


ACTION GUIDE

FOR CHILD CARE NUTRITION AND PHYSICAL ACTIVITY POLICIES

Best Practices for Creating a Healthy Child Care Environment

Connecticut State Department of Education




CONNECTICUT STATE DEPARTMENT OF EDUCATION

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Bureau of Health/Nutrition, Family Services and Adult Education

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PREFACE

The *Action Guide for Child Care Nutrition and Physical Activity Policies* was developed through a 2007 Team Nutrition grant from the U.S. Department of Agriculture (USDA) Food and Nutrition Service to the Connecticut State Department of Education (CSDE). This project has been partially funded with federal funds from the USDA Food and Nutrition Service. The content of this publication does not necessarily reflect the views or policies of the USDA, nor does mention of trade names, commercial products or organizations imply endorsement by the U.S. government.

The policies in this guide are based on requirements, standards and best practice recommendations from the following sources:

- *A Guide to Early Childhood Program Development,* Connecticut State Department of Education, 2007.
- *Active Start: A Statement of Physical Activity Guidelines for Children Birth to Age 5,* National Association for Sport and Physical Education, 2009.
- *Best Practices for Healthy Eating: A Guide to Help Children Grow Up Healthy,* The Nemours Foundation, 2008.
- *Best Practices for Physical Activity: A Guide to Help Children Grow Up Healthy,* The Nemours Foundation, 2009.
- *Caring for Our Children: National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care,* 2nd Edition, American Academy of Pediatrics, American Public Health Association and National Resource Center for Health and Safety in Child Care and Early Education, 2002.
- *Child and Adult Care Food Program (CACFP) Regulations,* Code of Federal Regulations, title 7, section 226, U.S. Department of Agriculture, 2010.
- *Connecticut Nutrition Standards for Food in Schools,* Connecticut State Department of Education, 2009.
- *Connecticut Preschool Curriculum Framework*, Connecticut State Department of Education, 2006.
- *Dietary Guidelines for Americans,* U.S. Department of Agriculture and U.S. Department of Health and Human Services, 2005.
- *Feeding Infants: A Guide for Use in the Child Nutrition Programs*, U.S. Department of Agriculture, 2001.
- *Head Start Performance Standards and Other Regulations,* Code of Federal Regulations, title 45 section 1304.23 (Child Nutrition), U.S. Department of Health and Human Services, 2008.
- *Healthy and Balanced Living Curriculum Framework,* Connecticut State Department of Education, 2006.
- *NAP SACC Best Practice Recommendations for Child Care Facilities,* Center for Health Promotion and Disease Prevention, The University of North Carolina at Chapel Hill, May 2007.
- *Nutrition Policies and Guidance for the Child and Adult Care Food Program,* Connecticut State Department of Education, 2009.
- *Physical Activity Guidelines for Americans*, U.S. Department of Health and Human Services, 2008.
- *Position of the American Dietetic Association: Benchmarks for Nutrition Programs in Child Care Settings,* American Dietetic Association, 2005.
- *Statutes and Regulations for Licensing Child Day Care Centers and Group Day Care Homes,* Connecticut Department of Public Health, 2009.
- *Statutes and Regulations for Licensing Family Day Care Homes,* Connecticut Department of Public Health, 2009.

The contents of the action guide are subject to change, based on new science, public health research and national health recommendations. The most recent version of the action guide is available on the CSDE Web site at http://www.sde.ct.gov/sde/cwp/view.asp?a=2678&Q=322562.

For more information on the CSDE's *Action Guide for Child Care Nutrition and Physical Activity Policies,* contact:

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- Connecticut After School Network
- Connecticut Association for the Education of Young Children (CTAEYC)
- Connecticut Association of Directors of Health (CADH)
- Connecticut Association for Health, Physical Education, Recreation and Dance (CTAHPERD)
- Connecticut Chapter of the American Academy of Pediatrics
- Connecticut Cancer Partnership
- Connecticut Charts-A-Course
- Connecticut Child and Adult Care Food Program (CACFP)
- Connecticut Child Day Care Council
- Connecticut Commission on Children
- Connecticut Coordinated School Health
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- Connecticut Early Childhood Alliance
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ABBREVIATIONS AND ACRONYMS

AAP	American Academy of Pediatrics
ADA	American Dietetic Association
APRN	advanced practice registered nurse
CACFP	Child and Adult Care Food Program
CCCNS	Connecticut Child Care Nutrition Standards
CDC	Centers for Disease Control and Prevention
CFR	*Code of Federal Regulations*
CGS	Connecticut General Statutes
CNP	Child Nutrition Programs
CSDE	Connecticut State Department of Education
CSRPPES	Connecticut School Readiness Preschool Program Evaluation System
DRI	Dietary Reference Intake
DV	daily value
ECERS	Early Childhood Environmental Rating Scale
FDA	Food and Drug Administration
FERPA	Family Educational Rights and Privacy Act
FNS	Food and Nutrition Service, U.S. Department of Agriculture
HDL	high-density lipoprotein
IDEA	Individuals with Disabilities Education Act
IEP	Individualized Education Program
IOM	Institute of Medicine, National Academy of Sciences
LDL	low-density lipoprotein
NAEYC	National Association for the Education of Young Children
NAFCC	National Association for Family Child Care
NASPE	National Association for Sport and Physical Education
QFO	qualified food operator
RD	registered dietitian
RDA	Recommended Dietary Allowance
SNAP	Supplemental Nutrition Assistance Program, formerly Food Stamps
USDA	United States Department of Agriculture
WIC	Special Supplemental Nutrition Program for Women, Infants and Children

1 — HOW TO USE THIS GUIDE

The *Action Guide for Child Care Nutrition and Physical Activity Policies* addresses comprehensive nutrition and physical activity policies to create the healthiest possible environment for infants and children in child care settings. It is intended to help local and community child care, early education and afterschool programs establish and implement policies and practices that encourage healthy lifestyles in children. The action guide includes best practices for promoting healthy eating and physical activity based on current science, public health research, and national recommendations and standards.

The action guide can be used in a variety of settings, including Child and Adult Care Food Program (CACFP) facilities (child care centers, family day care homes, at-risk afterschool centers and emergency shelters); Head Start centers; School Readiness programs; child care programs; early care and education programs; licensed centers; school-based preschool programs; and afterschool programs. It can also be used by sponsoring agencies, community organizations, local early childhood coordinating councils, municipalities and other groups interested in improving local nutrition and physical activity practices. For more information, see section 2.

The Connecticut State Department of Education (CSDE) recommends the following strategies to help child care programs use the action guide effectively.

- **Understand Program Requirements:** This guide includes best practice policy recommendations that often exceed federal or state requirements (e.g., CACFP and Head Start regulations, School Readiness legislation, and state licensing regulations for child care centers and family day care homes) and recommendations or accreditation standards from national organizations, e.g., the National Association for the Education of Young Children (NAEYC) and the National Association for Family Child Care (NAFCC).

  At a minimum, all CACFP facilities must meet the requirements specified by USDA regulations. CACFP facilities must also meet other applicable federal, state and local requirements. Accredited programs must comply with the standards of their accrediting organization. For more information, see *Step 2 — Identify Local Policy Development Process* in section 3.

  The CSDE's *Nutrition Policies and Guidance for the Child and Adult Care Food Program* describes the CACFP requirements. It includes comprehensive information on a variety of menu planning topics, including CACFP meal pattern requirements, avoiding common menu problems, nutrition guidance, feeding infants, and accommodating children with special dietary needs. *Nutrition Policies and Guidance for the Child and Adult Care Food Program* is available on the CSDE's Web site at http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326.

- **Understand Policy Development:** Before policy writing can begin, the child care program should understand why policy is important and the steps involved in developing policy. Sections 2 and 3 of the action guide assist child care programs in understanding the purpose and steps for policy development. These sections also identify key resources to assist in developing policies.

Policies can be developed by an individual site or a community-level organization that works with multiple child care programs. For simplicity, the term "child care program" is used throughout this document to denote all programs that could be involved in developing nutrition and physical activity policies, including:

- CACFP participants (child care centers, family day care homes, at-risk afterschool centers and emergency shelters);
- local and community-level early care and education programs;
- afterschool programs;
- organizations and agencies, e.g., sponsoring agencies, community organizations, coordinating councils and municipalities; and
- other interested groups.

- **Review Policy Components:** Sections 4 through 9 of the action guide address the six policy components for creating a healthy child care environment. These include:
    - Nutrition Standards
    - Eating Environment
    - Nutrition Education
    - Physical Activity
    - Communication and Promotion
    - Evaluation

The six policy component sections include recommendations, not requirements, for policy language. Note that some policy language is required due to federal or state regulations (e.g., CACFP, Head Start and state licensing) or accrediting requirements (e.g., NAEYC and NAFCC).

Each policy component section contains policy recommendations, rationale, implementation strategies and resources. These sections do not need to be read all at once or in order. The child care program can start with any of the six policy component sections that are most relevant, based on local needs and existing policies and practices. For more information, see *Summary of Policy Components and Areas* in this section.

- **Understand Policy Terms:** Having a common understanding of policy terms is important for staff members involved in the policy development process. Consult the Glossary for definitions and additional information.

    Note: Throughout this document, *"infants"* means children from birth through 11 months and *"children"* means ages 1 and older, including toddlers, preschoolers and school-age children. These definitions are based on the age groups defined in the CACFP meal patterns for infants and children. The words *"parent(s)"* and *"family(ies)"* are used in the broadest sense to mean those adults with primary responsibility for children. The CSDE prefers the use of "family" to "parent" because not all responsible agents are parents, but most are family, either by relationship or function.

- **Use Applicable Recommendations and Strategies:** Due to Connecticut's diverse child care settings, the action guide provides general policy recommendations for child care centers that can be adapted for other programs. Most policy recommendations in this guide are applicable to all child care settings, including centers, school-based preschool programs, afterschool programs, family day care homes and emergency shelters participating in the CACFP. For example, the policy recommendations for nutrition standards, meal schedules, healthy eating practices and screen time limits are the same for all children, regardless of the type of child care setting. However, some recommendations may not apply to all programs. If the policy language is not applicable to a specific child care setting, it can be eliminated. For example, child care programs that do not serve infants can disregard the policy recommendations for infants, and child care programs that do not conduct fundraisers can disregard the policy recommendations for fundraisers.

    Policy recommendations can be adapted to meet the local needs of different child care settings. For example, the policy recommendation for a health advisory team is not applicable to family day care homes. However, a family day care home might choose to include alternate language about consulting with appropriate organizations, such as their sponsoring organization, provider organizations, community groups or state health and education agencies. Additionally, an emergency shelter may not provide a formal nutrition education program, but its policy might address the provision of informal nutrition activities, as appropriate.

    Some of the suggested policy implementation strategies may not be appropriate for all child care programs, depending on the type of program and ages of children served, e.g., infants, preschool or school age. Some implementation strategies are appropriate only for younger or older children, while others are

suitable for all ages. The child care program can select implementation strategies as appropriate, based on local needs.

- **Review Additional Resources:** This guide identifies key resources for each policy area. Additional resource categories are listed in section 10 and include links to the relevant sections of the CSDE's regularly updated online resource lists, *Healthy School Environment Resources* and *Nutrition-Related Resources*. The appendices include the CACFP meal patterns, the Connecticut Child Care Nutrition Standards, guidance on reading food labels, suggestions for healthy celebrations, and national physical activity guidelines for infants and children.
- **Review Sample Policies:** Reviewing sample policies can be helpful in identifying potential language and formats. It is important to ensure that the policy language is based on current science and national health recommendations and is appropriate to the facility. For a collection of CSDE sample policy templates, see http://www.sde.ct.gov/sde/cwp/view.asp?a=2678&Q=322562.
- **Check for Updates:** The contents of this guide are subject to change, based on new science, public health research and national health recommendations. The CSDE will update the online version of the action guide as needed. The most current version is available on the CSDE's Web site at http://www.sde.ct.gov/sde/cwp/view.asp?a=2678&Q=322562.

GETTING STARTED

The policy development process can seem overwhelming, especially when staffing and resources are limited. However, it is important to recognize that all child care programs can take immediate action by writing simple policy statements that improve their nutrition and physical activity practices. These policy statements can have a big impact, even while the child care program is working toward developing more comprehensive policies.

Take a look at the child care program's current policies and practices and consider what changes might be made to:

- offer healthy foods and beverages;
- create a positive mealtime environment;
- increase physical activity and active play;
- limit screen time; and
- teach children, families and staff members about healthy eating and physical activity.

SMART STEPS

The Smart Steps strategies highlight actions that will improve the child care program's nutrition and physical activity practices.

Many changes can be made without any cost or much effort, such as modeling healthy behaviors, eliminating food rewards, increasing outdoor play and limiting screen time.

Start small. Review the policy areas in *Summary of Policy Components and Areas* (see next page). Identify one or two things that can be done right now, for example, including more fruits and vegetables on snack menus, eliminating food rewards or adding more active play in the daily schedule. See the Smart Steps strategies throughout the guide to help get started.

Enlist staff members to help with different areas, as appropriate. For example, the head teacher might take the lead on identifying strategies to incorporate more physical activity throughout the curriculum. The food service director could identify cost-effective seasonal fruits and vegetables for snack menus. The registered dietitian or health consultant could identify nutrition handouts for families. The educational consultant could identify appropriate strategies to promote desired behavior, instead of food rewards.

For more detailed information on the policy development process, see section 3.

SUMMARY OF POLICY COMPONENTS AND AREAS

This guide includes detailed information on the steps, strategies and resources for developing and implementing child care policies and practices to promote healthy eating and physical activity. It addresses six policy components and related policy areas for creating a healthy child care environment. Each policy area includes policy recommendations, rationale, implementation strategies and resources. The CSDE encourages child care programs to start with the policy components most relevant to local needs.

Child care programs may choose to adapt the policy recommendations to meet local needs and priorities. (Note that some policy language is required due to federal or state regulations or accrediting requirements). When developing nutrition and physical activity policies, child care programs will need to take into account their unique circumstances, challenges, opportunities and available resources. Policies should meet local needs and be adapted, as appropriate, to the health concerns, food preferences and dietary practices of local cultures and customs.

Component 1 – Nutrition Standards

CACFP Meals and Snacks
- Menu Planning
- Nutrition Guidelines for Children
- Nutrition Guidelines for Infants
- Special Dietary Needs

Other Foods and Beverages
- Parent-Provided Meals and Snacks
- Celebrations
- Functions, Events and Meetings
- Fundraising
- Access to Drinking Water

Component 2 – Eating Environment

- Meal Schedules
- Pleasant and Healthy Eating Environment (Physical, Social and Emotional)
- Modeling Healthy Behaviors
- Food Rewards and Punishments
- Food Service Personnel Qualifications and Training
- Food Safety
- Staff Wellness

Component 3 – Nutrition Education

- Standards-Based Nutrition Education
- Appropriateness of Nutrition Materials
- Connecting with Planned Learning Experiences
- Nutrition Promotion
- Professional Development

Component 4 – Physical Activity

- Daily Physical Activity
- Play Space and Equipment
- Connecting with Planned Learning Experiences
- Standards-Based Physical Education
- Screen Time
- Physical Activity and Punishment

Component 5 – Communication and Promotion

- Health Advisory Team
- Consistent Health Messages
- Promoting Healthy Foods
- Engaging Families
- Partnering with Community Organizations

Component 6 – Evaluation

- Monitoring
- Policy Review

2 — INTRODUCTION

The Connecticut State Department of Education (CSDE) developed the *Action Guide for Child Care Nutrition and Physical Activity Policies* to help child care programs and communities encourage healthy lifestyles in children by developing and implementing comprehensive nutrition and physical activity policies. The goal of these policies is to create a child care environment that consistently supports children's health and learning by:

- providing clear and consistent messages that explain and reinforce healthy eating and physical activity habits;
- helping children learn to make healthy lifestyle choices;
- providing developmentally appropriate and culturally relevant nutrition education;
- providing quality physical education and daily opportunities for developmentally appropriate physical activity; and
- supporting and engaging families in promoting healthy habits.

This action guide is intended for child care, early education and afterschool programs, including those participating in the U.S. Department of Agriculture (USDA) Child and Adult Care Food Program (CACFP). The CACFP serves children from birth through age 12 in child care centers and family day care homes; students ages 18 and younger in at-risk afterschool care centers; and in emergency shelters, residents up to 18 years old and children of any age who have disabilities. Centers participating in the CACFP include child care and school-based programs, early care and education programs, Head Start centers, School Readiness programs and at-risk afterschool care centers.

As noted in section 1, the action guide can be used in a variety of child care settings. It can also be used by sponsoring agencies, community organizations, local early childhood coordinating councils, municipalities and other groups interested in improving local nutrition and physical activity practices.

The CACFP helps child care programs to implement best practices for healthy meals and snacks. Children who receive CACFP meals and snacks eat healthier food than children who bring meals and snacks from home.[1, 2] For more information on the benefits of and requirements for participating in the CACFP, contact the CSDE at 860-807-2050.

The CSDE strongly encourages all Connecticut child care programs, including those that do not participate in the CACFP, to develop nutrition and physical activity policies based on the action guide. The action guide includes best practices for promoting healthy eating and physical activity for infants (birth through 11 months) and children (ages 1 and older) in the child care setting. These policy guidelines are based on current science, public health research, and national health recommendations and standards that are applicable to all children. They are supported by 45 health and education organizations in Connecticut (see *Acknowledgments*). Following the policy recommendations in the action guide will help all Connecticut child care programs implement best practices for creating a healthy child care environment.

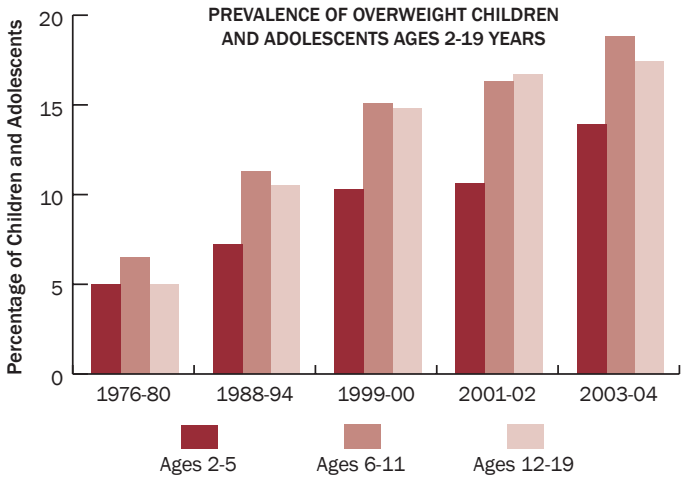
RATIONALE FOR POLICY DEVELOPMENT

Health Affects Academic Achievement

Research over the past decade has consistently concluded that children who eat well and are physically active learn better. Conversely, poorly nourished, overweight, sedentary or hungry children tend to have weaker academic performance and score lower on standardized achievement tests.[3-9] Participation in breakfast programs is linked with increased academic test scores, improved daily attendance, better class participation and reduced tardiness.[10, 11] Numerous studies have found that regular physical activity supports better learning and decreasing physical education may undermine the goal of better academic performance.[12,13] Children's fitness levels have been correlated with academic achievement, including improved math, reading and writing scores.[14-18]

Children's Nutrition and Physical Activity Behaviors Are Poor

Many children do not eat well or get enough physical activity. Currently, 17 percent of children and adolescents ages 2 to 19 are overweight and 1 in 3 children are overweight or obese.[19] Between 1980 and 2004, obesity tripled among children and adolescents.[20] Poor eating habits that contribute to health problems tend to be established early in life, and unhealthy habits are usually maintained as children age. Obese children have increased risk for diseases in adulthood, such as diabetes and heart disease, and they often become obese adults.[22, 23]



Source: Centers for Disease Control and Prevention, National Center for Health Statistics, 2006.

Childhood obesity disproportionately affects low-income and minority children. In 2008, almost 15 percent of low-income preschoolers were obese.[21] The prevalence was highest among American Indian or Alaska Native (21 percent) and Hispanic (19 percent) children, and lowest among white (13 percent), Asian or Pacific Islander (12 percent) and black (12 percent) preschool children.

Poor eating habits are not limited to children who are overweight. Data from the USDA Healthy Eating Index indicate that children's diets tend to be inadequate in fruits (particularly whole fruits) and vegetables (particularly dark green and orange vegetables and legumes), whole grains and calcium-rich foods, while they are too high in sodium, saturated fat and added sugars.[24] Snacking has increased significantly from 1977 to 2006, with children ages 2 to 18 consuming more than 27 percent of their calories from snacks.[25] The largest increases are from salty snacks (e.g., crackers, chips, popcorn and pretzels) and candy, while desserts (e.g., cakes, cookies, pies, bars, ice cream and gelatin) and sweetened beverages remain the major sources of calories from snacks.

National guidelines for children's physical activity include at least 60 minutes of daily physical activity.[26, 27] Recommendations for preschoolers include at least another 60 minutes of unstructured daily physical activity.[28] Yet, most children are not meeting these recommendations and research shows that physical activity declines

as children get older. A recent study found that children's activity levels begin to decline between ages 3 to 5.[29] By the time students are in high school, 65 percent do not meet daily physical activity recommendations.[30]

In the 2007-08 school year, 64 percent of Connecticut's students in Grades 4, 6, 8 and 10 could not pass all four components of a health-related physical fitness assessment.[31] The poorest performances were seen in the mile run, which indicates cardiovascular endurance; only 50 percent of students were able to meet the health standard.

Policies Make a Difference

Effective policies can improve children's health. The day-to-day practices of child care programs play a key role in helping children develop healthy eating and physical activity habits.

Child care programs have many opportunities to improve children's healthy eating and physical activity behaviors each day. Most infants and children in the U.S. spend a significant amount of time in child care. Sixty percent of infants and children up to age 5 spend an average of 29 hours per week in a child care setting. More than half of children ages 5 to 14 also spend time in a child care setting.[32]

Effective policies create an environment that supports healthy behaviors, encourages learning and eliminates practices that are counterproductive to children's health, such as food rewards or insufficient physical activity. Strong policies provide clear standards for staff members and families on implementing consistent healthy practices throughout the child care environment, such as:

- providing developmentally appropriate and standards-based nutrition education;
- providing quality physical education and daily opportunities for developmentally appropriate physical activity;
- providing healthy foods throughout the child care program, e.g., meals, snacks, celebrations and other events on site; and
- supporting and engaging families in promoting healthy habits.

