “says” has meaning and is important to you.

What to do:
Talk to your baby often. Answer her coos, gurgles, and smiles. Talk, touch, and smile back. Get her to look at you. Play simple talking and touching games with your baby. Ask, “Where’s your nose?” Then touch her nose and say playfully, “There’s your nose!” Do this several times, then switch to an ear or knee or tummy. Stop when she (or you) grows tired of the game. Change the game by touching the nose or ear and repeating the word for it several times. Do this with objects, too. When she hears you name something over and over again, your child begins to connect the sound with what it means.

Do things that interest your baby. Vary your tone of voice, make funny faces, sing lullabies, and recite simple nursery rhymes. Play “peek-a-boo” and “pat-a-cake” with her.

Read to your baby for short periods several times a day. As you read, point out things in the pictures. Name them as you point to them. Give your baby sturdy books to look at, touch, and hold. Allow him to peek through the holes or lift the flaps to discover surprises.

What you need:
Cardboard or cloth books with large, simple pictures of things with which babies are familiar or lift-the-flap, touch-and-feel, or peek-through play books.

Most infants are ready to start weaning from the bottle at about 10 to 12 months and should be completely weaned by 12 to 15 months of age. Continuing beyond that age can result in a poor appetite because too many calories are being taken in fluid form. Try these techniques to help reduce your toddler’s dependence on the bottle.

- Initially, restrict the bottles to mealtimes and offer it only after the solid foods have been eaten.
- Next, for at least one meal a day put milk in a cup instead of a bottle.
- Don’t allow a toddler to carry around a bottle of milk, juice or soda.
- Serve juice only in a cup, not a bottle.
- Don’t replace bottle nipples and pacifiers as they wear out.
- Try to find a bedtime routine such as reading a book or singing and snuggling rather than depending on the bottle to lull a child to sleep.
- Don’t ever put a child to bed with a bottle. Falling asleep with the bottle can cause dental cavities.
- Try weaning children older than two cold turkey. Plan a growing up party with your child. Buy a special new cup to drink from. Invite a friend or two to come celebrate or have a party with the family. Your child can help pack up the bottles and pacifiers to throw away or keep for another baby.

Healthy Eating and Family Life: These days many families are just too busy to eat together regularly. How about your family, do you eat together? What would get your family to eat together more often? Here are some benefits others have found in eating together:

- Improving Nutrition - “Our family meals at home always include a vegetable. When my daughter sees me eating vegetables, she does too!”
- Learning Cooking Skills - “My 4-year old loves to help cook. He washed the fruit for every meal, and is even helping set the table.”
- Saving Money - “We don’t eat out as much anymore, and we’ve started saving money!”
- Building Stronger Family Ties - “My kids love it when it’s their turn to talk during dinner. It gives us time to find out what’s been going on with each other!”

**FRUIT COCKTAIL CAKE**

Quick and easy, this moist cake is delicious enough to serve to guests.

- 1 egg
- 1 small can (15 ounces) lightly sweetened fruit cocktail, undrained
- 1/2 cup sugar
- 1 cup flour
- 1 teaspoon baking soda
- 1 tablespoon brown sugar

1. Set oven to 325°.
2. Lightly grease 9 inch round cake pan
3. In medium a medium bowl, beat egg lightly with a fork.
4. Stir in fruit cocktail and then sugar.
5. Sift flour and baking soda into fruit cocktail mixture and stir until well mixed.
6. Pour mixture into cake pan.
7. Lightly sprinkle the top with brown sugar.
8. Bake for 40-45 minutes or until toothpick inserted in center comes clean.
**BANANA BREAD**

Bake this bread after supper and eat it the next morning with a glass of skim milk and a piece of fruit for a quick and healthy breakfast. Serves 8.

**Tools:**
- large mixing bowl
- long-handled wooden spoon
- measuring spoons
- butter knife
- 8-inch round pan
- wire rack
- medium mixing bowl
- small, sharp knife
- measuring cups
- cutting board
- electric mixer or food processor
- toothpick
- timer

**Ingredients:**
- Vegetable oil spray
- 3 medium-sized, brown-speckled bananas (each about 6 inches long)
- 2 eggs whites
- 3/4 cup all-purpose flour
- 3/4 cup whole wheat flour
- 3 teaspoons baking powder
- 1/2 teaspoon baking soda
- 1/4 teaspoon nutmeg
- 1/2 cup honey
- 1/2 cup milk
- 1 1/2 teaspoons vanilla extract
- 2 tablespoons vegetable oil

**Directions:**
1. Preheat the oven to 400 degrees and lightly grease a round pan by spraying it with vegetable oil spray.
2. Peel the bananas and slice them into large chunks. Put the banana chunks into a large bowl. Add the egg whites. Using an electric mixer or food processor, beat the bananas and egg whites until the mixture is smooth and a light yellow (about 4 minutes).
3. In a medium bowl, combine the flours, baking powder, baking soda, and nutmeg. Stir with a wooden spoon to mix them.
4. Add the flour mixture, honey, milk, vanilla, and oil to the large bowl with the banana mixture. Beat with the electric mixer on medium speed or in the food processor until it is smooth.
5. Pour or scoop the batter into the prepared pan.
6. Put on your oven mitts and open the oven door. Place the pan in the middle of the center rack.
7. Set the timer and bake the bread for 40 minutes or until a wooden toothpick inserted into the center comes out clean.
8. When the bread is done, put your oven mitts back on and place the hot pan on a wire rack to cool about 30 minutes. Remove the bread from the pan by sliding a butter knife between the bread and the pan. Then turn the

**FRUIT SMOOTHIES**

Directions:
1. Place the strawberries, vanilla, yogurt, and ice in a blender or food processor. Blend until the mixture looks frothy and the ice cubes have been crushed, about 4 minutes.
2. Stir with a wooden spoon to check that all of the strawberries and ice cubes are blended. Pour into tall glasses.

**Strawberry Smoothie**

**Ingredients:**
- 1 cup frozen strawberries
- 1/2 teaspoon vanilla extract
- 1 cup nonfat or low-fat vanilla yogurt
- 1 cup ice cubes (optional)

**Banana Smoothie**

**Ingredients:**
- 1 medium-size banana
- 1 teaspoon vanilla extract

Directions:
1. Peel the banana and cut into chunks.
2. Place the banana, milk, vanilla, honey, and ice in a blender or food processor and blend until smooth, about 3 minutes. Turn the blender or processor off. Stir with a wooden spoon to make sure the fruit is completely blended. Pour into tall glasses and serve.
Funominoes is similar to dominoes for 2-4 players. Turn all game pieces face down. Each player draws five. The first player lays down a game piece face up. The next player must match the picture on the game piece with one of the ends of the game piece played. When playing a double, turn the game piece sideways. When a player cannot play, he draws until he can or until all game pieces are gone, and then he must pass a turn and the game continues. The game ends when one player is out of game pieces. He or she is the winner!
REFERENCES