Effective policies can help child care programs play a critical role in reducing childhood obesity. Child care programs can promote healthy weights for the children in their care by creating an environment that encourages healthy eating, promotes physical activity and decreases sedentary behavior. *The Surgeon General's Vision for a Healthy and Fit Nation* indicates that child care programs can be successful in these efforts by implementing effective approaches to promoting physical activity and good nutrition, and establishing and communicating policies, procedures and practices that support these approaches in ways that respect local communities and cultures.[33]

Strong policies can create a healthy environment that changes children's eating and physical activity behaviors.

Policies benefit the child care program as well as children. They can help to:

- identify the child care program's plan for quality nutrition and physical activity programs;
- document applicable federal and state requirements and accreditation standards;
- provide clear guidelines for staff members and families;
- standardize consistent practices between classrooms and among all staff members;
- communicate the child care program's benefits to potential families;
- provide a basis to evaluate program activities and staff members;
- demonstrate the child care program's commitment to children's health and well-being;
- educate families regarding the child care program's nutrition and physical activity practices; and
- ensure compliance with best practices based on current science, public health research and national health recommendations.

Developing policies provides a unique opportunity for child care staff members to collaborate within the program and local community. This collaboration can create an environment that optimizes children's health, development and academic achievement, and reduces barriers to learning.

3 — EIGHT STEPS FOR CREATING LOCAL POLICY

The policy development process is most effective when a team with appropriate representation from the child care program and community identifies best practices based on local needs. The steps outlined below are based on recommendations from the National Association of State Boards of Education, the U.S. Department of Agriculture, and the Centers for Disease Control and Prevention.[34-36] Following these steps can help child care programs be successful in developing effective nutrition and physical activity policies.

STEP 1 — IDENTIFY POLICY DEVELOPMENT TEAM

A program health advisory team helps with successful policy development. This team can be developed at either the local or community level, based on the child care program's needs and resources. The process may involve developing a new team or enhancing an existing team, such as the School Readiness Council, Early Learning Council, Early Childhood Council, *William Caspar Graustein Memorial Fund* Discovery collaborative group, Head Start Health Advisory Committee, After School Quality Improvement Team and, for school-based centers, the school health advisory team or school wellness team.

The CSDE recognizes that not all child care programs will have the capacity or resources to assemble a health advisory team as described in this section. The CSDE encourages these programs to move forward with policy development nonetheless, soliciting input from parents and staff members as needed.

The health advisory team can serve many purposes, such as:

- developing policy language;
- developing guidance to clarify, support and promote policy implementation;
- monitoring implementation;
- evaluating progress; and
- revising policies as necessary.

Ideally, the team consists of individuals representing the child care program, families and key community stakeholders. Examples of team members include governing board members, program administrators, parents, teachers, food service personnel, program consultants (e.g., registered dietitian consultant, health consultant, education consultant and dental hygienist consultant) and community members. The team can include other members as appropriate to local needs, such as:

- sponsoring agencies and professional organizations, e.g., CACFP center and family day care home sponsors, Head Start Health Advisory Committee, School Readiness councils, State-Funded Directors Forum, and child care organizations and associations for centers and family day care providers, e.g., NAEYC and NAFCC;

- health care providers, e.g., pediatricians, dietitians, dentists and representatives of nonprofit health organizations, e.g., American Cancer Society, American Diabetes Association and American Heart Association;
- community groups, e.g., YMCA, YWCA, Boy Scouts, Girl Scouts, Boys and Girls Clubs, faith-based groups, local early care and education councils, municipalities, local elected officials and community-based organizations that provide services to numerous ethnic groups;
- school groups, e.g., school wellness team, Family Resource Centers, health and physical education teachers and health services staff members;
- physical activity groups, e.g., town park and recreation programs, youth sports leagues and commercial fitness centers;
- university departments and other government agencies involved in nutrition and physical activity, e.g., local cooperative extension service;
- hospitals and public health representatives, e.g., local health department or health district;
- social service agencies, e.g., local United Way, local Youth and Family Services office; and
- local civic organizations, e.g., Kiwanis, Lions and Rotary Club.

Other considerations for the health advisory team include diversity, leadership and collaboration. The child care program should consider the professional diversity of the team and include ethnic, cultural and demographic representation that mirrors the child care community. A team leader or coordinator should be identified. This person plays a critical leadership role in coordinating the activities of the health advisory team, so it is important to have someone who is qualified, dedicated and can commit the necessary time. The health advisory team should collaborate with any existing efforts under way in the child care program or local community. School-based centers can coordinate with the district's local school wellness policy team. For more information, see *Health Advisory Team* in section 8.

For additional resources to assist child care programs with establishing a new team or building on existing teams and partnerships, see *Health Advisory Team* in section 10.

STEP 2 — IDENTIFY LOCAL POLICY DEVELOPMENT PROCESS

Before the health advisory team can start to develop policies, team members must understand their local child care program's process for policy development and adoption. The team should find out:

- who in the child care program, governing body or coordinating organization needs to be involved or kept informed;
- what format should be used for the document;
- who needs to review and approve drafts; and
- the typical timeline for policy review and approval.

If the health advisory team is not familiar with the child care program's procedures, the program administrator's office can provide specific information on the process. Health advisory team members must also understand what is needed for compliance with all local (e.g., local health department and board of education), state (e.g., School Readiness) and federal (e.g., CACFP and Head Start) requirements, as well as national accreditation standards (e.g., NAEYC and NAFCC). The health advisory team should identify and review federal and state laws and policies, and the child care program's current nutrition and physical activity policies.

In some cases, state and local laws and policies are more stringent than federal laws. At a minimum, the child care program's nutrition and physical activity policies must comply with their funding agency's requirements and all applicable federal, state and local requirements. Accredited child care programs must also comply with the standards of their accrediting organization. Federal and state laws and accrediting standards that should be considered include those designated below, as appropriate to each child care program.

- *Child and Adult Care Food Program Requirements and Operational Memoranda:* http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=321576
- *Connecticut General Statutes on School Foods and Beverages:** http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=320754#Statutes
- *Early Childhood Environmental Rating Scale (ECERS):* http://www.fpg.unc.edu/~ECERS/
- *Head Start Program Performance Standards Regulations 45 CFR 1304:* http://www.acf.hhs.gov/programs/ohs/legislation/
- *National Association for Family Child Care Quality Standards for NAFCC Accreditation:* http://nafcc.org/accreditation/pdfs/NAFCC%20Quality%20Standards.pdf
- *National Association for the Education of Young Children (NAEYC) Early Childhood Program Standards and Accreditation Criteria:* http://www.naeyc.org/academy/primary/standardsintro
- *School Readiness Program Requirements — Connecticut General Statutes section 10-16q:* http://www.cga.ct.gov/2007/pub/Chap164.htm#Sec10-16q.htm
- *School Readiness Program Requirements — General Policy, Program Operations and Technical Assistance Documents:* http://www.sde.ct.gov/sde/cwp/view.asp?A=2678&Q=320808
- *Section 19-13-B42 of the Regulations for Connecticut State Agencies — Public Health Code for Sanitation of Places Dispensing Foods and Beverages:* http://www.dph.state.ct.us/BRS/food/fpregs.htm
- *Statutes and Regulations for Licensing Child Day Care Centers and Group Day Care Homes:* http://www.ct.gov/dph/lib/dph/daycare/pdf/Statutes_and_Regulations_Centers.pdf
- *Statutes and Regulations for Licensing Family Day Care Homes:* http://www.ct.gov/dph/lib/dph/daycare/pdf/Statutes_and_Regulations_Homes.pdf
- *USDA Child and Adult Care Food Program Regulations 7 CFR 226:* http://www.fns.usda.gov/cnd/Care/Regs-Policy/Regulations.htm

* The Connecticut General Statutes (CGS) contain several sections on nutrition that apply only to public school districts. However, child care programs (e.g., Head Start) operating in public schools are affected by these state statutes if the district identifies preschool as a grade level and the enrolled prekindergarten students meet the definition for "resident student," i.e., enrolled in the public school district at the expense of the town, for the purposes of Education Cost Sharing (ECS). Preschool programs that do not include children who meet the definition of resident student are not required to comply with the CGS. In addition, these statutes do not apply to centers that are not in schools, or to emergency shelters or family day care homes. The CSDE strongly encourages school-based child care programs meeting the specified criteria to contact their local school district's school wellness team for assistance with identifying all applicable state statutes. For more information, see "Federal and State Laws Pertaining to Nutrition and Physical Activity" in the CSDE's *Action Guide for School Nutrition and Physical Activity Policies* at http://www.sde.ct.gov/sde/cwp/view.asp?a=2678&q=322436.

STEP 3 — CONDUCT LOCAL ASSESSMENT PROCESS

Nutrition and Physical Activity Practices

Before making plans to develop policies, the health advisory team should assess the strengths and weaknesses of the child care program's current nutrition and physical activity policies, programs and practices. Some assessment strategies are listed below.

- Review current policies, programs and practices for nutrition, physical activity and wellness.
- Ask staff members and parents what they think about current policies, programs and practices.
- Interview teachers and food service personnel about children's eating practices, e.g., food choices, plate waste and content of meals and snacks sent from home.
- Observe foods and beverages available in the child care environment, e.g., meals and snacks, classroom activities, celebrations, program events and fundraisers.
- Observe children's eating behaviors during meals and snacks.
- Review health, nutrition and physical education curricula used by teachers.
- Identify frequency of nutrition education and physical education for children and families.
- Review frequency and content of professional development for staff members.
- Observe frequency and amount of structured physical activity and active play, e.g., frequency and length of outdoor play time and amount of time children are physically active.
- Observe staff members' nutrition and physical activity practices, e.g., use of food as reward, mealtime behaviors and involvement in physical activity.
- Interview or survey parents regarding family nutrition and physical activity practices and concerns regarding their children's nutrition and physical activity.

Assessments can build upon what the child care program is already doing, such as the Head Start Annual Self-Assessment, Connecticut School Readiness Preschool Program Evaluation System (CSRPPES), Early Childhood Environmental Rating Scale (ECERS) and NAEYC reaccreditation process. The resources below can be used to conduct a more extensive assessment of current policies and practices in the child care environment.

- *Building Mealtime Environments and Relationships (BMER) — An Inventory for Feeding Young Children in Group Settings,* University of Idaho, 2005: http://www.ag.uidaho.edu/feeding/buildingpdf.htm
- *Nutrition and Physical Activity Self Assessment for Child Care (NAP SACC),* Center for Health Promotion and Disease Prevention, University of North Carolina at Chapel Hill, 2004: http://www.napsacc.org/ (click on "NAP SACC Updates")

- *Preschool Wellness Policy Evaluation Tool,* Rudd Center for Food Policy and Obesity, 2010: http://www.yaleruddcenter.org/what_we_do.aspx?id=165

Additional resources to assist child care programs with assessment can be found in section 9 and *Child Care Policies to Promote Healthy Lifestyles* in section 10.

When gathering assessment data, it is important to consider what will be useful to determine *policy impact* and measure outcomes over time. Baseline data is critical to evaluate whether the desired changes have occurred. Tracking data over time allows the child care program to identify trends, such as increased fruit and vegetable consumption in CACFP meals or increased physical activity while in child care. Assessment data should focus on changes to *children's behavior in child care*. It is difficult to evaluate the impact of policies on children's health outcomes (e.g., obesity, tooth decay, diabetes and iron-deficiency anemia) because they are also influenced by what happens at home and outside child care. For more information on evaluation, see section 9.

Children's Health Data

Identifying data on the education and health status of children in the local child care program and community provides a powerful rationale for local-level change and assists in prioritizing areas of work. Local and state health departments, community groups, early childhood coordinating councils, School Readiness councils and health agencies and organizations can often provide valuable community data. National data are available from many sources, such as the Centers for Disease Control and Prevention (CDC), USDA and Action for Healthy Kids. Some organizations provide state profiles in addition to national summaries.

The organizations listed below provide data on children's health.

- *Child Trends:* http://www.childtrends.org/index.cfm
- *Child Well-Being Reports,* Connecticut Voices for Children: http://www.ctkidslink.org/pub_issue_15.html
- *Connecticut School/District Data,* Connecticut State Department of Education: http://www.csde.state.ct.us/public/cedar/districts/index.htm?sdePNavCtr=|#45480
- *Connecticut School Health Survey,* Connecticut Department of Public Health: http://www.ct.gov/dph/cwp/view.asp?a=3132&q=388104&dphNav_GID=1832&dphPNavCtr=|#46988
- *Data and Statistics,* Centers for Disease Control and Prevention: http://www.cdc.gov/DataStatistics/
- *Data Resource Center for Child and Adolescent Health,* Maternal and Child Health Bureau, Health Resources and Services Administration, U.S. Department of Health and Human Services: http://www.childhealthdata.org/
- *Kids Count Data Center,* The Annie E. Casey Foundation: http://datacenter.kidscount.org/
- *Kids Count Publications,* Connecticut Association for Human Services: http://www.cahs.org/kidscount/kidscount_publications.htm

For additional resources on children's health data, see *Data and Trends* in section 10.

STEP 4 — PRIORITIZE NEEDS AND DEVELOP AN ACTION PLAN

After completing an assessment of current nutrition and physical activity policies, programs and practices (see *Step 3 — Conduct Local Assessment Process*), the health advisory team should prioritize the areas for change and address them in order of local importance by developing an action plan. The action plan includes recommended strategies and steps, indicates who is responsible and identifies a completion date for each task.

A sample action planning document, *NAP SACC Action Planning Document*, is available from the University of North Carolina Center for Health Promotion and Disease Prevention at http://www.center-trt.org/downloads/obesity_prevention/interventions/NAPSACC/intervention/Action_Planning_Document_sample.pdf. Additional resources to assist child care programs with prioritizing local needs and developing an action plan can be found in *Assessment* and *Developing and Implementing Policies* in section 10.

STEP 5 — DRAFT POLICY LANGUAGE

The health advisory team should use the results of the program assessment to draft initial policy statements (see *Step 3 — Conduct Local Assessment Process* and *Step 4 — Prioritize Needs and Develop an Action Plan)*. Ideally, policies should address the six policy components and related policy areas for creating a healthy child care environment (see *Summary of Policy Components and Areas* in section 1).

When drafting policy language, it is important to follow established, science-based health guidelines from credible health organizations and government agencies, such as the USDA, U.S. Department of Health and Human Services, American Academy of Pediatrics (AAP), Centers for Disease Control and Prevention, National Academics of Sciences Institute of Medicine, American Dietetics Association, American Heart Association and National Association for Sport and Physical Education (NASPE). Policies must be consistent with existing local, state and federal requirements addressing children's health (see *Step 2 — Identify Local Policy Development Process*). If approaches to childhood nutrition, physical activity, behavior management or other health issues are not science based, they are inappropriate to use as program policy.

Sections 4 through 9 of this guide contain policy recommendations, rationale, implementation strategies and resources for each of the six policy components and related policy areas. Child care programs are encouraged to adapt policy language to meet local needs and priorities. For additional resources, see *Child Care Policies to Promote Healthy Lifestyles* in section 10.

STEP 6 — BUILD AWARENESS AND SUPPORT

Educating various audiences — such as program administrators, teachers, food service personnel, other staff members, families and the community — about the policy initiative is critical to success. Healthy nutrition and physical activity practices are more likely to be successfully implemented when program staff members and families support them. Obtaining input from these groups during the development process helps the policies to be smoothly adopted and widely implemented. Ideally, all these groups will be part of the child care program's health advisory team and can provide representative input on behalf of their members. Input can be gathered informally and formally through a variety of channels, such as parent and staff meetings, surveys and community forums. For more information and resources on gathering input, see section 9 and *Assessment* in section 10.

STEP 7 — ADOPT AND IMPLEMENT THE POLICY

The adoption of a policy does not automatically mean that it will be implemented. Implementation requires good planning and management skills, the necessary resources, consistent oversight and widespread acceptance by staff members and families. Leadership, commitment, communication and support are essential to successful policy implementation.

The attitude of all personnel — policymakers, administrators, teachers, caregivers, staff members and food service personnel — can have a significant effect on the response to the policies. When everyone in the child care program has a positive attitude toward changes that promote healthy eating and physical activity, policy implementation is more successful. Communication and promotion can be important tools for policy implementation. A proactive communication plan can help inform, educate and build support for adopting and implementing nutrition and physical activity policies. For more information, see section 8.

The child care program can put the policies into action by assigning appropriate staff members to help implement different areas (see *Getting Started* in section 1). Implementation can occur all at once or may be phased in. The child care program can determine which approach is likely to be most effective.

STEP 8 — MAINTAIN, MEASURE AND EVALUATE

For policies to be successful, child care programs must establish a plan to evaluate implementation and sustain local efforts. This includes feedback and documentation based on relevant local data. Evaluation and feedback are important in maintaining local policies. They help determine whether nutrition and physical activity practices are consistent with the child care program's policies. A good evaluation plan does not need to be extensive or complicated. The evaluation process helps answer basic questions about how well the policies are working.

The child care program must make a sustained effort to ensure that new policies are consistently implemented. The health advisory team or other designated staff members should periodically assess how well the policies are being managed and enforced. Nutrition and physical activity practices should be reviewed at least every six months to ensure they are consistent with the child care program's policies. It may be necessary to reinforce policy goals with program staff members. Regular staff training is important to this process.

Child care programs should document any changes that result from the policies, such as children's eating behaviors (e.g., increased consumption of fruits and vegetables), time spent in physical activity, nutrition education programs conducted and the nutrition quality of foods and beverages served outside CACFP meals, e.g., celebrations and food brought from home. It is also important to assess parents' and program staff members' satisfaction with the policies.

Keep in mind that the policy process is ongoing; it does not end with the development of the policy document. Policy implementation requires regular evaluation. The results of local evaluation efforts often necessitate policy revisions. Revisions may also be needed due to changes in national and state standards and regulations, and new research on health trends and effective programs. For more information and resources on the evaluation process, see section 9.

4 — NUTRITION STANDARDS

POLICY COMPONENT
NUTRITION STANDARDS

POLICY AREAS

This section addresses best practices for nutrition standards in the child care environment including policy recommendations, rationale, implementation strategies and resources for *CACFP Meals and Snacks* and *Other Foods and Beverages* in the child care environment. The policy recommendations in this section are based on the Connecticut Child Care Nutrition Standards.

CACFP Meals and Snacks

CACFP meals and snacks are those meals and snacks that meet the USDA requirements and are reimbursable under the CACFP. Policy recommendations for CACFP meals and snacks address best practices for the following four policy areas:

- Menu Planning
- Nutrition Guidelines for Children
- Nutrition Guidelines for Infants
- Special Dietary Needs

Other Foods and Beverages

Other foods and beverages are items available in the child care setting that are not part of CACFP reimbursable meals and snacks. They might be provided by families (e.g., parent-provided meals and snacks or foods for celebrations), the CACFP facility (e.g., foods served at events and meetings) or outside groups (e.g., foods used as fundraisers). Policy recommendations for other foods and beverages address best practices for the following five policy areas:

- Parent-Provided Meals and Snacks
- Celebrations
- Functions, Events and Meetings
- Fundraising
- Access to Drinking Water

CONNECTICUT CHILD CARE NUTRITION STANDARDS

The policy recommendations for CACFP meals and snacks and other foods and beverages in the child care environment are based on the Connecticut Child Care Nutrition Standards (CCCNS). The CCCNS provides the healthiest choices in child care by promoting whole or minimally processed, nutrient-rich foods that are low in fat, added sugars and sodium. The standards reflect current nutrition science and national health recommendations from the Dietary Guidelines for Americans and national organizations, such as the National Academy of Sciences Institute of Medicine, American Academy of Pediatrics, American Dietetic Association and American Heart Association.

The CCCNS is based on the food groups of the CACFP meal patterns (see appendices A and B). Foods and beverages that do not contribute to the CACFP meal patterns are eliminated, e.g., potato chips, ice cream, frozen novelties, pudding, gelatin, candy, bacon, soda, lemonade and fruit-flavored drinks. The CCCNS also eliminates foods that are creditable in the CACFP meal patterns but contain little nutritional value, such as sweetened grain-based desserts (e.g., cakes, cookies, donuts and brownies), grain-based snack chips (e.g., tortilla chips, corn chips and multigrain chips), fried or baked pre-fried vegetables (e.g., french fries and potato puffs) and fried, baked pre-fried or high-fat meats and meat alternates (e.g., chicken nuggets, fish sticks, processed luncheon meats and process cheese foods). For specific information on the CCCNS, see appendix C.

When all foods and beverages meet the CCCNS, the child care program provides the healthiest choices for children and a consistent message about the importance of good nutrition.

To support children's health and reinforce nutrition education efforts, the CSDE strongly encourages all child care programs to follow the CCCNS for all foods and beverages served throughout the child care environment, including CACFP meals and snacks, celebrations, learning experiences, meetings and any other activities where foods and beverages are provided by the child care program or families.

RATIONALE FOR HEALTHY FOODS AND BEVERAGES IN CHILD CARE

The CCCNS eliminates foods and beverages that are high in fat, added sugars and sodium because children have many opportunities to consume these less nutritious choices outside child care. Serving only healthy foods and beverages in child care models healthy eating behaviors and helps children avoid excess calories. It helps parents balance children's food choices at home and gives children a better chance of meeting their daily MyPyramid recommendations. It also allows parents to determine whether and when their children have less nutritious foods. Current research on children's eating habits supports this approach because most children consume too many calories from fats and sugars.

DISCRETIONARY CALORIES

The daily calorie recommendations of MyPyramid include a small amount of discretionary or "extra" calories after basic nutrient needs are met. Many children overspend their daily discretionary calorie allowance by eating too many foods with added fats and sugars. For more information, see "Inside the Pyramid" at http://www.mypyramid.gov/index.html.

- **Most children consume too many unhealthy foods and beverages outside child care.** A recent study found that snacking among children ages 2 to 18 increased significantly from 1977 to 2006.[25] Children consume 27 percent of their calories from snack foods consisting mostly of salty snacks (crackers, chips, popcorn and pretzels), candy, desserts (cakes, cookies, pies, bars, ice cream and gelatin) and sweetened beverages (soft drinks, fruit drinks and sports drinks). From 1977 to 2006, children consumed 168 more calories per day from snacking. The largest increase was found among children ages 2 to 6, who consumed the most snacks per day and increased their overall daily caloric intake by 182 calories. Most children also far exceed the American Heart Association's recommended limit for added sugars. For children ages 4 to 8, added sugars should be limited to about 5 ¼ teaspoons per day, but average daily consumption is four times as much (21 teaspoons).[51, 52]

  While occasional treats like desserts and french fries can fit into a healthy diet, for many children regular consumption is the norm. The CSDE strongly encourages only healthy foods and beverages in child care to model healthy eating behaviors and help children avoid excess calories.

- **Meals and snacks consumed before and after child care are often less nutritious and may not meet children's nutrient needs.**[49, 50, 53] A study of preschoolers found that overconsumption of fats, oils and sweets (e.g., candy, cookies, cakes, doughnuts, pastries, chips, soda, ice cream, syrup, butter and jelly) was significantly greater during time away from child care.[53] Children consumed more servings of fats, oils and sweets per day than any other food group except fruit and juice. On any given day, 49 percent of toddlers ages 15 to 24 months consumed at least one meal or snack away from home and child care.[50] Lunches consumed away from home and child care frequently contained less healthful foods (e. g., fried foods, french fries, soda and sweetened fruit-flavored drinks), significantly more trans fat and fewer key nutrients.

- **Many parents rely on child care to provide healthy foods for their children.** When a child care program chooses to serve less nutritious foods and beverages, it is easier for children to consume excess calories from fat and sugars. On average, children ages 2 to 8 have about 170 discretionary calories per day.[52] One serving of a dessert in child care, such as two small chocolate chip cookies, can easily exceed this daily limit. This makes it more difficult for parents to balance children's food choices at home.

- **Unhealthy foods can displace the nutrient-rich foods needed for healthy growth and development.** When children have simultaneous access to healthy and unhealthy foods — for example, a choice of an apple or cookie — they are more likely to choose the unhealthy food.[54, 55] Young children's appetites are small. When they fill up on less nutritious foods, they may not be hungry for the nutrient-rich foods provided in CACFP meals or snacks. Eliminating unhealthy foods and beverages in child care makes it easier for children to make healthy choices and get the nutrients they need.

- **Serving unhealthy foods and beverages contradicts the health messages promoted in child care.** Nutrition education is meaningless if it is contradicted by other activities that promote unhealthy choices. Actions in the child care environment must support the messages being taught in the classroom and give children opportunities to practice healthy habits. Learning about nutrition remains strictly theoretical if the child care environment regularly promotes unhealthy behaviors.

CACFP MEALS AND SNACKS

MENU PLANNING

Policy Recommendations

- The child care program uses a cycle menu of at least four weeks that changes with the seasons and contains minimal repetition.
- Menus are planned using good menu planning principles and include a variety of new and familiar healthy and appealing foods. Menus regularly include foods from different cultures.
- Menus are planned and approved by a health professional with knowledge of nutrition and CACFP requirements.
- The menu planning process includes input from families and staff members through menu surveys, discussions, meetings and other means.
- Written menus are developed at least one month in advance and are posted and shared with families and staff members.

Rationale

CACFP meals have a substantial impact on the nutritional quality of children's overall dietary intake and provide a valuable opportunity to teach children about good nutrition. Following basic menu planning principles (balance, variety, contrast, color and eye appeal) increases menu variety and makes meals more appealing. Children are more likely to try foods when they look attractive and when new foods are served with familiar foods. When children learn about and try new foods, they are more likely to learn to eat a varied diet. For more information, see *Encouraging New Foods* under *Modeling Healthy Behaviors* in section 5.

Cycle menus help provide varied and balanced meals. They allow child care programs to take advantage of seasonal variety, such as fresh fruits and vegetables. Cycle menus save time and labor and help reduce food cost.

State licensing regulations require that licensed child care centers serving meals must have a registered dietitian consultant available for advice regarding nutrition and food service.[37] When menus are planned by a health professional with appropriate knowledge of nutrition and the CACFP, they are more likely to meet nutrition guidelines and the USDA requirements.

The menu is an important tool to communicate with and seek input from families regarding CACFP meals and snacks. Input from families is important to the menu planning process.

The recommendations in the *CACFP Meals and Snacks* section address meals and snacks provide by the child care program. For information on foods provided from home, see *Parent-Provided Meals and Snacks* in this section.

SMART STEPS

Plan menus to include a variety of nutritious and appealing foods that reflect the cultures and customs of families.

SMART STEPS

Use cycle menus to increase variety, save time and reduce food cost.

Meals provide an opportunity to reflect and celebrate ethnic and cultural communities through preparation techniques and use of food products. Menus that reflect the local cultures and customs of families are more likely to be acceptable to children. The *National Health and Safety Performance Standards* and Head Start regulations specify that menus include a variety of foods that consider cultural and ethnic food preferences and broaden children's food experiences.[38, 39]

The written menu is a critical element in documenting compliance with the CACFP meal pattern requirements. Each CACFP facility must have a "menu of record" on file to document the specific meal pattern components served to all enrolled children each day. This menu must be dated and reflect any changes made to the planned meals and snacks. The CACFP facility must maintain all menus on file with other required CACFP records in accordance with Section 226.10(d) of the CACFP regulations.[40]

The menu should be made available to families and posted in a highly visible location. State licensing regulations for licensed child care centers require that menus are prepared at least one week in advance and posted in a conspicuous location.[37] The *National Health and Safety Performance Standards* specify that written menus should be developed at least one month in advance and be made available to parents.[38] NAEYC accreditation standards specify that written menus are posted where families can see them, with copies available for families.[41] NAFCC accreditation standards specify that a written menu is posted daily or weekly and any changes are indicated.[42]

Implementation Strategies

- Use an appropriate health professional with sufficient knowledge of nutrition and CACFP requirements to plan and approve CACFP menus, i.e., registered dietitian consultant, registered dietitian or public health nutritionist. For more information, see *Finding Consultants* under *Professional Development* in section 6.
- Use cycle menus to plan CACFP meals and snacks at least one month in advance.
- Use the USDA's menu planning resources and recipes, e.g., *Building Blocks for Fun and Healthy Meals* and *Child Care Recipes, Food for Health and Fun.*
- Plan menus that include balanced flavors (e.g., mild, strong and spicy), variety, contrast (e.g., texture, type, size and shape), color and eye appeal. Include a variety of familiar and new foods to broaden children's food experiences.
- Include specific information on the menu that describes the type of food being served, e.g., low-fat milk and whole-grain bread.
- Include foods that are developmentally appropriate and appealing and attractive to children.
- Address the food preferences of the local child care community by considering children's cultural norms and preferences.
- Involve children, families and staff members in taste-testing new food items or recipes, e.g., provide samples of new food items and recipes as part of nutrition education activities or sample menu items at parent and staff meetings, orientations and open houses.
- Post menus in a central location and let families know where they can find them. For the purposes of documenting CACFP requirements, the menu posted for families must be the same as the CACFP menu of record.
- Disseminate menus through family newsletters, e-mails and posting on the program Web site.

Resources

Building Blocks for Fun and Healthy Meals: A Planner for the Child Menu and Adult Care Food Program, USDA, 2000: http://www.fns.usda.gov/tn/Resources/buildingblocks.html

Child Care Recipes, Food for Health and Fun, USDA, 1999*:* http://www.fns.usda.gov/tn/Resources/childcare_recipes.html

Creative Menu Planning, Mealtime Memo, No. 2, National Food Service Management Institute, 2008: http://www.olemiss.edu/depts/nfsmi/Information/Newsletters/MM2008-2.pdf

Food Buying Guide for Child Nutrition Programs, USDA, 2002: http://www.fns.usda.gov/tn/Resources/foodbuyingguide.html

Menu Magic for Children, USDA, 2002: http://teamnutrition.usda.gov/Resources/menu_magic.pdf

Menus for Child Care, National Food Service Management Institute, 2008: http://www.nfsmi.org/ResourceOverview.aspx?ID=196

Nutrition Policies and Guidance for the Child and Adult Care Food Program: Crediting Foods, CSDE, 2009: http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326

Nutrition Policies and Guidance for the Child and Adult Care Food Program: Menu Planning, CSDE, 2009: http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326

Using Cycle Menus, Mealtime Memo, No. 10, National Food Service Management Institute, 2006: http://www.olemiss.edu/depts/nfsmi/Information/Newsletters/meme2006-10.pdf

Using Cycle Menus to Control Food Costs, Mealtime Memo, No. 3, National Food Service Management Institute, 2009: http://www.nfsmi.org/documentlibraryfiles/PDF/20090306023620.pdf

For additional resources, see *CACFP Menus, Cultural Diversity* and *Menu Planning and Recipes* in section 10.

NUTRITION GUIDELINES FOR CHILDREN

Policy Recommendations

- The child care program provides healthy and safe meals and snacks that meet the nutrition requirements established by federal and state laws and regulations. Agreements with food or vending companies ensure that contractors follow these requirements.
- Menus offer varied and nutritious food choices that are consistent with the CACFP Meal Pattern for Children, the Dietary Guidelines for Americans and the Connecticut Child Care Nutrition Standards. Meals and snacks emphasize nutrient-rich foods, including fruits, vegetables, whole grains, low-fat or nonfat dairy, lean meats, skinless poultry, fish, eggs, legumes, nuts and seeds.
- Healthy food preparation techniques are used.

SMART STEPS

Provide healthy meals and snacks that meet CACFP requirements, the Dietary Guidelines for Americans and the CCCNS.

Rationale

Child care programs play an important role in providing all children access to the varied and nutritious foods they need to stay healthy and learn well. CACFP facilities must serve meals and snacks that meet the requirements specified by USDA regulations, as well as all state and local requirements.[40] State licensing regulations for licensed centers require that meals and snacks meet the USDA requirements for the CACFP (see CACFP Meal Pattern for Children in appendix A).[37] State licensing regulations for family day care homes require that adequate and nutritious meals and snacks must be provided.[43] Head Start regulations, the *National Health and Safety Performance Standards,* and the NAEYC and NAFCC accreditation standards specify that meals and snacks must follow the CACFP requirements.[38, 39, 41, 42] Head Start regulations also specify that foods must be high in nutrients and low in fat, sugar and salt.[39]

The USDA regulations do not require that CACFP meals and snacks meet specific nutrition standards or the Dietary Guidelines for Americans, nor do they prohibit child care programs from offering additional foods and beverages of poor nutrient value. To provide children with consistent health messages and optimal nutrition, the CSDE strongly recommends that all CACFP meals and snacks meet the CCCNS (see appendix C). For more information, see *Consistent Health Messages* in section 8.

The American Dietetic Association's (ADA) *Benchmarks for Nutrition Programs in Child Care Settings* specifies that child care menus should be consistent with the Dietary Guidelines for Americans.[44] This ensures that children eat nutritious foods that promote normal health and development and enables them to learn food preferences and dietary habits that prevent disease and support a lifetime of good health.[44]

SMART STEPS

Choose whole or minimally processed, nutrient-rich foods that are low in fat, added sugars and sodium.

The Dietary Guidelines for Americans are science-based advice for Americans ages 2 and older to promote health and reduce risk of chronic diseases.[27] They focus on consuming most calories from nutrient-rich foods that are low in fat, added sugars and sodium. Consumption of a healthy diet that contains nutrient-rich foods and limits fat, added sugars and sodium is linked to reduced health risks, such as heart disease, cancer, obesity and osteoporosis.

When meals or snacks are provided by a food service contractor, it is important to maintain good communication regarding the child care program's nutrition requirements. The child care program is responsible for ensuring that contractors meet all federal, state and local requirements.

Implementation Strategies

- Follow the USDA and CSDE guidance and resources for planning meals and snacks to meet the CACFP Meal Pattern for Children (see appendix A).
- Plan CACFP menus to include only foods and beverages that meet the CCCNS (see appendix C). Use food labels to review products for compliance with the CCCNS before purchasing. For more information, see appendices D and E.
- Follow CACFP menus as planned. If menu substitutions are needed for children with special dietary needs, follow the USDA requirements for accommodating special diets. For more information, see *Special Dietary Needs* in this section.

- Serve the required components and amounts of food at meals and snacks, based on the CACFP Meal Pattern for Children (see appendix A). CACFP menu planning templates are available in *Nutrition Policies and Guidance for the Child and Adult Care Food Program: Meal Pattern Requirements*. The Nemours Foundation's *Best Practices for Healthy Eating: A Guide to Growing Up Healthy* contains pictures of appropriate CACFP portion sizes for each age group.
- Use standardized recipes to ensure the correct amount of food is prepared and healthy food preparation techniques are followed, e.g., steaming instead of boiling; baking, roasting or grilling instead of frying.
- Use appropriate precautions during food preparation to eliminate potential choking risks and address food allergies. For more information, see *Special Dietary Needs* in this section, Food Safety in section 5 and the CCCNS in appendix C.
- Increase the variety of whole fruits and vegetables (fresh, frozen, canned and dried) available in meals and snacks, and emphasize fresh and locally grown produce, when available. For more information, see the *Vegetables and Fruits* category of the CCCNS for Children in appendix C.
- Serve whole-grain foods (e.g., breads, grains, pasta, rice and cereals) most often. For more information, see the *Grains and Breads* category of the CCCNS for Children in appendix C.
- Serve lean protein sources with minimal or no added fat, sugars and salt, such as skinless poultry, fish, legumes, nuts and seeds, nut and seed butters, eggs, low-fat yogurt and low-fat natural cheese. For more information, see the *Meat and Meat Alternates* category of the CCCNS for Children in appendix C.

SMART STEPS

Include more fruits, vegetables and whole grains in meals and snacks. Eliminate juice and serve whole fruits and vegetables instead.

- Serve only whole milk for children younger than 2 and only low-fat (1%) or fat-free milk for children ages 2 and older. For more information, see the *Milk* category of the CCCNS for Children in appendix C.
- Choose and prepare foods without hydrogenated or partially hydrogenated oils (see the Glossary for more information).
- Provide ongoing training for food service personnel and program staff on meeting CACFP menu planning requirements and preparing healthy and safe meals. For more information, see *Food Service Qualifications and Training* in section 5.
- Attend training on CACFP regulations, menu planning, food safety, nutrition education and other relevant topics, as provided by the CSDE, state child care organizations, CACFP sponsors and other appropriate organizations.
- When food or vending contractors are used, specify the child care program's nutrition requirements (CACFP and CCCNS) in the written contract.

Resources

Best Practices for Healthy Eating: A Guide to Help Children Grow Up Healthy, The Nemours Foundation, 2008: http://static.nemours.org/www-filebox/nhps/grow-up-healthy/cacfp-guideline.pdf

Building Blocks for Fun and Healthy Meals: A Menu Planner for the Child and Adult Care Food Program, USDA, 2000: http://www.fns.usda.gov/tn/Resources/buildingblocks.html

Child and Adult Care Food Program Requirements and Operational Memoranda, CSDE: http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=321576

Dietary Guidelines for Americans, USDA and U.S. Department of Health and Human Services, 2005: http://www.healthierus.gov/dietaryguidelines/

Making Nutrition Count for Children — Nutrition Guidance for Child Care Homes, USDA, 2003: http://www.fns.usda.gov/tn/Resources/nutritioncount.html

Measuring Success with Standardized Recipes, National Food Service Management Institute, 2002: http://www.olemiss.edu/depts/nfsmi/Information/measuring-success.html

Menu Magic for Children, USDA, 2003: http://teamnutrition.usda.gov/Resources/menumagic.html

MyPyramid for Kids (6-11), USDA: http://www.mypyramid.gov/kids/index.html

MyPyramid for Preschoolers, USDA: http://www.mypyramid.gov/pyramid/grains.html

Nutrition Policies and Guidance for the Child and Adult Care Food Program: Crediting Foods, CSDE, 2009: http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326

Nutrition Policies and Guidance for the Child and Adult Care Food Program: Meal Pattern Requirements, CSDE, 2009: http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326

Nutrition Policies and Guidance for the Child and Adult Care Food Program: Planning Healthy Meals, CSDE, 2009: http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326

The CCCNS provides specific guidance on the recommended standards for foods and beverages in child care programs (see appendix C). For additional resources, see *Dietary Guidelines, Menu Planning and Recipes, Fruits and Vegetables* and *Whole Grains* in section 10.

NUTRITION GUIDELINES FOR INFANTS

Policy Recommendations

- The child care program creates an environment that encourages and supports mothers who are breastfeeding their infants, including:
  - refrigerated storage for breast milk;
  - a comfortable, private area for mothers to breastfeed their infants or express milk;
  - sensitivity for breastfeeding mothers and their infants; and
  - training for staff members on proper handling of breast milk.

SMART STEPS

Support and promote exclusive breastfeeding for at least the first six months of life.

- If a mother is breastfeeding exclusively, staff members will feed the mother's expressed breast milk to the infant and support the mother in breastfeeding her infant when visiting the facility.
- Breastfed infants will receive infant formula only if the mother requests it.
- The child care program supports exclusive breastfeeding (preferred) or iron-fortified infant formula for the first six months of life.
- The child care program supports families who are breastfeeding beyond 12 months.
- The child care program works in consultation with families to gradually introduce solid foods from ages 4 to 6 months, based on each infant's developmental readiness. The AAP strongly recommends waiting until infants are 6 months before serving any solid foods. All foods provided to infants will meet the CACFP requirements and the Connecticut Child Care Nutrition Standards.
- The child care program will not serve infants any food or drink in a bottle other than breast milk or iron-fortified infant formula unless medically necessary and documented by a medical statement.
- Following the American Academy of Pediatrics' recommendations, the child care program encourages children ages 1 and older to use a cup exclusively, instead of a bottle.

Rationale

Child care programs play an important role in providing all infants access to the varied and nutritious foods they need for healthy growth and development during their first year. CACFP facilities must feed infants in accordance with the requirements specified by USDA regulations, state licensing regulations and local requirements. Following the CCCNS provides infants with optimal nutrition by encouraging a nutrient-rich diet and avoiding ingredients that are not needed by infants, such as trans fats, sodium and added sugars.

Breast milk is the ideal food for babies. The AAP and other national health organizations and federal

agencies recommend exclusive consumption of breast milk for at least the first six months of life.[45, 46] The child care program can help working mothers and their infants increase their breastfeeding duration by providing an environment that supports breastfeeding. For specific strategies, see the USDA's *Feeding Infants: A Guide for Use in the Child Nutrition Programs*.

Breastfed infants should not be fed infant formula unless the parents request that it be served. State licensing regulations for licensed child care centers do not allow formula to be substituted for breast milk unless it is specified in the written feeding plan provided by the parents.[37]

SMART STEPS

When infants are developmentally ready, provide healthy foods that meet the CACFP requirements and the CCCNS.

The CACFP Infant Meal Pattern is specifically designed to be flexible in meeting infants' individual feeding needs, based on their developmental stages. The USDA indicates that most babies are developmentally ready to begin to eat solid foods between 4 to 6 months.[47] The child care program should consult with families regarding their infant's developmental readiness for solid foods and work with families to ensure consistency as new solid foods are introduced. The AAP strongly recommends waiting until infants are 6 months before serving any solid foods.

No food or drink other than breast milk or iron-fortified infant formula should be served in a bottle. Food added to a bottle (such as infant cereal) does not help infants sleep through the night. This practice deprives infants of the opportunity to learn to regulate their food intake and contributes to tooth decay.

The practice of allowing infants to lie down with a bottle is dangerous, as it may lead to choking, ear infections or dental problems, e.g., baby bottle tooth decay. The AAP recommends that children ages 1 and older should use a cup exclusively and not be allowed to carry it around throughout the day.[48] Prolonged exposure of the teeth to the sugars in juice, milk or formula is a major factor contributing to dental caries.

CACFP facilities can provide special dietary accommodations for infants only when the appropriate medical statement is completed and on file. This statement must be signed by a licensed physician if the infant is considered disabled or by a recognized medical authority if the infant is not disabled but has medical or other special dietary needs.[40] For more information, see *Special Dietary Needs* in this section.

Implementation Strategies

- Follow the USDA and CSDE guidance for meeting the CACFP Infant Meal Pattern requirements (see appendix B).
- Follow CACFP infant menus as planned. If menu substitutions are needed for infants with special dietary needs, follow the USDA requirements for accommodating special diets. For more information, see *Special Dietary Needs* in this section.
- Create an environment that encourages and supports breastfeeding mothers. For more information, see Chapter 3 in the USDA's *Feeding Infants: A Guide for Use in the Child Nutrition Programs*, the Vermont Department of Health's *Sample Childcare Center Breastfeeding Policy* and the Connecticut Breastfeeding Coalition's *Breastfeeding Friendly Employer Project*.
- Provide ongoing training for staff members on the proper procedures for storing and handling breast milk and strategies to support breastfeeding mothers.

- Serve only breast milk (preferred) or iron-fortified infant formula, as specified in the written feeding plan supplied by parents. For more information, see the Infant Beverages category of the CCCNS for Infants in appendix C.
- Consult with parents regarding their infant's developmental readiness for solid foods. In the CACFP, new foods can be introduced when an infant is at least 4 months and parents request that they be served. However, the AAP strongly recommends waiting until infants are 6 months before serving any solid foods.
- Talk with parents about what the baby is eating at home and in child care to ensure that nutrition needs are met, and discuss any concerns about how the baby is eating and growing.

SMART STEPS

No juice for infants until 12 months.

- For infants eating solid foods, plan CACFP meals and snacks to include only appropriate foods that meet the CCCNS (see appendix C). Use food labels to review products for compliance with the CCCNS before purchasing. For more information, see appendices D and E.
- Serve appropriate portion sizes at meals and snacks, based on the CACFP Infant Meal Pattern (see appendix B) and each infant's individual needs. The Nemours Foundation's *Best Practices for Healthy Eating: A Guide to Growing Up Healthy* contains pictures of appropriate CACFP portion sizes for infants.
- Serve foods plain, without added fat, salt, honey, sugars or other sweeteners (including natural, artificial and nonnutritive) or sugar alcohols. Choose foods without hydrogenated or partially hydrogenated oils. For more information, see the CCCNS for Infants in appendix C.
- Serve only breast milk (preferred) or iron-fortified infant formula in a bottle. For more information, see the *Infant Beverages* category of the CCCNS for Infants in appendix C.
- Provide ongoing training for food service personnel and program staff members on meeting the CACFP requirements for feeding infants. For more information, see *Food Service Qualifications and Training* in section 5.
- When food or vending contractors are used, specify the child care program's nutrition requirements for infants (CACFP and CCCNS) in the written contract.

INTRODUCING SOLID FOODS

The American Academy of Pediatrics recommends exclusive consumption of breast milk for at least the first six months of life, followed by the gradual introduction of solid foods from 6 to 12 months. Infants may be developmentally ready for solid foods when they:

- have good neck and head control;
- do not push most solid objects out of their mouth with their tongue (tongue thrust reflex); and
- have increased demand for breastfeeding.

The child care program should consult with parents regarding their infant's developmental readiness and any solid foods being introduced at home. Single-ingredient solid foods should be introduced one at a time. Each food should be provided for at least seven days before a new food is introduced. This helps identify if the infant has any adverse reactions such as food allergies or intolerances.

Resources

10 Steps to Breastfeeding Friendly Child Care Centers, Wisconsin Department of Health Services, 2009: http://dhs.wi.gov/health/physicalactivity/pdf_files/BreastfeedingFriendlyChildCareCenters.pdf

Best Practices for Healthy Eating: A Guide to Help Children Grow Up Healthy, The Nemours Foundation, 2008: http://static.nemours.org/www-filebox/nhps/grow-up-healthy/cacfp-guideline.pdf

Breastfeeding Friendly Employer Project, Connecticut Breastfeeding Coalition: http://www.breastfeedingct.org/bfproject/employerfriendlyproject.htm

Feeding Infants: A Guide for Use in the Child Nutrition Programs, USDA, 2001: http://www.fns.usda.gov/tn/Resources/feeding_infants.html

Feeding Infants Right from the Start, Mealtime Memo, No. 9, 2006, National Food Service Management Institute: http://www.olemiss.edu/depts/nfsmi/Information/Newsletters/meme2006-9.pdf

Nutrition Policies and Guidance for the Child and Adult Care Food Program: Feeding Infants, CSDE, 2009: http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326

Sample Childcare Center Breastfeeding Policy, Vermont Department of Health: http://healthvermont.gov/wic/documents/childcare_policy.pdf

For additional resources, see *Feeding Infants* in section 10.

SPECIAL DIETARY NEEDS

Policy Recommendations

- The child care program follows state and federal requirements for accommodating children with special dietary needs.
- With appropriate medical documentation, the child care program prepares modified meals for children (including infants) with food allergies or other special dietary needs.
- Parents must provide the appropriate medical statement before the child care program can make any dietary accommodations. This statement must be signed by a licensed physician if the child is considered disabled or by a recognized medical authority (i.e., physician, physician assistant, doctor of osteopathy or advanced practice registered nurse) if the child is not disabled but has medical or other special dietary needs.
- The child care program takes appropriate precautions to prepare and serve safe meals and snacks for children with food allergies. Procedures are in place to:
    - develop a food allergy action plan for each child with life-threatening food allergies;
    - check ingredients labels for all foods served to children with food allergies;
    - designate an area in the kitchen for allergy-free meals and use separate equipment and utensils during preparation, cooking and serving;
    - develop cleaning procedures that avoid cross-contamination; and
    - provide ongoing training for staff members.

Rationale

CACFP regulations require substitutions or modifications in meals for children and infants who are considered disabled under Section 504 of the Rehabilitation Act of 1973 or the Individuals with Disabilities Education Act (IDEA) and whose disabilities restrict their diet, when the need is certified by a licensed physician.[40] Examples of disabling conditions include food anaphylaxis (severe life-threatening food allergy) and metabolic disorders such as diabetes and phenylketonuria (PKU). Substitutions are also required when a physician determines that a child's severe medical condition requires specific dietary modifications, even if the child is not considered disabled under Section 504 or IDEA.

USDA regulations specify that CACFP facilities may choose, but are not required, to substitute foods for children who are not disabled but who are medically certified as having a special medical or dietary need.[40] These substitutions may be made on a case-by-case basis and must be documented by a statement signed by a recognized medical authority, including physicians, physician assistants, doctors of osteopathy and advanced practice registered nurses (APRN). Close communication among health consultants, child care staff and CACFP food service personnel is essential to ensure that children receive appropriate dietary accommodations.

Head Start regulations require that medically based diets or other dietary requirements are accomodated.[39] The *National Health and Safety Performance Standards* specify that child care programs should obtain a written history of special nutrition or feeding needs and develop individual feeding plans to address these needs.[38] The NAEYC standards indicate that an individualized care plan should be prepared by the child's health care provider in consultation with family members and specialists involved in the child's care.[41]

The child care program must implement procedures to ensure that meals and snacks prepared for children with food allergies are safe. For children with life-threatening food allergies, this includes the development of a food allergy action plan. This plan addresses prevention and emergency response and is prepared in consultation with the child's family, health care provider and, for licensed centers, the registered dietitian consultant and health consultant.

Appropriate training for staff members is critical for effective management of life-threatening food allergies. Food service personnel require appropriate training on how to read food labels and identify potential allergens in processed foods. They also need to know how to avoid cross-contamination with potential allergens during food preparation, service and cleaning. Cross-contamination occurs when allergen-containing ingredients are transferred to allergy-free food by hands, food-contact surfaces, sponges, cloth towels or utensils. All staff members need training on identifying the symptoms of an allergic reaction and how to respond in an emergency.

Implementation Strategies

- Develop written procedures for handling families' requests for special dietary accommodations, based on federal, state and CACFP requirements.
- Inform families of program procedures and provide guidance on using the appropriate medical statements for CACFP meals. For more information, see the CSDE's *Nutrition Policies and Guidance for the Child and Adult Care Food Program: Accommodating Special Dietary Needs*.
- Maintain appropriate documentation for all special dietary accommodations and develop a plan for ensuring that the dietary information on file is current, e.g., annually updating medical statements in conjunction with children's physicals.
- Communicate with families, the child's health provider, food service personnel, teachers and other staff members to ensure that everyone is aware of each child's dietary needs and specific accommodations, as indicated on the child's medical statement.
- Develop an individual food allergy action plan for each child with life-threatening food allergies in consultation with the child's family, health care provider and, for licensed centers, the registered dietitian consultant and health consultant.
- Develop written responsibilities for the child care program, staff members and families regarding safe meals and snacks for children with life-threatening food allergies. These responsibilities should also address other foods and beverages available in the child care environment, such as celebrations and foods used for nutrition education activities.
- Provide appropriate training for program staff members on procedures for handling special dietary accommodations and food allergies and supporting children with special feeding needs.
- Contact the CSDE with questions regarding specific procedures for handling CACFP meal accommodations for children with food allergies and other special dietary needs.

Resources

Accommodating Children with Special Dietary Needs in the School Nutrition Programs: Guidance for School Food Service Staff, USDA, 2001: http://www.fns.usda.gov/cnd/Guidance/special_dietary_needs.pdf

Guidelines for Managing Life-Threatening Food Allergies in Connecticut Schools, CSDE, 2006: http://www.sde.ct.gov/sde/lib/sde/PDF/deps/student/health/Food_Allergies.pdf

NFSMI Best Practices for Serving Students with Special Food and/or Nutrition Needs in School Nutrition Programs, National Food Service Management Institute, 2009: http://www.nfsmi.org/documentlibraryfiles/PDF/20090717040947.pdf

Meeting Children's Special Food and Nutrition Needs in Child Nutrition Programs, National Food Service Management Institute, 2007: http://nfsmi-web01.nfsmi.olemiss.edu/ResourceOverview.aspx?ID=89

Nutrition Policies and Guidance for the Child and Adult Care Food Program: Accommodating Special Dietary Needs, CSDE, 2009: http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326

For additional resources, see *Special Diets* in section 10.

OTHER FOODS AND BEVERAGES

PARENT-PROVIDED MEALS AND SNACKS

Policy Recommendations

SMART STEPS

Provide families with specific nutrition and food safety guidelines for foods and beverages brought from home.

- When meals and snacks are provided from home for an individual child's consumption, families support safe and healthy eating by providing nutrient-rich choices that meet the CACFP Meal Pattern for Children and the Connecticut Child Care Nutrition Standards.
  - Foods provided by parents are healthy choices from the CACFP meal components of grains and breads, meat and meat alternates and vegetables and fruits. They are low in fat, added sugars and sodium.
- Beverages provided for children (ages 1 and older) will consist only of:
  - whole milk for children younger than 2;
  - low-fat (1%) or fat-free unflavored milk for children ages 2 and older;
  - 100 percent juice when it can be served in a cup (limit of ¼ cup or 2 fluid ounces per day for ages 12 to 23 months and ½ cup or 4 fluid ounces per day for ages 2 and older); and
  - water without added ingredients, e.g., flavors, sugars, sweeteners (natural, artificial and nonnutritive), sugar alcohols and caffeine.
- Beverages for infants (birth through 11 months) will consist only of:
  - breast milk (preferred) or iron-fortified infant formula; and
  - water without added ingredients for infants ages 7 months and older when it can be served in a cup.
- Families will provide safe foods for children by clearly labeling all foods with the child's name and date and type of food and storing all foods at an appropriate temperature until they are eaten.
- Children are not allowed to share lunches and snacks brought from home with other children.
- Foods that do not meet the child care program's standards for nutrition and food safety will be returned home with the children. The child care program supplements children's meals or snacks if food from home is deficient in meeting the child's nutrient needs.

Rationale

The child care program serves safe and healthy meals and snacks, and staff members model healthy eating behaviors throughout the day. Families are important partners in supporting the child care program's efforts to provide good nutrition for children. Child care programs should communicate with families to ensure that meals and snacks from home meet the same nutrition and food safety standards as those provided by the program.

State licensing regulations require that meals and snacks provided by parents for children in licensed child care centers must meet the USDA meal pattern requirements even if the center does not participate in the CACFP.[37] The NAEYC accreditation standards specify that the child care program works with families to ensure that foods brought from home meet the CACFP meal patterns.[41] The NAFCC accreditation standards specify that if parents bring food, the provider assures that it is nutritious food or supplements it.[42]

Meals that follow the CACFP meal patterns are more nutritious. Research indicates that lunches served in the CACFP are higher in nutrients than those provided by parents. Lunches sent from home for preschoolers in child care generally do not meet CACFP requirements and may not regularly provide adequate nutrients for growth and development.[49,50]

The *National Health and Safety Performance Standards* specify that food brought into the child care program should be labeled with the child's name, date and type of food.[38] They also indicate that the child care program should provide families with written nutrition guidelines for foods brought from home and supplement a child's meals or snacks if food from home is deficient in meeting the child's nutrition needs. State licensing regulations for licensed child care centers require that all infant bottles are labeled with the infant's name.[37]

Implementation Strategies

- Develop nutrition guidelines for parent-provided meals and snacks that encourage nutrient-rich choices based on the CACFP Meal Pattern for Children (appendix A), the CACFP Infant Meal Pattern (appendix B), and the CCCNS (appendix C).
- Provide clear guidance to families regarding foods and beverages that are not allowed due to poor nutritional value or food safety reasons and specify the procedures that will be followed if inappropriate foods are sent from home. For more information, see the CCCNS in appendix C and *Food Safety* in section 5.
- Develop procedures for staff members on handling inappropriate foods sent from home, e.g., returning foods that do not meet the child care program's standards for nutrition and food safety, supplementing the child's meal with appropriate foods and discussing the child care program's standards with parents.
- Provide guidance to families on identifying healthy choices and reading food labels. For more information, see *Food Labels* in section 10 and appendix D and the CCCNS in appendix C.
- Provide guidance to families on safe food preparation and storage practices for meals and snacks brought from home. For more information, see *Food Safety* in section 5 and the University of California Cooperative Extension's *Safe Lunches for Preschool Children.*
- Regularly monitor foods sent from home for nutrition content, food safety and choking risk. For more information, see *Food Safety* in section 5 and the CCCNS in appendix C.

- Share the program's nutrition and food safety standards with families through a variety of means, such as entrance interviews, orientation, meetings, workshops, program Web site, newsletters and memos.
- For licensed child care centers that serve meals, provide assistance and nutrition guidance to families through the program's registered dietitian consultant. For more information, see *Finding Consultants* under *Professional Development* in section 6.
- Provide workshops and materials for families on nutrition and healthy eating for children. For more information, see *Engaging Families* in section 8.

Resources

Lunch Box Handouts, University of California Cooperative Extension, San Luis Obispo County, 2007: http://cesanluisobispo.ucdavis.edu/Nutrition,_Family_and_Consumer_Science208/Lunch_Box_Handouts.htm

MyPyramid for Kids (6–11), USDA: http://www.mypyramid.gov/kids/index.html

MyPyramid for Preschoolers, USDA: http://www.mypyramid.gov/pyramid/grains.html

Nibbles for Health: Nutrition Newsletters for Parents of Young Children, USDA, 2008: http://www.fns.usda.gov/tn/Resources/nibbles.html

Safe Lunches for Preschool Children, University of California Cooperative Extension, 2007: http://cesanluisobispo.ucdavis.edu/files/54157.pdf

For additional resources, see *Nutrition Handouts*, *Nutrition for Young Children* and *Resources for Families* in section 10.

CELEBRATIONS

Policy Recommendations

SMART STEPS

Provide healthy foods and beverages that meet the CCCNS for all celebrations in child care.

- The child care program promotes nonfood celebrations. If foods and beverages are served at celebrations, they consist only of healthy choices that meet the Connecticut Child Care Nutrition Standards.
- Families support the child care program's efforts by providing only nonfood items or healthy foods that meet the Connecticut Child Care Nutrition Standards for celebrations, holiday parties and other events on site.
- To protect food safety and guard against allergic reactions, all food provided by families to be shared with other children must be either whole fruits (e.g., apples, oranges or pears) or commercially prepared packaged foods that are unopened and, when possible, individually wrapped.
- The child care program provides staff members and families with party ideas, including an approved list of appropriate healthy foods and beverages and nonfood activities for parties.
- Foods and beverages that do not meet the child care program's standards for nutrition and food safety are not accepted.

Rationale

Providing healthy celebrations demonstrates the child care program's commitment to promoting healthy behaviors. It supports the classroom lessons children are learning about health, instead of contradicting them, and gives children an opportunity to practice healthy behaviors.

The CCCNS promotes healthy choices and eliminates foods and beverages with little nutritional value. Research shows that most children consume too many calories from fats and sugars. Serving only healthy foods in child care helps parents balance children's food choices at home and gives children a better chance of meeting their daily MyPyramid recommendations. For more information, see *Rationale for Healthy Foods and Beverages in Child Care* in this section.

The *National Health and Safety Performance Standards* and NAEYC accreditation standards specify that foods brought into child care should be limited to whole fruits and commercially packaged foods.[38, 41] If the child care program allows families to provide food for celebrations and other functions on site, the CSDE strongly recommends requiring commercially prepared healthy foods. When parents send in homemade food, it is difficult to ensure that the food has been handled properly and is safe from bacterial contamination. Homemade foods are also a concern for children with food allergies because it is difficult to determine what ingredients have been used and whether the food has been contaminated with potential allergens during the preparation process, e.g., the same knife used for spreading peanut butter is used to cut vegetables. Child care programs can protect food-allergic children by providing nonfood celebrations or, if food is served, obtaining it from a known source such as the food service program. For more information, see *Special Dietary Needs* in this section.

Implementation Strategies

- Develop procedures to ensure food safety and prevent allergic reactions when food is provided by families to be shared with other children, e.g., allow only whole fruits or healthy commercially prepared packaged foods that meet the CCCNS, are unopened and, when possible, individually wrapped.
- Provide staff members and families with an approved list of appropriate healthy foods and beverages for parties and other events on site. For more information, see *Ideas for Healthy Celebrations and Events* in appendix F.
- Provide staff members with an approved list of nonfood activities for parties, such as special party games and other activities.
- Ask families to provide age-appropriate supplies instead of food, e.g., pencils, erasers, stickers and other small school supplies. Provide guidance for families regarding appropriate supplies that are not choking hazards.

- Create a healthy party idea book. Ask staff members and families to send in healthy recipes and ideas for activities, games and crafts.
- Plan a special activity for children and ask families to provide activity supplies instead of food.
- Give children extra play time instead of a class party. For birthdays, the birthday child can choose and lead an active game for everyone.
- Plan nonfood celebrations for birthdays, for example:
  - Instead of food, ask families to purchase a book for the classroom or program library in the birthday child's name. Teachers read it to the class or invite the child's parents to read it to the class.
  - Instead of food, ask families to purchase a small toy for a gift box. The birthday child gets to pick a gift.
  - Create a "Celebrate Me" book, where classmates draw pictures or write stories and poems (as developmentally appropriate) to describe what is special about the birthday child.
  - Create a special birthday package, e.g., the birthday child wears a sash and crown, sits in a special chair and gets a special birthday surprise, such as a pencil, sticker or card.
  - Let the birthday child be the teacher's assistant for the day and help with special tasks like leading the line, starting an activity and choosing a game or story.

Resources

Appendix F provides ideas for healthy foods and beverages at celebrations and events. For information on the CCCNS, see appendix C. For additional resources, see *Healthy Celebrations* in section 10.

FUNCTIONS, EVENTS AND MEETINGS

Policy Recommendations

- All foods and beverages served at any functions, events and meetings on site, whether provided by the child care program or brought from home by families, meet the Connecticut Child Care Nutrition Standards.

Rationale

Foods and beverages served at the child care program's functions, events and meetings can support or contradict the health messages promoted to children and families. Providing healthy choices that meet the CCCNS supports the classroom lessons children are learning about health, instead of contradicting them, and gives children an opportunity to practice healthy behaviors. For more information, see *Rationale for Healthy Foods and Beverages in Child Care* in this section.

SMART STEPS

Follow the CCCNS for all foods and beverages served at functions, events and meetings on site.

Consistently providing healthy foods demonstrates the child care program's commitment to promoting healthy behaviors and emphasizes the importance of adults as positive role models for children. Positive adult role models shape children's behaviors and can significantly influence the development of healthy eating and physical activity habits. For more information, see *Modeling Healthy Behaviors* in section 5 and *Consistent Health Messages* in section 8.

Implementation Strategies

- Review all functions, events and meetings held on site to determine whether foods and beverages are provided and what changes are needed to comply with the CCCNS.
- Regularly communicate with families regarding the importance of providing consistent health messages for children. For more information, see *Consistent Health Messages* and *Engaging Families* in section 8.
- Provide staff members and families with an approved list of appropriate healthy foods and beverages for parties and other events on site. For more information, see *Ideas for Healthy Celebrations and Events* in appendix F.
- Whenever possible, incorporate physical activity into functions, events and meetings. For more information, see section 7.

Resources

Appendix F provides ideas for healthy food and beverages at child care program events. For information on the CCCNS, see appendix C. For additional resources, see *Healthy Celebrations* in section 10.

FUNDRAISING

Policy Recommendations

- Fundraising activities do not involve food or beverages or only use foods and beverages that meet the Connecticut Child Care Nutrition Standards.
- The child care program encourages fundraising activities that promote physical activity, as developmentally appropriate.
- The child care program provides a list of ideas for acceptable fundraising activities, such as nonfood items or healthy foods and beverages.
- Vending machines are not located on site. If vending machines are available, they sell only beverages and foods that meet the Connecticut Child Care Nutrition Standards.

SMART STEPS

If fundraisers are conducted, use only nonfood items or healthy foods that meet the CCCNS.

Rationale

Foods and beverages are often used to raise money through activities such as catalog sales, bake sales, vending machines and other activities. The items typically used for fundraisers — candy, cookies, pies, cheesecake, chips and sweetened beverages like soda and sports drinks — generally contain little nutritional value. These foods and beverages contradict the child care program's health messages for children and families.

Fundraisers can support the health messages promoted to children and families, instead of contradicting them. Consistently providing healthy foods and beverages demonstrates the child care program's commitment to promoting healthy behaviors. For more information, see *Rationale for Healthy Foods and Beverages in Child Care* in this section and *Consistent Health Messages* in section 8.

When unhealthy foods and beverages are available on site, staff members are more likely to consume them in front of children. To serve as effective role models, staff members should not consume unhealthy foods and beverages in front of children. For more information, see *Modeling Healthy Behaviors* in section 5.

Implementation Strategies

- Conduct fundraising activities that do not involve food or that use only healthy food, e.g., fruit.
- Encourage fundraising activities that promote physical activity, as developmentally appropriate, e.g., jump-a-thons, walk-a-thons and bike-a-thons.
- Provide staff members and families with a list of acceptable fundraising activities such as healthy foods and beverages or nonfood fundraisers.
- If vending contracts are negotiable, specify healthy choices, such as water and 100 percent juice instead of soda and sports drinks, and foods that meet the CCCNS instead of candy, cookies and chips.
- Relocate vending machines so they are not visible to children and families.

Resources

Healthy Fundraising: Promoting a Healthy School Environment, CSDE, 2009:
http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Student/NutritionEd/Healthy_Fundraising.PDF

For additional resources, see *Healthy Fundraisers* in section 10.

ACCESS TO DRINKING WATER

Policy Recommendations

- Safe, fresh drinking water will be clearly visible and available to children at all times indoors and outdoors, including during meals and snacks.
- Water will not be offered as a choice to replace the CACFP meal pattern components of milk or juice.

Rationale

Children need to stay hydrated for good health. Water is the best choice when children are thirsty between meals and snacks. Child care programs should make drinking water available and accessible to children at all times. State licensing regulations require that licensed child care centers make sanitary drinking fountains or individual disposable drinking cups available and accessible to children at all times.[37] State licensing regulations for family day care homes require that readily available drinking water is accessible to children at all times.[43] The *National Health and Safety Performance Standards* and the NAEYC and NAFCC accreditation standards specify that drinking water is available at all times.[38, 41, 42]

However, it is important to note that water is *not* a component of reimbursable meals and snacks in the CACFP. It cannot be offered as a choice to replace the required CACFP meal pattern components. For example, a reimbursable CACFP lunch cannot include a choice of water or milk. Milk is a required component of all breakfasts, lunches and suppers.

If milk or juice is served as one of the two required snack components, water cannot be served as a choice instead of milk or juice. A reimbursable snack must always include two of the four CACFP snack components (milk, vegetables/fruits, grains/breads and meat/meat alternates). The CCCNS recommends serving whole fruits and vegetables instead of juice (see appendix C).

Water can be served in addition to the required CACFP components, for example, allowing children access to water after the meal pattern components are served.

Implementation Strategies

- Develop an appropriate procedure to make water available at meals and snacks while meeting CACFP requirements, i.e., do not offer water as a choice instead of milk or instead of juice.

SMART STEPS

Make drinking water readily available to children at all times.

Water is not a component of the CACFP meal patterns (see appendices A and B) and cannot be served instead of the required CACFP meal pattern components. However, it can be served in addition to the required CACFP meal pattern components.

- Encourage staff members to offer water to children often during the day.
- Provide pitchers of water and disposable cups if water fountains are not available.
- Provide disposable cups near sinks that are available to children and provide a step stool if children are unable to reach the sink.
- For programs serving school-age children, provide signage to encourage drinking water.

Resources

Drinking Water for Good Health, Mealtime Memo for Child Care, Number 3, National Food Service Management Institute, 2008: http://www.olemiss.edu/depts/nfsmi/Information/Newsletters/MM2008-3.pdf

5 — EATING ENVIRONMENT

POLICY COMPONENT
EATING ENVIRONMENT

POLICY AREAS

This section addresses best practices for the eating environment in child care, including policy recommendations, rationale, implementation strategies and resources for the following seven policy areas:

- Meal Schedules
- Pleasant and Healthy Eating Environment (Physical, Social and Emotional)
- Modeling Healthy Behaviors
- Food Rewards and Punishments
- Food Service Personnel Qualifications and Training
- Food Safety
- Staff Wellness

MEAL SCHEDULES

Policy Recommendations for Children

- The child care program schedules meal and snack periods at appropriate times that are not too close together or too far apart. Food is offered at least every three hours so that children's hunger does not overwhelm their ability to self-regulate food intake.
- To encourage meal consumption and improve children's behavior, mealtimes are scheduled after structured physical activity or active play.
- Adequate time is provided to allow all children to eat and socialize. Scheduled mealtimes provide children with at least 20 minutes to eat breakfast or snack and at least 30 minutes to eat lunch or supper, after the children are sitting at the table.
- The child care program accommodates the tooth-brushing regimens of all children, including those with special oral health needs, e.g., orthodontia or high tooth decay risk.

SMART STEPS

Schedule meals and snacks for children at least two but no more than three hours apart.

Policy Recommendations for Infants

- The child care program feeds infants according to the written feeding plan provided by parents. Infants are fed on demand following cues for hunger and fullness.
- Infants' teeth and gums are wiped with a disposable tissue or gauze after each feeding.

Rationale

Young children have small stomachs and high energy needs. They need to eat smaller amounts and more frequently than adults. Children do not have adults' ability to compensate for hunger. With a significant time span between meals, children can experience hunger symptoms (such as fatigue, irritability, inability to concentrate, weakness and stomach pains) that can interfere with daily activities and learning. Conversely, meals and snacks should not be so close together that children are not hungry.

SMART STEPS

Feed infants on demand based on each child's individual needs, in consultation with parents.

Generally, children ages 2 and older need to eat at least every three hours so that their hunger does not overwhelm their ability to self-regulate food intake.[38, 41, 44] Breakfast and lunch should be scheduled at appropriate times. Snacks should be served at times that allow children to come to their regular meals hungry but not famished. Structured mealtimes ensure that food is provided at appropriate times.

Neither the CACFP or Head Start regulations require a specific amount of time for meals and snacks, although Head Start regulations indicate that sufficient time must be allowed for each child to eat.[39] Generally, 30 minutes to eat lunch and supper and 20 minutes to eat breakfast and snack is sufficient, after the children are sitting at the table. However, these time frames should be adjusted as needed to ensure that all children have enough time to eat until they are no longer hungry.

Scheduling physical activity or active play before mealtimes is an effective strategy to increase meal consumption, promote better behavior and encourage a more positive mealtime environment. Children who play before they eat have improved behavior at mealtimes and in the classroom.[56, 57] They waste less food and drink more milk, which leads to increased nutrient intake. The mealtime atmosphere is improved and children are more settled and ready to learn upon returning to classroom activities.

NAEYC standards specify that staff members provide the opportunity for tooth brushing and gum cleaning at least once daily for children ages 1 and older who receive two or more meals.[41] Head Start regulations specify that staff members must promote effective dental hygiene based on children's ages and developmental levels.[39] Infants' teeth and gums should be wiped with a disposable tissue or gauze after each feeding.[39, 41]

An infant's first year is a time of rapid growth and development. Infant feeding schedules should be flexible and respond to each infant's individual needs. State licensing regulations for licensed child care centers require that infants are fed in accordance to the written feeding schedule provided by their parents.[37] Infants should be fed on demand in response to hunger cues and fullness.[38, 47] Staff members should never force infants to eat or wait to feed an infant based on scheduled times.

Implementation Strategies for Children

- Schedule meals and snacks at regular times.
- Schedule breakfast, lunch, supper and snacks at least two hours but no more than three hours apart.[38, 41, 44]
- Schedule mealtimes after structured physical activity or active play whenever possible.
- Allow all children sufficient time to finish eating, i.e., at least 20 minutes for breakfast or snack and at least 30 minutes for lunch or supper, after the children are sitting at the table.
- Schedule time to accommodate children's tooth-brushing regimens.

Implementation Strategies for Infants

- When an infant cries, look to see if there is a reason other than hunger. Crying infants may not be hungry. They might be tired, want affection or need a diaper change.
- Feed infants on demand (about every two hours) based on hunger cues, e.g., rooting, sucking on a fist, crying and fussing. Do not try to put infants on a feeding schedule.
- Stop feeding infants when they indicate fullness, e.g., sealing lips together, decrease in sucking, spitting out the nipple, turning away from bottle and pushing bottle away. Never force infants to eat.
- When sucking stops or decreases, take the bottle out and see if the infant still roots for it. Sometimes infants use the bottle as a pacifier after their hunger needs are met.
- Look for milk running out of the mouth. Many infants will let the bottle stay in their mouth even after they are full.
- Wipe infants' teeth and gums with a disposable tissue or gauze after feeding.

Resources

Feeding Infants: A Guide for Use in the Child Nutrition Programs, USDA, 2001: http://www.fns.usda.gov/tn/Resources/feeding_infants.html

Happy Mealtimes for Healthy Kids, Mealtime Memo for Child Care, National Food Service Management Institute, 2004: http://www.olemiss.edu/depts/nfsmi/Information/Newsletters/meme2004-4.pdf

Nutrition Policies and Guidance for the Child and Adult Care Food Program: Feeding Infants, CSDE, 2009: http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326

Recess Before Lunch: A Guide to Success, Montana Office of Public Instruction, 2003: http://test.opi.mt.gov/PDF/SchoolFood/RBL/RBLGuide2008.pdf

For additional resources, see *Developing Healthy Habits, Feeding Infants* and *Play Then Eat* in section 10.

PLEASANT AND HEALTHY EATING ENVIRONMENT (PHYSICAL, SOCIAL AND EMOTIONAL)

Policy Recommendations for Children

- The child care program serves meals and snacks in safe, clean and pleasant settings, and develops an eating environment that provides children with a relaxed, enjoyable climate. The eating environment is a place where children have:
  - adequate space to eat;
  - clean and pleasant surroundings;
  - appropriate and culturally relevant eating dishes and utensils;
  - pleasant conversation; and
  - convenient access to hand washing facilities before meals and snacks.
- Mealtimes include predictable routines, such as washing hands before coming to the table, assisting with setting plates and utensils and cleaning up after meals.
- Meals are served family style, where children serve themselves from common platters of food with assistance from supervising adults who sit and eat with the children. The child care program uses mealtime as an opportunity to teach nutrition and food concepts. Adults eating with the children encourage social interaction and conversation, and ask questions and talk about nutrition concepts related to the foods being served.
- To support the development of healthy eating habits, staff members observe children's hunger and fullness cues and implement strategies that support children's self-regulation of food intake.
- Staff members encourage children to try foods but never force, coax or bribe children to eat.
- Staff members do not praise children for finishing food or cleaning their plates.
- Mealtime is never used to discipline or scold children.

SMART STEPS

Create a pleasant and relaxed eating environment that encourages children to enjoy mealtimes.

When family style meals are not possible or children bring meals from home, children and adults can still eat their meals together at the table. Staff members can encourage a pleasant eating environment and support children's self-regulation of food intake.

Policy Recommendations for Infants

- The child care program follows best practices for feeding infants, as defined by the American Academy of Pediatrics and the USDA Child and Adult Care Food Program. Infants are provided a safe, calm and uninterrupted feeding environment.
- Staff members hold infants while they are being fed and never lay them down to sleep or propped in a bouncy chair or high chair with a bottle.

- Whenever possible, infants are fed by a single caregiver to develop familiarity, encourage bonding and make mealtime an enjoyable experience.

SMART STEPS

Serve meals family style and let children decide what and how much to eat.

Rationale

The physical dining environment should keep children safe while eating and encourage healthy eating practices. Furniture and eating utensils should be the right size for children's ages and development. Proper seating ensures children's comfort and safety while eating and reduces the risk of choking.[38] Suitable furniture and utensils provide comfort, enable children to perform eating tasks they have already mastered and facilitate the development of skill and coordination in handling food and utensils.[38]

The physical, social and emotional dining environment greatly affects the atmosphere in which children eat. Mealtimes provide many opportunities to support children's development and socialization and promote the development of healthy eating habits. A pleasant social and emotional environment encourages children to accept and enjoy food.[44] Children are more likely to enjoy feeding themselves and eat well in a pleasant and relaxed environment. Mealtime practices should focus on making the eating experience pleasant and enjoyable for children by providing a positive environment with predictable routines. Predictable routines help communicate expectations to children. They also provide appropriate sharing of responsibility in the adult-child feeding relationship.[58-60]

Family-style meals allow supervising adults to serve as role models, teach social skills and provide educational activities that are centered on foods. This approach allows children to identify and be introduced to new foods, new tastes and new menus. It encourages a positive attitude toward nutritious foods and helps children develop good eating habits. The USDA strongly encourages family-style meal service in the CACFP. It is a best-practice standard of the *National Health and Safety Performance Standards* and the ADA's *Benchmarks for Nutrition Programs in Child Care Settings* and a required component of Head Start regulations.[38, 39, 44]

Developing healthy eating habits relies on a division of responsibility between children and adults.[58, 59] Adults have the responsibility of providing healthy and safe foods served at regularly scheduled meals and snacks. Children have the responsibility of deciding whether and how much to eat. Staff members play an important role in helping children to recognize their internal cues of hunger and fullness so that they are able to self-regulate food intake, i.e., eat when they are hungry and stop when they are full. When adults force children to eat or encourage them to clean their plates, children are taught to disregard their internal hunger cues. This can lead to overeating and childhood obesity.

Infants need a calm and supportive atmosphere that ensures an uninterrupted mealtime. To enhance bonding and establish a sense of security while feeding, staff members should hold babies, establish eye contact and softly talk to babies.[39, 47] Feeding should continue until the baby indicates fullness. (For more information on recognizing fullness, see *Implementation Strategies for Infants* under *Meal Schedules* in this section.) The practice of propping an infant's bottle is inappropriate because it prevents staff members from bonding with the infant and observing cues for fullness. It may also lead to choking, ear infections or dental problems, e.g., baby bottle tooth decay.

Implementation Strategies for Children

- Provide dining areas that are attractive, well-lit and have sufficient space for seating.
- Provide tables and chairs that are in good repair and are the right size for children.
- Provide appropriate child-size flatware, plates and bowls, serving dishes and child-size serving utensils.
- Provide accommodations to allow children with disabilities and special feeding needs to eat with their nondisabled peers, including adaptive utensils and cups.
- Provide hand-washing equipment and supplies in a convenient place so children can wash their hands before eating.
- Provide children with clear expectations for mealtime behavior, e.g., sharing, being polite and having pleasant conversation.
- Encourage self-feeding for toddlers, e.g., using a spoon, using fingers to self-feed and holding and drinking from a cup.
- Serve meals family style, where children serve themselves from common platters of food with assistance from supervising adults who sit and eat with the children. If family-style meal service cannot be implemented completely, try serving at least one or two foods family style.
- Train staff members on strategies for implementing family-style meal service.
- Encourage socializing and pleasant conversation among children and between children and adults.
- Do not use mealtime to discipline or scold children
- Encourage all children to come to the table for meals and snacks. Provide a transition activity to help children slow down from active play to mealtime, e.g., playing music, reading a story or setting the table.
- Serve all meal components simultaneously and let children decide what and how much to eat.
- Help children to recognize their internal cues of hunger and fullness so they are able to self-regulate food intake, i.e., eat

HELPING CHILDREN DETERMINE HUNGER AND FULLNESS

- Encourage appropriate portion sizes. Children have small stomachs and need small portions. Like adults, they can overeat when their plate contains too much food.
- Start with small portions and ask children if they are hungry before serving or allowing second helpings.
- Serve family-style meals to help children learn to put the right amount of food on their plate.
- Create a positive eating environment. Listen when children say they are full. Discourage staff members from asking children to clean their plates.
- Observe younger children for fullness cues. For example, toddlers may not say they are full but they may be distracted from eating or start to play.
- Model healthy behaviors while sitting with the children. Let them see adults eating when they are hungry and pushing their plates away and stopping eating when they are full, even if there is still food on the plate.

when they are hungry and stop when they are full. For more information, see *Helping Children Determine Hunger and Fullness* on the previous page.

- Observe staff interaction with children at mealtimes and provide appropriate guidance to assist staff members in implementing the division of responsibility for children's eating.
- Encourage appropriate portion sizes. Provide additional helpings of food beyond the CACFP recommended amounts only if the child asks for more or serves himself.
- Provide training for staff members on appropriate portion sizes, based on the CACFP Meal Pattern for Children. The Nemours Foundation's *Best Practices for Healthy Eating: A Guide to Growing Up Healthy* provides pictures of appropriate CACFP portion sizes for each age group.
- Encourage children to try foods but never bribe, coax or force children to eat or praise children for finishing food.
- Acknowledge children's differences and preferences for food, but do not compare children's eating characteristics.

Implementation Strategies for Infants

- Provide a safe, calm and uninterrupted mealtime, e.g., serving foods at proper temperatures, holding and softly talking to babies, and feeding until baby indicates fullness. For more information on recognizing fullness, see *Implementation Strategies for Infants* under *Meal Schedules* in this section.
- For babies who can sit up and are eating solid foods, use appropriate infant seats and high chairs and appropriate feeding equipment, e.g., infant spoons and dishes.
- Work with families to follow best practices for infant feeding including the transition from bottle to cup and the introduction of solid foods. For more information, see *Nutrition Guidelines for Infants* in section 4.
- Provide training for staff members on appropriate portion sizes for infant foods, based on the CACFP Infant Meal Pattern. The Nemours Foundation's *Best Practices for Healthy Eating: A Guide to Growing Up Healthy* provides pictures of appropriate CACFP portion sizes for infants.

Resources

Best Practices for Healthy Eating: A Guide to Help Children Grow Up Healthy, The Nemours Foundation, 2008: http://static.nemours.org/www-filebox/nhps/grow-up-healthy/cacfp-guideline.pdf

Best Practices for Serving Foods to Groups of Children, University of Idaho: http://www.cals.uidaho.edu/feeding/pdfs/1_2%20Best%20Practices.pdf

Building Mealtime Environments and Relationships (BMER) — An Inventory for Feeding Young Children in Group, University of Idaho, 2005: http://www.ag.uidaho.edu/feeding/buildingpdf.htm

Care Connection, National Food Service Management Institute, 2009: http://www.nfsmi.org/ResourceOverview.aspx?ID=199

Developing Healthy Eating Habits, MyPyramid for Preschoolers, USDA, 2009: http://www.mypyramid.gov/preschoolers/HealthyHabits/index.html

Ellyn Satter Associates: http://www.ellynsatter.com/

Feeding Policy Division of Responsibility, Ellyn Satter Associates: https://ellynsatter.com/resources.jsp

Family Style Dining in Child Care, Mealtime Memo, No. 8, National Food Service Management Institute, 2006: http://www.olemiss.edu/depts/nfsmi/Information/Newsletters/meme2006-8.pdf

Making Food Healthy and Safe for Children: How to Meet the National Health and Safety Performance Standards — Guidelines for Out-of-Home Child Care Programs, Second Edition, The National Training Institute for Child Care Health Consultants, Department of Maternal and Child Health, The University of North Carolina at Chapel Hill, 2007: http://nti.unc.edu/course_files/curriculum/nutrition/making_food_healthy_and_safe.pdf

For additional resources, see *Developing Healthy Eating Habits* in section 10.

MODELING HEALTHY BEHAVIORS

Policy Recommendations

- The child care program recognizes the importance of staff members as positive role models for children as they learn to live healthy lives. Staff members model behaviors for healthy eating, physical activity (including limited screen time), and positive body image in the presence of children. They do not consume unhealthy foods and beverages such as candy and soda in front of children.
- The child care program encourages parents to reinforce these positive messages by serving as role models for their children at home.

SMART STEPS

Staff members model healthy eating and physical activity practices throughout the child care environment.

Rationale

Adults help shape children's behaviors. They can have significant influence on the development of healthy eating and physical activity habits or sedentary behaviors, such as watching television. Modeling healthy behaviors reinforces lessons about nutrition and physical activity and encourages children to value healthy practices. Modeling by staff members demonstrates the child care program's commitment to providing a healthy child care environment. Staff members' body language and reaction to food can affect a child's decision to try and like new foods.

When parents serve as role models, they support and reinforce the positive messages that children are learning in child care. Parents' positive nutrition attitudes are related to more pleasant mealtimes, fewer negative mealtime practices and less troublesome child eating behaviors.[60] Parents who exhibit negative meal practices (e.g., verbal reprimands and telling children to clean their plates) are more likely to have obese children.[60]

Implementation Strategies

- If family-style meal service is implemented, sit with children at the table and eat the same foods as children (with exceptions for staff members with special religious, dietary or medical restrictions).
- If children and staff members bring meals from home, staff members eat with the children and their meals model healthy food choices.

- Enjoy healthy foods (such as fruits, vegetables and whole grains) and make positive comments about healthy foods.
- Encourage children to try healthy foods and provide positive reinforcement when they do.
- Do not consume unhealthy foods and beverages (such as candy, cake, soda and coffee) in front of children.
- Educate staff members about avoiding inappropriate verbal and nonverbal responses that communicate negative messages to children, such as making negative comments about foods, negative body language (e.g., negative facial expressions when a disliked food is served), commenting about children's or adults' body size and comparing children's eating characteristics (e.g., *"Sam eats his peas, why can't you?"*).
- Do not treat children differently based on their body size or shape.
- Encourage staff members to participate in unstructured child-initiated physical activity.
- Provide opportunities that support staff members in making healthy food and lifestyle choices for themselves, e.g., professional development on health, physical activity and wellness. For more information, see *Staff Wellness* in this section.
- Educate families about the importance of adults as positive role models for healthy eating, physical activity, limited screen time and positive body image at home. For more information, see *Engaging Families* in section 8.

ENCOURAGING NEW FOODS

- Model positive attitudes and behaviors. Staff members try new foods, and talk about enjoying their taste, texture and smell.
- Offer new foods at the beginning of the meal when children are most hungry and more likely to try something new.
- Serve a new food with familiar foods that children like.
- Serve one new food at a time so children are not overwhelmed.
- Offer a very small amount of the new food.
- Gently encourage children to try new foods and provide positive reinforcement when they do. Never force children to eat.
- Offer new foods many times on the menu to help children become familiar with them. It may take up to a dozen times before a child will try a new food.
- Provide opportunities to try new foods outside meals, e.g., as part of nutrition education or cooking activities.

Resources

Be a Role Model for Kids — 10 Tips for Setting Good Examples, USDA, Center for Nutrition Policy and Promotion, September 2009: http://www.mypyramid.gov/downloads/TenTips/RoleModelTipsheet.pdf

Developing Healthy Eating Habits, MyPyramid, USDA: http://www.mypyramid.gov/preschoolers/HealthyHabits/index.html

MODEL Health! Promoting Nutrition and Physical Activity in Children, Maryland State Department of Education, 2007: http://healthymeals.nal.usda.gov/hsmrs/Maryland/MODELHealth.pdf

For additional resources, see *Modeling Healthy Behaviors* in section 10.

FOOD REWARDS AND PUNISHMENTS

Policy Recommendations

- Staff members do not use foods or beverages as rewards for performance or good behavior, unless this practice is required by a child's individualized education program (IEP) under the Individuals with Disabilities Education Act (IDEA).
- Staff members never withhold food or beverages (including food served through CACFP meals) as a punishment.

SMART STEPS

Do not use food as a reward or punishment.

- The child care program develops alternative nonfood reinforcements for appropriate behavior.

Rationale

Offering food as a reward or restricting food as punishment places undue importance on food and can harm children's eating behaviors. Restricting access to CACFP meals and snacks as a punishment is prohibited by USDA regulations. These practices are inappropriate for all child care programs, regardless of whether they participate in the CACFP. Head Start regulations, the *National Health and Safety Performance Standards,* ADA's *Benchmarks for Nutrition Programs in Child Care Settings,* and the NAFCC accreditation standards all prohibit the use of food as reward or punishment.[38, 41, 42, 44]

Food as Reward: Rewarding with food can interfere with children learning to eat in response to hunger and satiety cues. This teaches children to eat when they are not hungry as a reward to themselves, and may contribute to the development of obesity and disordered eating. Foods used as rewards are typically unhealthy foods that are high in fat and sugars with little nutritional value. Decreasing the availability of these foods is one strategy child care programs can use to address the current childhood obesity epidemic. For more information, see *Rationale for Healthy Foods and Beverages in Child Care* in section 4.

Adults often use food rewards because they are an easy, inexpensive and powerful tool to bring about immediate short-term behavior change. Yet, using food as a reward has many negative consequences that go far beyond the short-term benefits of good behavior or performance. Rewarding children with food undermines efforts to teach children about good nutrition by modeling unhealthy behavior and contradicting the nutrition principles taught in the classroom. It interferes with children learning to eat in response to hunger and satiety cues. This teaches children to eat when they are not hungry as a reward to themselves, and may contribute to the development of disordered eating.[61,62] It also increases children's preferences for unhealthy foods. Research shows that food preferences for both sweet and nonsweet food increase significantly when foods are presented as rewards.[62, 63] Rewarding children with food encourages overconsumption of unhealthy foods.

Food as Punishment: Facilities participating in the CACFP are prohibited from restricting children's access to CACFP meals and snacks for any reason, including as a punishment for individual or group behavior. Other inappropriate practices include:

- forcing a child to eat a food;
- delaying access to food, e.g., a child or group of children is served last;
- denying children access to certain types of foods, e.g., dessert and snacks; and
- preventing children from eating food when food is normally allowed.

These practices are inappropriate for all child care programs, regardless of whether they participate in the CACFP. Child care program policies must prohibit staff members from forcing children to eat or withholding access to meals and snacks as punishment. Restricting access to meals, snacks or other foods and beverages is an inappropriate form of punishment. Children should be secure in knowing that they will be able to eat at appropriate times, and adults should not create anxiety and stress around eating by using food to control children's behavior. Child care program policies should develop alternative practices for promoting appropriate behavior.

Implementation Strategies (as developmentally appropriate)

- Use or build upon discipline policies that are already in place, instead of using food.
- Train staff members on appropriate strategies for encouraging positive behaviors.
- Develop alternative positive practices for promoting appropriate behavior, e.g., earning "rights," such as the right to spend more time at a desired activity.
- If rewards are allowed, provide staff members with a list of acceptable age-appropriate nonfood alternatives, e.g., stickers.
- Provide training for staff members and information to families on the negative consequences of using food to reward or punish children.

Resources

Alternatives to Food as Rewards, CSDE, 2007:
http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=320754#Resources

Center on the Social and Emotional Foundations for Early Learning, Vanderbilt University:
http://www.vanderbilt.edu/csefel/

For additional resources, see *Alternatives to Food Rewards* and *Behavior Management* in section 10.

FOOD SERVICE PERSONNEL QUALIFICATIONS AND TRAINING

Policy Recommendations

- Qualified nutrition professionals administer the CACFP. The child care program provides adequate training and continuing professional development for all nutrition and food service personnel.
- Food service personnel regularly participate in professional development activities that address all applicable areas of food service operations, including planning, preparing and serving nutritious, safe and appealing meals and snacks that meet the required CACFP meal pattern components and serving sizes.
- Food service personnel regularly participate in professional development activities that address other appropriate topics, such as nutrition, strategies for promoting healthy eating behaviors and accommodating special dietary needs.

SMART STEPS

Provide regular training for food service personnel on nutrition, food safety and CACFP requirements.

Rationale

Food service personnel who are appropriately trained in nutrition, CACFP requirements, food preparation techniques, accommodating special diets and food safety are better prepared to provide nutritious and safe meals. Training helps food service personnel understand their responsibilities and be successful in their jobs. Motivation is increased when employees understand program goals and the tasks required to achieve those goals. Training also instills a sense of positive self-esteem through improved professional competency. CACFP regulations require that all sponsors provide annual training for key staff members.[40] At a minimum, the training must address the CACFP meal pattern and requirements, e.g., meal counts, claim submission, review procedures, recordkeeping requirements and the reimbursement system.

Implementation Strategies

- Ensure that food service personnel are adequately trained and regularly participate in professional development activities to provide healthy meals and snacks that meet the CACFP requirements. Training should address appropriate topics such as CACFP meal pattern requirements, menu planning, food preparation, food safety and sanitation, nutrition, children's health trends and strategies for promoting healthy eating behaviors.
- Provide training for food service personnel on appropriate procedures for preparing meals for children with food allergies and other special dietary needs. For more information, see *Special Dietary Needs* in section 4.
- Use appropriate personnel (including registered dietitian consultant, health consultant and food service director) and the community (including registered dietitians and other health professionals) to promote awareness and serve as a resource to food service personnel for nutrition, food service and related topics. For more information, see *Finding Consultants* under *Professional Development* in section 6.
- Encourage food service personnel to participate in appropriate certification and credentialing programs.
- For child care programs using food contractors, specify the requirements for food service personnel qualifications and training in the written contract.
- For child care programs that are required to comply with the state qualified food operator (QFO) regulation, ensure that the appropriate food service personnel are QFOs. For more information, see *Food Safety* in this section.

Resources

Resources on food service personnel can be found in *Qualifications of Food Service Personnel* and *Training for Food Service Personnel* in section 10.

FOOD SAFETY

Policy Recommendations

- All foods and beverages made available in the child care program comply with federal, state and local food safety and sanitation regulations. This includes foods and beverages served for CACFP meals and snacks, nutrition education activities (such as cooking and taste-testing), celebrations and other events on site.
- The child care program takes appropriate precautions during food preparation to eliminate foods that are high risks for choking and use preparation methods to make all foods safe to eat.

Rationale

Serving safe food is a critical responsibility for all child care programs and a key aspect of a healthy child care environment. Young children are especially susceptible to foodborne illness, which can cause serious side effects, even death. Child care programs are responsible for ensuring that meals served to children are properly prepared using healthy foods and safe food-handling practices. Prevention is the key to providing safe food service. All child care programs must ensure that foods are kept at proper temperatures at all times and that all food service personnel follow appropriate food safety and sanitation practices.

CONNECTICUT PUBLIC HEALTH CODE

All child care centers and emergency shelters must follow Connecticut Public Health Code Section 19-13-B42 regulations.[64] Food service operations in child care centers and emergency shelters must also comply with any local requirements, as directed by the local department of health. The local department of health is responsible for inspecting food service operations to ensure compliance with the Connecticut Public Health Code. Child care programs should always consult their local health department for guidance on questions regarding specific sanitation and food safety issues.

Note: Connecticut Public Health Code Section 19-13-B42 does not apply to family day care homes. However, to ensure the safety of meals for all children, day care home providers should follow appropriate food safety procedures.

Children younger than 4 are at the highest risk of choking. Child care menus must reflect the eating abilities of the children being served.[38] The child care program must eliminate foods that are high risks for choking (e.g., round, hard, small, thick and sticky, smooth or slippery foods) and use preparation methods to make all foods safe to eat, e.g., cutting foods into small pieces and cooking and mashing vegetables. For more information, see the CCCNS in appendix C.

For information on food safety for children with food allergies, see *Special Dietary Needs* in section 4.

Implementation Strategies

- Designate a QFO and an alternate QFO at each site with a food service establishment that is required to comply with the state qualified food operator regualtion.[64] For more information, see *Responsibilities of Child Nutrition Programs Regarding Connecticut's Qualified Food Operator (QFO) Requirement*.

- Ensure that all foods used are clean, wholesome and from approved sources.
- Maintain food storage, preparation and service that are consistent with state and federal standards for food safety and sanitation. For more information, see *Nutrition Policies and Guidance for the Child and Adult Care Food Program: Food Safety.*
- Ensure that foods are kept at proper temperatures at all times.
- Eliminate foods that are high risks for choking and use preparation methods to make all foods safe to eat. For more information, see the CCCNS in appendix C and the CSDE's *Preventing Choking in Infants and Young Children.*

SMART STEPS

Provide food safety guidance for families regarding foods brought from home.

- Provide ongoing food safety and sanitation training for all food service personnel, including basic food safety principles and proper hand washing procedures.
- Attend sanitation and food safety training provided by state agencies, state child care organizations, CACFP sponsors and other appropriate organizations.
- Train teachers and other program staff members in basic food safety principles.
- Take advantage of Internet-based training, such as online courses and seminars. The National Food Service Management Institute provides online training on a variety of topics related to the USDA Child Nutrition Programs.
- Follow appropriate food safety practices for preparing infant bottles and food. For more information, see the CSDE's *Nutrition Policies and Guidance for the Child and Adult Care Food Program: Feeding Infants* and the USDA's *Feeding Infants: A Guide for Use in the Child Nutrition Programs.*
- Communicate with families regarding food safety procedures for foods brought from home. For more information, see *Parent-Provided Meals and Snacks* in section 4.

Resources

Compliance Guide for Food Service Inspection Form, Connecticut Department of Public Health, 2001: http://www.ct.gov/dph/lib/dph/environmental_health/food_protection/pdf/compliance.pdf

Connecticut Public Health Code Section 19-13-B42 Sanitation of Places Dispensing Foods or Beverages: http://www.dir.ct.gov/dph/PHC/docs/19_Sanitation_of_Food_Fair.doc

Feeding Infants: A Guide for Use in the Child Nutrition Programs, USDA, 2001: http://www.fns.usda.gov/tn/Resources/feeding_infants.html

Food Protection Program, Connecticut Department of Public Health: http://www.ct.gov/dph/foodprotection

Inspection Report for Food Service Establishments, Connecticut Department of Public Health, June 2001: http://www.ct.gov/dph/lib/dph/environmental_health/food_protection/pdf/inspection_form.pdf

Nutrition Policies and Guidance for the Child and Adult Care Food Program: Feeding Infants, CSDE, 2009: http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326

Nutrition Policies and Guidance for the Child and Adult Care Food Program: Food Safety and Sanitation, CSDE, 2009: http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326

Online Courses, National Food Service Management Institute: http://www.nfsmi.org/ (click on "Online Courses")

Preventing Choking in Infants and Young Children, CSDE, 2009: http://www.sde.ct.gov/sde/LIB/sde/pdf/deps/nutrition/CACFP/Feeding_Infants/Preventing_Choking.pdf

Responsibilities of Child Nutrition Programs Regarding Connecticut's Qualified Food Operator (QFO) Requirement, CSDE, 2009: http://www.sde.ct.gov/sde/LIB/sde/pdf/deps/nutrition/QFO_Handout.pdf

For additional resources on food safety and sanitation, see *Food Safety* in section 10.

STAFF WELLNESS

Policy Recommendations

- The child care program highly values the health and well-being of every staff member. The child care program promotes and provides activities and resources that support personal efforts by staff members to maintain a healthy lifestyle and that encourage staff members to serve as role models for children.

SMART STEPS

Provide activities and resources to promote the health and well-being of staff members.

Rationale

Health promotion services for all staff members can improve their eating and physical activity behaviors and their effectiveness in teaching and modeling healthy behaviors. When staff members improve their own personal health and wellness they increase morale, become role models, and build the commitment to promote children's health through a healthy child care environment. Connecting staff members to health promotion programs helps staff members, children and their families.

Implementation Strategies

- Survey staff members regarding their interest in specific health promotion activities.
- Identify community and state programs and initiatives that support and promote wellness.
- Collaborate with community health promotion initiatives to provide staff health promotion programs or to promote these opportunities, e.g., health screenings, physical activity and fitness programs, nutrition education, health fairs, weight management, smoking cessation, influenza vaccinations and stress management. For more information, see *Partnering with Community Organizations* in section 8.
- Provide information to encourage staff members to participate in health promotion programs,

e.g., introduce wellness programs to new staff members at orientation sessions; present information at regular staff meetings; include fliers and brochures with paychecks; and share information in newsletter articles, brochures and e-mail messages.

- Provide staff members with information and resources on relevant health topics.
- Provide educational activities for staff members on healthy lifestyle behaviors, e.g., healthy eating, physical activity and wellness.
- Develop peer support groups for identified health issues, e.g., weight management, stress management and tobacco-use cessation.
- Provide only healthy foods and beverages for staff functions, meetings and other events. For more information, see *Functions, Events and Meetings* in section 4, the CCCNS (appendix C) and *Ideas for Healthy Celebrations and Events* (appendix F).
- Develop a walking club for staff members that meets before or after work hours or during established breaks.

Resources

Resources on staff wellness can be found in *Staff Wellness* in section 10.

6 — NUTRITION EDUCATION

POLICY COMPONENT
NUTRITION EDUCATION

POLICY AREAS

This section addresses best practices for nutrition education in the child care environment including policy recommendations, rationale, implementation strategies and resources for the following five policy areas:

- Standards-Based Nutrition Education
- Appropriateness of Nutrition Materials
- Connecting with Planned Learning Experiences
- Nutrition Promotion
- Professional Development

STANDARDS-BASED NUTRITION EDUCATION

Policy Recommendations

- The child care program provides standards-based nutrition education that reflects current science and national guidelines and is focused on children's eating behaviors. Nutrition education aligns with state standards, such as the CSDE's *Connecticut Preschool Curriculum Framework, A Guide to Early Childhood Program Development* and *Healthy and Balanced Living Curriculum Framework.*
- Nutrition education is offered at least once per week as part of a planned comprehensive health education program designed to provide children with the knowledge and skills necessary to promote and protect their health.
- Nutrition education activities are consistent with the Dietary Guidelines for Americans and emphasize the appealing aspects of healthy eating. They promote nutrient-rich foods, healthy food preparation methods, good nutrition practices and include enjoyable, developmentally appropriate and culturally relevant participatory activities, e.g., cooking, taste-testing and farm visits.

This section addresses nutrition education for children. For information on nutrition education for families, see *Engaging Families* in section 8. For information on nutrition education for staff members, see *Professional Development* in this section and *Food Service Personnel Qualifications and Training* in section 5.

Rationale

To develop healthy habits, *The Surgeon General's Vision for a Healthy and Fit Nation* emphasizes that children need a planned and sequential health education curriculum for prekindergarten through Grade 12.[33] This curriculum should be based on national health education standards and address a clear set of behavioral outcomes that empower children to make healthy dietary choices and meet physical activity recommendations.

Educational materials that are consistent with state or national standards provide relevant science-based nutrition information that is developmentally appropriate and focused on developing skills for healthy eating. By providing positive food experiences, child care programs help children to develop an awareness of good nutrition and develop healthy eating habits for a lifetime. Helping children to make healthy food choices can promote consumption of a balanced diet; achievement of optimal growth and intellectual development; increased physical performance; maintenance of healthy weight; and decreased risk of nutrition-related diseases.

Successful nutrition education programs influence children's eating behaviors. The CDC says that nutrition education strategies are most likely to promote lifelong habits for good health if they help children learn the skills needed for healthy eating behaviors, provide opportunities to practice these behaviors and make nutrition education relevant and fun.[65] Activities should be designed to encourage developmentally appropriate food experiences that help children learn about new and culturally diverse foods and healthy eating. Nutrition education should:

- teach children the relationship between food and health;
- help children understand their growing bodies and how to take care of themselves through positive health behaviors;
- expose children to a variety of learning experiences about where food comes from and how it can be prepared; and
- help children develop sound attitudes and knowledge about food, nutrition and health.

NAEYC standards specify that children are provided varied opportunities and materials to help them learn about nutrition, including identifying sources of food and recognizing, preparing, eating and valuing healthy foods.[41] Head Start regulations require that children are provided with opportunities for involvement in food-related activities, as developmentally appropriate.[39]

Implementation Strategies

- Develop a plan for nutrition education that includes opportunities for children to develop the knowledge and skills necessary to make appropriate food choices and is the shared responsibility of all staff members, including program administrators, teachers and food service personnel.[38] The plan should devote adequate time and intensity to focus on behaviors and skill building.
- Provide developmentally appropriate nutrition education activities based on state health education standards for prekindergarten through Grade 12, such as the CSDE's *Preschool Curriculum Framework* and the CSDE's *Healthy and Balanced Living Curriculum Framework*.

SMART STEPS

Provide weekly nutrition education activities for children that focus on developing healthy behaviors.

- Employ active learning experiences that use developmentally appropriate instructional concepts at each age or grade level and introduce children to foods and healthy eating.
- Provide concrete experiences that focus on changing specific behaviors rather than on learning general facts about nutrition, such as increasing exposure to many healthy foods and building skills in choosing healthy foods, e.g., Captain 5 A Day and MyPyramid for Kids.
- Provide culturally relevant nutrition education that addresses the different health concerns, eating patterns, food preferences, and food-related habits and attitudes of different cultural groups. For more information, see *Cultural Diversity* in section 10.
- Integrate nutrition materials and foods into the curriculum that reflect the diversity of the community, e.g., include healthy foods and cooking utensils from a variety of cultures in the dramatic play area, regularly include foods from various local cultures when cooking, and ensure that literature includes foods from various cultures.
- As age appropriate, include cooking and food-related activities that reinforce and promote health messages, e.g., using recipes for healthy foods, taking field trips to farms or orchards and growing vegetables from seeds.
- Follow the CCCNS for foods used in nutrition education activities, e.g., taste tests and cooking. For more information, see section 4 and appendix C.
- Provide current nutrition resources, games, toys and materials that staff members can use with nutrition education activities.
- Model healthy behaviors, e.g., staff members eat the same foods with children and talk about nutrition and healthy eating habits. For more information, see *Modeling Healthy Behaviors* in section 5.
- Promote healthy eating messages in language families can understand using a variety of methods, e.g., posters, parent newsletters, menu backs, program Web site and parent presentations. For more information, see section 8.
- Provide meal programs and food-related policies that reinforce classroom nutrition education. For more information, see sections 4 and 7.
- Ask families to share healthy recipes that children can prepare as a group cooking activity in child care.
- Encourage children to tell their parents about their food experiences in child care.
- Involve families in nutrition education. For more information, see *Engaging Families* in section 8.

Resources

A Guide to Early Childhood Program Development, CSDE, 2007: http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Early/early_childhood_guide.pdf

Captain 5 A Day, Connecticut Department of Public Health: http://www.captain5aday.org

Connecticut Preschool Curriculum Framework, CSDE, 2006: http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Early/Preschool_framework.pdf

Cultural and Ethnic Food and Nutrition Education Materials: A Resource List for Educators, USDA Food and Nutrition Information Center, January 2008: http://www.nal.usda.gov/fnic/pubs/bibs/gen/ethnic.pdf

FitSource Physical Activity and Nutrition in Child Care Settings, U.S. Department of Health and Human Services: http://nccic.acf.hhs.gov/fitsource/

Food and Nutrition Fun for Preschoolers, USDA Food and Nutrition Information Center, July 2008: http://www.nal.usda.gov/fnic/pubs/bibs/gen/fun_preschoolers.pdf

Food and Nutrition Fun for Elementary-Age Children, USDA Food and Nutrition Information Center, July 2008: http://www.nal.usda.gov/fnic/pubs/bibs/gen/fun_elementary.pdf

Food and Nutrition Information Center, USDA: http://fnic.nal.usda.gov (click on "Topics A-Z" then "Nutrition Education" or click on "Resource Lists")

Healthy and Balanced Living Curriculum Framework, CSDE, 2006: http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Student/Healthy&BalancedLiving.pdf

Healthy Meals Resource System for Child Care Providers, USDA: http://healthymeals.nal.usda.gov (click on "Nutrition Education")

National Food Service Management Institute: http://www.nfsmi.org (click on "Resource Center")

MyPyramid for Kids Classroom Materials, USDA: http://teamnutrition.usda.gov/resources/mypyr amidclassroom.html

Team Nutrition, USDA: http://teamnutrition.usda.gov/childcare.html

For additional resources, see *Curriculum Development*, *Nutrition Education, Nutrition Handouts* and *Nutrition Promotions* in section 10.

APPROPRIATENESS OF NUTRITION MATERIALS

Policy Recommendations

- The child care program reviews all nutrition education lessons and materials for accuracy, completeness, balance, cultural relevancy and consistency with the state's and child care program's educational goals and curriculum standards.
- The child care program does not use nutrition education materials with corporate logos or advertising.

Rationale

To provide consistent and appropriate health messages for children and families, nutrition education materials must be consistent with established standards and reflect science-based information. Materials with corporate logos or advertising contain commercial messages and expose children to product marketing. These materials are not appropriate in the child care setting.

Implementation Strategies

- Use science-based nutrition education materials from state and national health agencies and organizations, such as the USDA, CDC, U.S. Department of Health and Human Services and Connecticut Department of Public Health.
- Determine a schedule for regularly reviewing all curricula and materials to ensure they reflect current health recommendations (e.g., Dietary Guidelines for Americans and MyPyramid) and state standards (e.g., the CSDE's *Preschool Curriculum Framework, A Guide to Early Childhood Program Development* and *Healthy and Balanced Living Curriculum Framework*).
- Identify appropriate individuals to review nutrition education materials, e.g., curricula, activities, handouts and other materials. For licensed child care centers that serve meals, the registered dietitian consultant can assist with this process. The early childhood education consultant can help to evaluate the appropriateness of education materials regarding state early childhood education standards. For more information, see *Finding Consultants* under *Professional Development* in section 6.

Resources

A Guide to Early Childhood Program Development, CSDE, 2007:
http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Early/early_childhood_guide.pdf

Characteristics of an Effective Health Education Curriculum, Centers for Disease Control and Prevention, 2008: http://www.cdc.gov/healthyyouth/SHER/characteristics/index.htm

Connecticut Preschool Curriculum Framework, CSDE, 2006:
http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Early/Preschool_framework.pdf

Dietary Guidelines for Americans. USDA and U.S. Department of Health and Human Services, 2005:
http://www.healthierus.gov/dietaryguidelines/

Healthy and Balanced Living Curriculum Framework, CSDE, 2006:
http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Student/Healthy&BalancedLiving.pdf

Health Education Curriculum Analys is Tool (HECAT), Centers for Disease Control and Prevention, 2007:
http://www.cdc.gov/healthyyouth/HECAT/index.htm

For additional resources, see *Evaluating Nutrition Education Materials* in section 10.

CONNECTING WITH PLANNED LEARNING EXPERIENCES

Policy Recommendations

- Nutrition education is a part of comprehensive health education and is included in other content areas, such as language and literacy development, mathematics, science and music.
- The child care program encourages instructional staff members to incorporate nutrition themes from the CSDE's *Healthy and Balanced Living Curriculum Framework* and *A Guide to Early Childhood Program Development* into planned learning experiences, when appropriate, to reinforce and support health messages.
- Nutrition concepts are integrated into daily routines whenever possible, such as mealtimes and transitions.
- Afterschool programs integrate nutrition activities throughout the learning environment.

SMART STEPS

Integrate nutrition education activities throughout the curriculum and into daily routines.

Rationale

An integrated approach to nutrition education is more effective than teaching nutrition only as a discrete unit, since it is ongoing and continually reinforces what children are learning. When nutrition education is linked with other content areas, children have daily exposure to nutrition concepts and messages. Nutrition concepts are easily integrated into a variety of content areas such as language and literacy development, mathematics, science and music. They can also be incorporated into daily routines such as mealtimes and transitions.

The interdisciplinary approach to nutrition education should complement and not replace sequential nutrition education lessons within a comprehensive health education curriculum.[36] The exclusive use of an interdisciplinary approach can sacrifice key elements of an effective nutrition education program, e.g., adequate instructional time, focusing on behaviors and skill-building, attention to scope and sequence and adequate teacher preparation.

Implementation Strategies (as developmentally appropriate)

- Include appropriate staff members in planning for nutrition activities, e.g., teachers, food service personnel, registered dietitian consultant, health consultant, early childhood education consultant and other program staff members.

- Provide training for staff members on strategies for integrating nutrition into different content areas and daily routines.
- Review current curricula to identify content areas that can incorporate nutrition.
- Identify and use resources that integrate nutrition into other content areas. For more information, see *Integrating Nutrition* in section 10.
- Use literature with appropriate health themes, e.g., messages about healthy eating or physical activity. For more information, see Michigan State University*'s Michigan Team Nutrition Booklist* and *Michigan Team Nutrition Preschool Booklist*.
- Use nutrition to teach math concepts, e.g., charting how many servings of fruits and vegetables children eat. Older children can learn to read food labels and compare the nutritional value of foods.
- Sing food-themed songs during daily activities such as center learning time, art, cooking, washing hands and during transitions between activities.
- Demonstrate nutrition-related science concepts, e.g., cooking activities or growing vegetables from seeds. Older school-age children can identify foods' chemical compounds or determine chemical changes in recipe ingredients, such as the formation of gluten in flour.
- Learn about and research food customs of other countries. Involve children in cooking activities using foods from different countries. Older children can create a healthy menu based on the local food preferences of a specific country or ethnic group.

Resources

Michigan Team Nutrition Booklist, Michigan State University, 2006:
http://www.michigan.gov/documents/mde/UpdatedMichiganTeamNutritionBooklist_290287_7.pdf

Michigan Team Nutrition Preschool Booklist, Michigan State University, 2006:
http://www.michigan.gov/documents/mde/PreschoolBooklist_290284_7.pdf

The following resources provide guidance on integrating nutrition and physical activity into afterschool programs.

Changing Lives, Saving Lives, A Step-by-Step Guide to Developing Exemplary Practices in Healthy Eating, Physical Activity and Food Security in Afterschool Programs, Center for Collaborative Solutions, 2010:
http://www.ccscenter.org/afterschool/Step-By-Step%20Guide

Empowering Youth with Nutrition & Physical Activity, USDA, 2007:
http://teamnutrition.usda.gov/Resources/empoweringyouth.html

Promoting Healthy Eating and Physical Activity in Out-of-School Programs, The Nemours Foundation, 2008:
http://static.nemours.org/www-filebox/nhps/grow-up-healthy/after-school-book.pdf

The Power of Choice: Helping Youth Make Healthy Eating and Fitness Decisions, A Leader's Guide, USDA, 2003:
http://www.fns.usda.gov/tn/Resources/power_of_choice.html

Resources on connecting nutrition themes to the preschool or school-age curriculum can be found in *Integrating Nutrition* in section 10.

NUTRITION PROMOTION

Policy Recommendations

- The child care program conducts nutrition education activities and promotions that involve children, families and the community.
- The nutrition education program is coordinated with CACFP meals and snacks and other foods and beverages available in the child care environment, such as parties, meetings and other events.
- Whenever possible, nutrition education activities involve the entire child care program and are linked to health-related community initiatives, services and programs.
- The child care program collaborates with agencies and groups conducting nutrition education in the community to send consistent health messages to children and their families.

SMART STEPS

Coordinate nutrition education activities with CACFP meals and snacks and other foods and beverages available in the child care environment.

SMART STEPS

Collaborate with community-based nutrition programs, initiatives and services.

Rationale

Promoting nutrition throughout the child care environment provides consistent health messages for children and families. Linking nutrition education to CACFP meals and snacks provides children with hands-on opportunities to practice healthy habits. Participation in community programs that promote and reinforce health emphasizes the child care program's commitment to a healthy child care environment and supports local nutrition and physical activity efforts.

Collaborating with community initiatives, services and programs enhances the child care program's existing resources. It also increases the effectiveness of local nutrition interventions by providing consistent and reinforcing health messages to children and families.

Implementation Strategies (as developmentally appropriate)

- Promote nutrition in the child care program through a variety of activities, such as cooking, connecting with local farmers' markets and community gardens, sampling popular healthy ethnic foods, and participating in marketing campaigns promoting nutrition or physical activity messages, e.g., Fruits & Veggies More Matters.
- Collaborate with and participate in community-based programs that promote and reinforce children's health, such as nutrition initiatives, health fairs, physical activity challenges and food drives. For more information, see *Partnering with Community Organizations* in section 8.
- Coordinate CACFP meals and snacks with the nutrition curriculum, e.g., fruits and vegetables used for a nutrition education activity are featured on the menu and a recipe is sent home for families.

- Provide healthy choices that reflect the cultures and customs of families and that meet the CCCNS (see appendix C) whenever foods and beverages are available in the child care environment, including CACFP meals and snacks, nutrition education and cooking activities, meetings, celebrations and other events.
- For school-based centers, link nutrition education with the district's coordinated school health initiatives.
- Promote nutrition and physical activity challenges for children, families and staff members, e.g., eating the recommended daily servings of fruits and vegetables or meeting daily physical activity recommendations.
- Decorate classroom and dining areas with nutrition and physical activity posters and displays.
- Promote nutrition and physical activity to families and staff members through a variety of methods, e.g., bulletin boards, newsletters, fact sheets, program Web site, activities and events.
- Plan special events for national health awareness days, such as National Nutrition Month, National Diabetes Month, or Fruits & Veggies More Matters Month.

Resources

Coordinated School Health, CSDE:
http://www.sde.ct.gov/sde/cwp/view.asp?a=2678&q=320726&sdePNavCtr=|45534|#45556

Fruits & Veggies More Matters, Produce for Better Health Foundation:
http://www.fruitsandveggiesmorematters.org

National Health Observances, U.S. Department of Health and Human Services:
http://healthfinder.gov/nho/default.aspx.

For additional resources, see *Nutrition Promotions* and *Partnering with Community Organizations* in section 10.

PROFESSIONAL DEVELOPMENT

Policy Recommendations

- Staff members responsible for nutrition education are adequately prepared and regularly participate in professional development activities to effectively deliver the nutrition education program as planned. The child care program includes relevant nutrition training at least twice a year for teachers, assistant teachers and other staff members, as appropriate.
- Professional development includes orientation to appropriate state standards and curriculum frameworks, such as the CSDE's *Connecticut Preschool Curriculum Framework, A Guide to Early Childhood Program Development* and *Healthy and Balanced Living Curriculum Framework.*

SMART STEPS

Provide training on nutrition and physical activity for all staff members at least twice a year.

- The child care program builds awareness among teachers, food service personnel, consultants and other staff members about the importance of nutrition, physical activity, decreased screen time and positive body image to academic success and lifelong wellness.
- Nutrition and physical activity information shared with children, families and staff members is based on current science and national health recommendations.

Rationale

It is important for the child care program to develop and implement a training plan for staff members. Appropriate training in nutrition and health education affects the quality of instruction and increases the extent to which teachers implement the curriculum.[66-67] It also impacts how staff members behave at mealtimes, which in turn influences children's eating behaviors. Staff members' nutrition knowledge is correlated with their ability to positively influence children's eating behaviors at mealtime, e.g., eating the same foods as the children, encouraging pleasant conversation, nutrition education and modeling healthy eating behaviors.[68]

Training should address developmentally and culturally appropriate content and teaching strategies while focusing on giving teachers the skills needed to provide innovative nutrition education.[65] Staff members also need to understand basic nutrition concepts and issues related to children, such as dietary recommendations and the impact of childhood obesity. Staff members are better able to implement and support program policies when they understand the rationale behind them.

The child care program should include all appropriate staff members in professional development activities in nutrition, for example, program consultants and food service personnel. (For more information on training for food service personnel, see *Food Service Personnel Qualifications and Training* in section 5.) All staff members need to be aware of the importance of nutrition and physical activity to children's development and achievement so they can consistently reinforce positive health messages throughout the child care environment. Appropriate professional development assists staff members with providing accurate nutrition information that is based on current science and national health recommendations instead of personal beliefs.

Implementation Strategies

- Ensure that staff members responsible for nutrition education are adequately prepared and regularly participate in professional development activities to effectively deliver the nutrition education program as planned.
- Provide an orientation for all new staff members on basic nutrition and the program's nutrition and physical activity policies.
- Encourage staff members to participate in appropriate credentialing programs, such as an associate's degree from a community college, the Child Development Associate (CDA) credential through Connecticut Charts-A-Course or certification through a bachelor's degree from a four-year institution.
- Offer professional development activities on nutrition at least twice a year, e.g., basic knowledge of nutrition, modeling healthy behaviors, and instructional techniques and strategies that are inclusive and respectful of cultural values and traditions and are designed to promote healthy eating behaviors.
- Provide staff members with science-based health information regarding benefits and risks of dietary habits, health trends, effective strategies for addressing nutrition issues, and food safety and foodborne illness prevention.
- Offer professional development activities in nutrition to all appropriate child care personnel, such as program consultants and food service personnel.
- Use appropriate personnel (including registered dietitian consultant, health consultant, early childhood education consultant and food service director) and the community (including registered dietitians and other health professionals) to promote awareness and serve as a resource to staff members for nutrition, nutrition education and the CACFP. For more information, see *Partnering with Community Organizations* in section 8.

FINDING CONSULTANTS

Education consultants:
Connecticut Early Education Consultation Network
http://ctconsultationnetwork.org

Health consultants:
Connecticut Nurses Association
http://www.ctnurses.org/

Registered dietitian consultants:
Connecticut Dietetic Association
http://www.dietetics.com/cda/

- Take advantage of Internet-based training, such as online courses and seminars. The National Food Service Management Institute provides online training on a variety of topics related to the USDA Child Nutrition Programs. For more information, see *Training for Teachers and Staff Members* in section 10.
- Educate staff members regarding the importance of providing nutrition information based on current science and national health recommendations, not personal beliefs.
- Use only qualified health personnel (e.g., registered dietitian or registered nurse) to provide specific dietary guidance. Staff members providing nutrition education should not advocate dieting behaviors or any specific eating regimen to children, families or other staff members.

Resources

Care Connection, National Food Service Management Institute, 2009: http://www.nfsmi.org/ResourceOverview.aspx?ID=199

Child Development Associate (CDA) National Credentialing Program: http://www.cdacouncil.org/

Connecticut Charts-A-Course Early Childhood Professional Development System and Registry: http://www.ctcharts-a-course.org/

Connecticut Community Colleges: http://www.commnet.edu/

Connecticut's Approved Education Preparation Programs: http://www.sde.ct.gov/sde/lib/sde/PDF/Cert/guides/ap_ed_prep_prgms.pdf

Education and Training Materials Database, USDA: http://healthymeals.nal.usda.gov/schoolmeals/Resource_Cafe/Resource_Search.php

From the Trainer's Tablet — Lessons for Family/Home Child Care Providers Food Safety in Child Care, National Food Service Management Institute, 2003: http://www.nfsmi.org/DocumentSearch.aspx?type=advance&title=From%20the%20Trainer

National Food Service Management Institute: http://www.nfsmi.org/

Online Courses, National Food Service Management Institute: http://www.nfsmi.org/ (click on "Online Courses")

Team Nutrition, U.S. Department of Agriculture: http://teamnutrition.usda.gov/library.html

For additional resources, see *Training for Teachers and Staff Members* and *Training for Food Service Personnel* in section 10.

7 — PHYSICAL ACTIVITY

POLICY COMPONENT
PHYSICAL ACTIVITY

POLICY AREAS

This section addresses best practices for physical activity in the child care environment including policy recommendations, rationale, implementation strategies and resources for the following six policy areas:

- Daily Physical Activity
- Play Space and Equipment
- Standards-Based Physical Education
- Connecting with Planned Learning Experiences
- Screen Time
- Physical Activity and Punishment

DAILY PHYSICAL ACTIVITY

Policy Recommendations for Children

- In accordance with national guidelines, the child care program encourages all children to participate in a variety of daily physical activity opportunities that are appropriate for their age, that are fun and that offer variety. The child care program provides all children with numerous opportunities for physical activity throughout the day.
    - Toddlers (ages 1 to 2) are provided with at least 30 minutes of structured activity and at least 60 minutes up to several hours of unstructured physical activity daily.
    - Preschoolers (ages 3 to 5) are provided with at least 60 minutes of structured activity and at least 60 minutes up to several hours of unstructured physical activity daily.
    - Toddlers and preschoolers are not sedentary for more than 60 minutes at a time except while sleeping.
    - School-age children (ages 6 and older) are provided with at least 60 minutes of daily physical activity that includes aerobic and age-appropriate muscle- and bone-strengthening activities.

SMART STEPS

Plan daily periods of active play that meet physical activity goals and learning standards.

The daily recommended amount of structured physical activity does not need to be provided all at once. Children can accumulate shorter bouts of activity (e.g., 10 minutes) throughout the day to equal the recommended amount.

- Program practices are inclusive and offer access for children with disabilities to participate in physical activities with nondisabled peers.
- All children are provided outdoor time at least twice daily, weather and air quality permitting.
    - Children can go outside when the temperatures are above 15 degrees Fahrenheit (including wind chill factor) and below 90 degrees Fahrenheit.
    - Outdoor time should be limited to 20 to 30 minutes when temperatures are between 16 to 32 degrees Fahrenheit.
    - Outdoor time is in safe settings supervised by adults.
- Staff members lead and participate in active play (e.g., games and activities) during outdoor time and other times devoted to physical activity.

Policy Recommendations for Infants

- In accordance with national guidelines, the child care program provides all infants with planned daily physical activity to safely support their physical development and health. Activities are planned to support infants' developmental milestones, such as self-supporting head and neck, rolling, reaching, sitting, kicking, crawling, standing and walking.
- Following the American Academy of Pediatrics' recommendation, infants are provided "tummy time" (time spent lying on their stomachs) for short intervals at least two to three times each day while they are awake and supervised by an adult.
- All infants are provided daily outdoor time when the weather and air quality are safe.
    - Infants can go outside when the temperatures are above 15 degrees Fahrenheit (including wind chill factor) and below 90 degrees Fahrenheit.
    - Outdoor time should be limited to 20 to 30 minutes when temperatures are between 16 to 32 degrees Fahrenheit.
    - Outdoor time is in safe settings supervised by adults.
- To support infant development, confining equipment (e.g., swings, bouncy chairs, exercise saucers, car seats and strollers) is limited to less than 30 minutes while infants are awake.

SMART STEPS

Provide planned daily physical activity to safely support infants' physical development and health.

Rationale

Regular physical activity is important to children's health and development. It increases muscle and bone strength, helps maintain healthy weight, enhances psychological well-being and provides numerous health benefits, including reduced risk of chronic diseases, such as heart disease, hypertension, type 2 diabetes and osteoporosis. However, research indicates that few children meet the daily recommendations for physical activity and physical activity declines as children get older. A recent study found that children's activity levels begin to decrease between ages 3 and 5.[29] By the time students are in high school, 65 percent do not meet daily physical activity recommendations.[30]

Child care programs can help children become more physically active and fit by providing a wide range of developmentally appropriate and safe opportunities to be active. Appropriate practices guided by competent, knowledgeable and supportive adults influence the extent to which children choose to engage in activities, enjoy physical activity and develop healthy lifestyles. High-quality motor skill instruction significantly increases preschoolers' motor skill development.[27]

The policy recommendations for daily physical activity are based on national standards from the National Association for Sport and Physical Education (NASPE) and the U.S. Department of Health and Human Services. The NASPE recommends that all children from birth to age 5 should engage in daily physical activity that promotes movement skillfulness and foundations of health-related fitness (see appendix G).[28] For children ages 1 to 2, the daily recommendation is at least 30 minutes of structured activity and at least 60 minutes up to several hours of unstructured physical activity. For children ages 3 to 5, the daily recommendation is at least 60 minutes of structured activity and at least 60 minutes up to several hours of unstructured physical activity. The U.S. Department of Health and Human Services recommends that children and adolescents engage in at least 60 minutes of daily physical activity that is appropriate for their age, enjoyable and offers variety (see appendix H).[26]

Daily outdoor play helps all children be more physically active. Research shows that preschoolers' participation in moderate to vigorous physical activity is significantly associated with the percentage of time spent in outside play areas and child-initiated free play activities, while interacting with peers.[69] Child care programs can decrease children's sedentary activity simply by providing sufficient portable play equipment, e.g., large building blocks and balls. Adding portable play equipment to an outdoor playground significantly increases physical activity among 3 to 5 year olds.[70]

Providing a child care environment that supports appropriate physical activity for infants helps them with developing movement skills, such as sitting up, rolling over and crawling. The AAP recommends that infants are provided tummy time (time spent lying on their stomachs) at least two to three times each day while they are awake and being supervised by an adult.[71] Tummy time promotes babies' muscle development and prepares them for when they will be ready to slide on their bellies and crawl. Insufficient tummy time can cause a delay of babies' motor skill development. The Nemours Foundation recommends at least 30 minutes of daily tummy time until an infant is creeping or crawling.[72] *Note: Babies must always sleep on their backs to reduce the risk of Sudden Infant Death Syndrome (SIDS).*

SMART STEPS

Provide outdoor play time at least twice daily and provide enough portable play equipment for all children.

SMART STEPS

Provide daily tummy time for infants. Limit confining equipment to less than 30 minutes per day when infants are awake.

The Nemours Foundation recommends that the use of confining equipment for infants (e.g., swings, bouncy chairs and exercise saucers) is limited to less than 30 minutes per day while the infant is awake.[72] The overuse of confining equipment can delay infants' motor skill development, such as rolling over, sitting, crawling and walking.[28]

Implementation Strategies for Children

- For children ages birth to 5, follow the guidelines in the NASPE's *Active Start: A Statement of Physical Activity Guidelines for Children Birth to Age 5* (see appendix G).
- For children ages 6 and older, follow the U.S. Department of Health and Human Services' *Physical Activity Guidelines for Children and Adolescents* (see appendix H).
- Provide teacher-led physical activity at least two times per day.
- Promote noncompetitive age-appropriate games.
- Provide daily outdoor time for all children at least twice daily, as appropriate, based on weather and air quality.
- Develop guidelines for staff members regarding appropriate temperatures and length of time for outdoor play. For more information, see the National Weather Service's *Wind Chill Temperature Chart* and the Iowa Department of Public Health's *Child Care Weather Watch*.
- Provide guidance for parents on appropriate seasonal clothing and footwear that allows children to move freely and play safely.
- Encourage all children to try new noncompetitive activities and provide positive reinforcement when they do.
- Schedule structured physical activity or active play before mealtimes to encourage better meal consumption, better behavior and a more positive mealtime environment. For more information, see *Meal Schedules* in section 5 and *Play Then Eat* in section 10.
- Encourage staff members to model positive behaviors by being physically active with the children and making positive comments about physical activity.
- Offer training opportunities for staff members at least twice a year on strategies for promoting developmentally appropriate structured physical activity. Staff training should be provided by a qualified professional, e.g., physical education teacher or other experts regarding physical education and physical activity for children.
- Limit time in confining equipment (e.g., car seats and strollers) for toddlers to less than 30 minutes while they are awake.

Implementation Strategies for Infants

- Follow the NASPE's *Active Start: A Statement of Physical Activity Guidelines for Children Birth to Age 5* (see appendix G).
- Provide all infants with planned daily physical activity that safely supports their physical development and health, e.g., self-supporting head and neck, rolling, reaching, sitting, kicking, crawling, standing and walking.

- Engage infants in physical activity when they are awake and interested.
- Provide daily outdoor time for all infants, as appropriate, based on weather and air quality. Dress infants appropriately for the weather. Place infants on a blanket at least 5 by 7 feet or other safe, dry surface for free movement and exploration.
- Develop guidelines for staff members regarding appropriate temperatures and length of time for outdoor play. For more information, see the National Weather Service's *Wind Chill Temperature Chart* and the Iowa Department of Public Health's *Child Care Weather Watch.*
- From birth, provide tummy time for all infants at least two to three times each day while the infant is awake and supervised by an adult. Start with a short period of time (three to five minutes) and increase the amount of time as the baby begins to enjoy this position.
- Limit time in confining equipment for infants (e.g., swings, bouncy chairs and exercise saucers) to less than 30 minutes while they are awake.

Resources

Active Start: A Statement of Physical Activity Guidelines for Children Birth to Age 5, National Association for Sport and Physical Education, 2009: http://www.aahperd.org/naspe/standards/nationalGuidelines/ActiveStart.cfm

Back to Sleep, Tummy to Play, Healthy Child Care America, American Academy of Pediatrics, 2008: http://www.healthychildcare.org/pdf/SIDStummytime.pdf

Best Practices for Physical Activity: A Guide to Help Children Grow Up Healthy, Nemours Foundation, 2009: http://www.nemours.org

Child Care Weather Watch, Iowa Department of Public Health, 2009: http://www.idph.state.ia.us/hcci/common/pdf/weatherwatch.pdf).

Model Physical Activity Standards for Child-Care Providers (for Infants through Preschool-Age Children), National Policy & Legal Analysis Network to Prevent Childhood Obesity (NPLAN), 2009: http://nplanonline.org/products/model-physical-activity-standards-child-care-providers-infant-through-preschool-age-childre

Physical Activity for Children: A Statement of Guidelines for Children Ages 5-12, 2nd Edition, National Association for Sport and Physical Education, 2004: http://www.aahperd.org/naspe/standards/nationalGuidelines/PA-Children-5-12.cfm

Physical Activity for Preschoolers (MyPyramid), USDA: http://www.mypyramid.gov/Preschoolers/PhysicalActivity/index.html

Wind Chill Temperature Chart, National Weather Service, 2001: http://www.nws.noaa.gov/om/windchill/

For additional resources, see *Guidelines and Standards, Physical Activity Policies* and *Programs to Promote Physical Activity* in section 10. Resources to promote physical activity in afterschool programs can be found in *Physical Activity Before and After School* in section 10.

PLAY SPACE AND EQUIPMENT

Policy Recommendations for Children

SMART STEPS

Provide safe, sufficient and developmentally appropriate indoor and outdoor play space and equipment.

- The child care program provides children with a physical environment that promotes active play. Safe, sufficient and developmentally appropriate indoor and outdoor space and equipment encourage all children to be physically active, including children with disabilities. Sufficient equipment is provided to avoid competition and long waits.
    - A variety of fixed play equipment is available that accommodates the needs of all children, such as climbing structures, swings, sandboxes, tunnels and slides.
    - A large variety of indoor and outdoor portable play equipment is available for children to use at the same time, such as balls, hula hoops, tumbling mats, jump ropes, tricycles and buckets.
    - Outdoor play space includes open grassy areas and a path for wheeled toys.
    - Indoor play areas are safe and provide adequate space for each child.
- Staff members regularly inspect equipment and play areas to ensure they are safe.
- Staff members always supervise children on playground equipment and during active play and other physical activities.
- The physical environment does not promote sedentary activity. Sedentary equipment such as televisions, videos and electronic games are not prominently displayed.

Policy Recommendations for Infants

- The child care program provides infants with a safe and engaging physical environment that encourages movement and exploration.
- The child care program provides safe, sufficient and developmentally appropriate equipment for infants, such as rattles, balls, and simple cause and effect toys.
- Staff members regularly inspect infant equipment and play areas to ensure they are safe.
- Staff members always supervise infants in their play environments.

Rationale

The physical space and equipment provided in the child care environment greatly affects children's physical activity levels and development of movement skills. Sufficient and appropriate space and equipment increases the likelihood that children are physically active.[69, 70] Stimulating environments that engage children in appropriate movement experiences help develop children's movement skills.[28]

Indoor and outdoor play areas should provide sufficient safe and developmentally appropriate space and equipment to encourage active play. The NASPE indicates that each toddler and preschooler needs at least 35 square feet of indoor space for structured movement and activities.[28] More space is needed for advanced motor skills such as running, skipping and kicking. The NASPE recommends a minimum of 75 square feet

of accessible outside play space for each child.[28] State licensing regulations for licensed child care centers require at least 75 square feet of outdoor space per child for the number of children using the space at any one time.[37]

An appropriate physical activity environment provides important opportunities to foster an infant's developing movement skills. Child care programs should provide safe and developmentally appropriate space and equipment that facilitates infants' movement and exploration. Infants require a minimum of 35 square feet, such as a 5-by-7-foot rug or blanket, for playing, rolling, crawling and other large muscle activities.[28] Infants who are confined to a small play space or confining equipment are more likely to have delayed motor skill development.[28]

Implementation Strategies for Children

- Provide safe and developmentally appropriate play environments and equipment, such as climbing structures and portable play equipment, e.g., balls, riding toys and hula hoops.
- Provide sufficient outdoor space for safe active play (at least 75 square feet per child).
- Provide sufficient indoor space for safe active play (at least 35 square feet per child).
- Provide adaptive equipment for children with disabilities and access to safe play environments with nondisabled peers.
- Develop a schedule for regular inspections of equipment and play areas.
- Store televisions, videos, electronic games and other sedentary equipment out of sight.

Implementation Strategies for Infants

- Provide large open safe play surfaces at least 5 by 7 feet and appropriate equipment in every infant room to promote free movement and physical activity.
- Engage young infants with rattles, mobiles, mirrors and other appropriate objects. Engage babies' senses with toys that make music or noise or flash lights.
- Provide safe and appropriate infant play objects of different textures, sizes, colors, shapes and weights, such as rattles, balls and stuffed animals. For older infants, add simple cause and effect toys (e.g., toys that respond with sound or motion after infant manipulation) and solid furniture to use for pulling up.
- Interact with infants to encourage safe and positive movement and exploration.
- Provide adaptive equipment for infants with disabilities and access to safe play environments with nondisabled peers.
- Develop a schedule for regular inspections of equipment and play areas.
- Store televisions, videos, electronic games and other sedentary equipment out of sight.

Resources

Active Start: A Statement of Physical Activity Guidelines for Children Birth to Age 5, National Association for Sport and Physical Education, 2009: http://www.aahperd.org/naspe/standards/nationalGuidelines/ActiveStart.cfm

Best Practices for Physical Activity: A Guide to Help Children Grow Up Healthy, Nemours Foundation, 2009: http://www.nemours.org

Best Practice Guidelines for Physical Activity at Child Care, Pediatrics, 124(6), 2009: http://pediatrics.aappublications.org/cgi/reprint/124/6/1650

Caring for Our Children: National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care, 2nd Edition, American Academy of Pediatrics, American Public Health Association and National Resource Center for Health and Safety in Child Care and Early Education, 2002: http://nrc.uchsc.edu/CFOC/

NAP SACC Best Practice Recommendations for Child Care Facilities, Center for Health Promotion and Disease Prevention, The University of North Carolina at Chapel Hill, 2007: http://www.whrv.org/NR/rdonlyres/4C89B06B-4ED9-4315-99B3-4B0D7A3F0E0C/10128/NAPSACCBestPracticeRecommendationsforChildCareFaci.pdf

For additional resources, see *Guidelines and Standards* and *Physical Activity Policies* in section 10.

STANDARDS-BASED PHYSICAL EDUCATION

Policy Recommendations

- The child care program provides standards-based physical education for children at least once per week, using national or state-developed standards, such as the CSDE's *Healthy and Balanced Living Curriculum Framework,* the CSDE's *Connecticut Preschool Assessment Framework* and guidelines from the National Association for Sport and Physical Education and the U.S. Department of Health and Human Services.
- Physical education complements health education by reinforcing the knowledge and self-management skills needed to maintain a physically active lifestyle and to reduce time spent on sedentary activities, such as watching television and playing video games.
- Children with disabilities have appropriate physical education opportunities and participate with nondisabled peers.

SMART STEPS

Provide physical education for children through a standardized curriculum at least once per week.

Rationale

Physical education plays a critical role in helping children learn necessary skills and develop confidence in their physical abilities. Child care programs can help children become more physically active and fit by providing a wide range of developmentally appropriate and safe opportunities to be active. Standards-based physical education helps child care programs provide children with developmentally appropriate learning experiences. Appropriate practices guided by competent, knowledgeable and supportive adults influence the extent to which children choose to engage in activities, enjoy physical activity and develop healthy lifestyles.

Implementation Strategies

- Provide regular physical activity opportunities for children based on recognized standards, e.g., the CSDE's *Healthy and Balanced Living Curriculum Framework* and *Connecticut Preschool Curriculum Framework.*

- Provide physical education for children through a standardized curriculum at least once per week.
- Provide appropriate accommodations for children with disabilities based on the curriculum standards for all children.
- Plan opportunities for children to engage in a wide variety of gross-motor activities that are child selected and teacher initiated.
- Provide education about active play in language families can understand through a variety of methods, such as workshops, family events, newsletters and the program's Web site. For more information, see the *Stay Active Physical Activity Tips* (birth to 12 months, ages 1 to 2, ages 3 to 5 and ages 6 and older) in The Nemours Foundation's *Best Practices for Physical Activity: A Guide to Help Children Grow Up Healthy*.
- Provide positive messages about safe and developmentally appropriate physical activity throughout the child care environment, e.g., posters, pictures and books about physical activity.

Resources

A Guide to Early Childhood Program Development, CSDE, 2007:
http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Early/early_childhood_guide.pdf

Best Practices for Physical Activity: A Guide to Help Children Grow Up Healthy, The Nemours Foundation, 2009:
http://www.nemours.org

Connecticut Preschool Assessment Framework, CSDE, 2008:
http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Early/Preschool_Assessment_Framework.pdf

Connecticut Preschool Curriculum Framework, CSDE, 2006:
http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Early/Preschool_framework.pdf

Healthy and Balanced Living Curriculum Framework, CSDE, 2006:
http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Student/Healthy&BalancedLiving.pdf

For additional resources, see *Guidelines and Standards, Programs to Promote Physical Activity* and *Evaluating Physical Education* in section 10.

CONNECTING WITH PLANNED LEARNING EXPERIENCES

Policy Recommendations

- Opportunities for physical activity and active play are incorporated into planned learning experiences outside physical education, such as language and literacy development, mathematics, science and music.
- Teachers provide short physical activity breaks between learning activities, as appropriate.
- Physical activity is integrated into daily routines whenever possible, such as transition time.
- As age appropriate, physical activity is used as reinforcement, reward and celebration for group achievement.
- Afterschool programs integrate physical activity throughout the learning environment.

Rationale

Children who are physically active learn better. Daily classroom physical activity breaks improve children's on-task behavior.[73,74] Children's fitness levels are correlated with academic achievement, including improved math, reading and writing scores.[12-18]

For children to receive the recommended amount of daily physical activity and to fully embrace regular physical activity as a personal behavior, ongoing opportunities for daily physical activity must be provided. Child care programs can easily incorporate physical activity into planned learning activities and routines or as an energizing break.

Implementation Strategies

- Provide fun, engaging physical activity in planned daily learning experiences for all content areas.
- As age appropriate, use physical activity to reinforce, reward and celebrate group achievements, positive behavior and completion of tasks.
- Ensure that children are not excluded from physical activity if they do not achieve tasks or complete assignments. For more information, see *Physical Activity and Punishment* in this section.
- Establish routines for safely managing physical activity and behavior in classroom spaces.
- Provide short physical activity breaks between learning activities to invigorate children and eliminate long periods of sitting.
- Incorporate physical activity into transition time.
- Provide staff members with resources on integrating physical activity throughout the curriculum.
- Train staff members on the use of adaptive strategies and equipment in the classroom environment for children with disabilities.

Resources

ABC for Fitness (Activity Bursts in the Classroom), Yale University School of Medicine, 2008: http://www.davidkatzmd.com/abcforfitness.aspx

Active Academics: http://www.activeacademics.org/

Energizers, North Carolina Department of Instruction: http://www.ncpe4me.com/energizers.html

I am Moving, I am Learning — A Proactive Approach for Addressing Childhood Obesity in Head Start Children, U.S. Department of Health and Human Services, Office of Head Start: http://eclkc.ohs.acf.hhs.gov/hslc/ecdh/Health/Nutrition/Nutrition%20Program%20Staff/IMIL/IamMovingIam.htm

Mind and Body: Activities for the Elementary Classroom, Montana Office of Public Instruction: http://www.schoolnutritionandfitness.com/data/pdf/TeacherPDFs/MindBody.pdf

For resources on incorporating physical activity into afterschool programs, see *Resources* under *Connecting with Planned Learning Experiences* in section 6. For more information, see *Classroom-Based Physical Activity* in section 10.

SCREEN TIME

Policy Recommendations

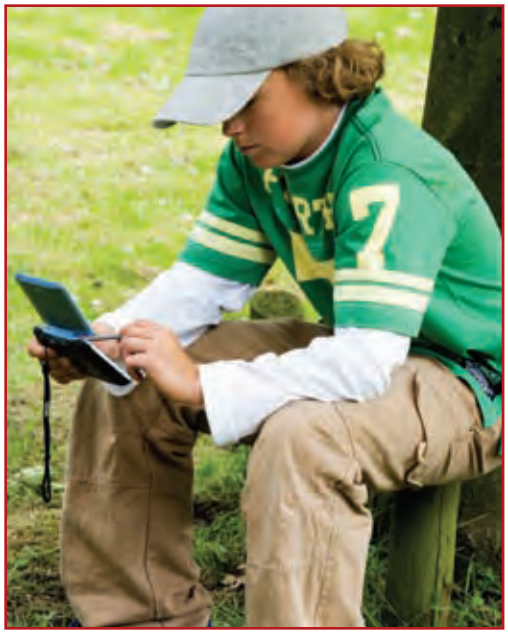
- In accordance with the American Academy of Pediatrics recommendations, the child care program does not permit screen time (e.g., television, movies, video games and computers) for infants and children younger than 2.
- For children ages 2 and older, screen time is limited to less than one hour per day and consists only of quality educational activities that are connected to learning goals and standards or programs that actively engage child movement.
- The child care program does not allow screen time during meals or snacks.

SMART STEPS

No screen time for infants and children younger than 2. Limit daily screen time to less than one hour for ages 2 and older.

Rationale

The AAP recommends no screen time for children younger than 2 and less than two hours per day for children ages 2 and older.[75, 76] Since most children get additional screen time at home, limiting screen time in child care to less than one hour will help meet the AAP recommendation.



While most children ages 3 to 6 meet the AAP guidelines, 70 percent of children ages 2 and younger do not.[77] Furthermore, children's screen time and engagement in other sedentary activities increase as children get older. A recent study from the Kaiser Family Foundation found that children ages 8 to 18 devote an average of seven hours and 38 minutes to using recreational entertainment media each day (i.e., watching television and movies; playing video games; listening to music; using computers; and reading newspapers, magazines and books), not including computer use or reading for school work.[78]

Before age 3, television viewing can harm children's cognitive development.[79] Research shows that for children ages 8 to 16 months, every hour of viewing baby DVDs or videos was associated with six to eight fewer words learned compared to those who did not watch.[80] The AAP discourages television viewing for children younger than 2 and encourages interactive activities that promote brain development, such as talking, singing, playing and reading together.[76] Because children watch television before and after child care, limiting screen time in child care will help meet the AAP recommendation.

Screen time increases children's sedentary activity. Extensive screen time is associated with childhood obesity, poor academic performance and developmental delays.[74] Studies indicate that television viewing of more than two hours per day contributes to greater rates of obesity in preschoolers and school-age children.[81-83] For each one hour increment of television viewing, 3-year-olds consumed more sugar-sweetened beverages, fast food and calories, and less fruit, vegetables, calcium and fiber.[84] Research has also shown links between extensive screen time and violent and aggressive behavior, substance abuse, sexual activity and poor body image.[77] Reducing screen time is important in providing an environment that encourages children to develop lifelong healthy habits.

Screen time may be even more prevalent in family day care homes. A recent study indicates that preschool children in home-based child care programs are exposed to significantly more television on an average day (2.4 hours) than are children in center-based programs (0.4 hours).[85] Toddlers in family day care homes watched 1.6 hours of television while those in centers watched 0.1 hours.

Implementation Strategies

- Eliminate screen time for children younger than 2.
- Limit screen time to less than one hour per day for children ages 2 and older. Ensure that screen time is used only for quality educational activities that are connected to learning goals and standards or programs that actively engage child movement.
- Do not use screen time to reward children.
- Require parental permission for any screen time.
- Educate families in language they can understand about the importance of limiting screen time for children at home.

Resources

Center on Media and Children's Health, Children's Hospital Boston, Harvard Medical School and Harvard School of Public Health: http://www.cmch.tv/

Help Children Reduce Screen Time, U.S. Department of Health and Human Services: http://www.nhlbi.nih.gov/health/public/heart/obesity/wecan/downloads/tip_screen_time.pdf

How Much Inactive Time Is Too Much?, MyPyramid for Preschoolers, USDA: http://www.mypyramid.gov/preschoolers/PhysicalActivity/inactivetime.html

Reduce Screen Time Tools and Resources, U.S. Department of Health and Human Services: http://www.nhlbi.nih.gov/health/public/heart/obesity/wecan/tools-resources/tools-reduce-screen-time.htm

For more information, see *Reducing Screen Time* in section 10.

PHYSICAL ACTIVITY AND PUNISHMENT

Policy Recommendations

- Staff members do not withhold opportunities for physical activity (e.g., not being permitted to play with the rest of the class or being kept from play time), except when a child's behavior is dangerous to himself or others.
- Staff members never use physical activity or exercise as punishment, e.g., doing push-ups or running laps.
- Play time or other opportunities for physical activity are never withheld as a measure to enforce the completion of learning activities or academic work.
- The child care program uses appropriate alternate strategies as consequences for negative or undesirable behaviors.

SMART STEPS

Teach staff members educationally sound strategies for positive behavior management.

Rationale

The NASPE emphasizes that administering or withholding physical activity as punishment is inappropriate and constitutes an unsound educational practice.[86] Children need to encounter positive physical activity experiences to become active adults. One of the prime goals of opportunities to engage in physical activity is to provide children with positive experiences that will motivate them to pursue and develop active lifestyles. The practice of using physical activity as punishment develops children's attitudes that are contrary to this goal. Teachers do not punish children with reading and then expect them to develop a love of reading. Neither should teachers punish with exercise and expect children to develop a love of physical activity. To promote and support children's enjoyment of physical activity, child care programs must ensure that opportunities for active play are never withheld and exercise is never used as punishment.

Implementation Strategies

- Prohibit staff members from restricting active play time as a consequence for misbehavior (except when a child's behavior is dangerous to himself or others) or using physical activity as punishment.
- Develop purposeful, educationally sound strategies that provide teachers and other program personnel with appropriate actions and measures that are consistent with the child care program's philosophy to positively reinforce behaviors and messages while discouraging undesirable behaviors.
- Provide training for staff members on positive behavior management for children and implementation of age-appropriate physical activity.
- Educate families in language they can understand about the importance of daily physical activity and the negative consequences of using physical activity as punishment or withholding physical activity. For more information, see *Engaging Families* in section 8.

Resources

Center on the Social and Emotional Foundations for Early Learning, Vanderbilt University: http://www.vanderbilt.edu/csefel/

Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth through Age 8, NAEYC, 2009: http://www.naeyc.org/store/node/162

Physical Activity Used as Punishment and/or Behavior Management (NASPE Position Statement), National Association for Sport and Physical Education, 2009: http://www.aahperd.org/naspe/standards/upload/Physical-Activity-as-Punishment-to-Board-12-10.pdf

For additional resources, see *Behavior Management* in section 10.

8 — COMMUNICATION AND PROMOTION

POLICY COMPONENT
COMMUNICATION AND PROMOTION

POLICY AREAS

This section addresses best practices for communicating and promoting healthy messages in the child care environment including policy recommendations, rationale, implementation strategies and resources for the following five policy areas:

- Health Advisory Team
- Consistent Health Messages
- Promoting Healthy Foods
- Engaging Families
- Partnering with Community Organizations

In all communication efforts, child care programs should provide multilingual signage and materials as appropriate to the languages of the local childcare community. Messages should be culturally relevant and reflect the importance of good nutrition and healthy eating and physical activity habits.

HEALTH ADVISORY TEAM

Policy Recommendations

- The child care program maintains a health advisory team for the planning, operation and evaluation of the program's health services component, including nutrition and physical activity.
- Membership includes parents, governing board members, program administrators, teachers, staff members, food service personnel, program consultants, community members and other individuals as appropriate to local needs.

Rationale

The health advisory team plays an important role in developing, implementing and evaluating the child care program's health services component, while providing representative input from the child care community. The health advisory team is better able to accomplish its

The CSDE recognizes that not all child care programs will have the capacity or resources to assemble a health advisory team. The CSDE encourages these programs to move forward with policy development nonetheless, soliciting input from parents and staff members as needed.

goals when it includes individuals representing the child care program, families and the community, as appropriate to local needs.

The child care program determines team membership and function based on local needs and priorities. Depending on the specific functions and tasks of the health advisory team, it may not be appropriate for all team members to be involved. For example, due to confidentiality issues, community representatives would not be involved with reviewing children's records or observing staff members and children.

SMART STEPS

Involve parents, staff members and other appropriate individuals in developing and implementing program policies and practices.

Implementation Strategies

- Identify a health advisory team representing the child care program, families and the community. Team members can include parents, governing board members, program administrators, teachers, food service personnel, program consultants (e.g., registered dietitian consultant, health consultant and early childhood education consultant), community members and other members as appropriate to local needs. This team can be developed at either the local or community level, based on the child care program's needs and resources. For more information, see *Step 1 — Identify Policy Development Team* in section 3.
- Develop a schedule for regular health advisory team meetings.
- Identify and prioritize tasks for the health advisory team, such as developing policy language; developing guidance to clarify, support and promote policy implementation; monitoring implementation; evaluating progress; and revising policy as necessary.
- Develop an action plan for health advisory team activities based on local needs and priorities, including recommended strategies and steps, who is responsible and completion dates for each task. For more information on developing action plans, see *Assessment* and *Developing and Implementing Policies* in section 10.

Resources

For resources on health advisory teams, see *Step 4 — Prioritize Needs and Develop an Action Plan* in section 3 and *Health Advisory Teams* in section 10.

CONSISTENT HEALTH MESSAGES

Policy Recommendations

- The child care program actively promotes positive, motivating verbal and nonverbal messages about healthy eating and physical activity throughout the child care environment. All staff members help reinforce these positive messages.
- To be consistent with healthy eating messages, all foods and beverages available on site meet the Connecticut Child Care Nutrition Standards.
- Staff members do not use practices that contradict messages to promote and enjoy physical activity, such as withholding play time or using physical activity as punishment.

SMART STEPS

Regularly observe program practices for consistency of nutrition and physical activity messages.

Rationale

In a healthy child care environment, nutritious food choices and physical activity are regularly available for children, and staff members provide daily reinforcement of positive health messages. Consistently promoting healthy eating and physical activity messages in the child care environment reinforces the child care program's commitment to children's health. It also helps staff members to serve as role models for healthy lifestyles. For more information, see *Modeling Healthy Behaviors* in section 5.

Children cannot learn the importance of healthy behaviors if the child care program implements contradictory practices. When all foods and beverages meet the CCCNS, the child care program provides the healthiest choices for children and a consistent message about the importance of good nutrition. When physical activity is promoted as a positive aspect of the daily routine, the child care program provides consistent messages about enjoying physical activity.

To ensure consistency, nonverbal messages in the child care environment — such as posters, pictures, books, puzzles, food containers in play areas, videos and games — cannot contradict healthy eating and physical activity messages. Child care programs should consider what nonverbal messages in the child care environment tell children about the value of certain foods or eating practices and physical activity. Do they adequately depict nutritious foods such as fruits, vegetables and whole grains? Or do they promote unhealthy eating, such as counting with candy or pictures of unhealthy foods? Does the kitchen play area include toy foods from all food groups of MyPyramid or just fast foods and cookie boxes? Do books and posters picture children playing outdoors and wearing helmets while riding bikes or sitting in front of the television?

Child care programs play an important role in encouraging children to enjoy regular physical activity. The practice of using physical activity as punishment develops children's attitudes that are contrary to this goal. For more information, see *Physical Activity and Punishment* in section 7.

Implementation Strategies

- Observe the child care environment (such as posters, pictures, books, puzzles, food containers in play areas, videos and games) for nonverbal messages that contradict healthy eating and physical activity, e.g., counting with candy, pictures of unhealthy foods or unsafe physical activity practices and posters that show only inactive children.
- Provide books, posters and other materials that depict healthy foods and enjoyment of safe and developmentally appropriate physical activity.
- Review educational materials, handouts and resources for corporate logos or advertising. These materials contain commercial messages and expose children to product marketing. They are not appropriate in the child care setting. For more information, see *Promoting Healthy Foods* in this section and *Appropriateness of Nutrition Education Materials* in section 6.
- Review policies regarding nutrition standards for foods and beverages allowed at meetings and events on site to ensure consistency throughout the child care environment. For more information, see *Other Foods and Beverages* in section 4 and the CCCNS in appendix C.

- Observe staff members' practices regarding foods and beverages consumed in front of children. If necessary, revise policies to specify that staff members cannot consume unhealthy foods and beverages in front of children. For more information, see *Modeling Healthy Behaviors* in section 5.
- Feature regular messages about healthy eating and physical activity in the child care program's communication materials, e.g., newsletters, memos, e-mails, announcements, bulletin board, program Web site, communications folders and CACFP menus.
- For school-based centers and afterschool programs, work with school and student organizations (e.g., student council, PTA/PTO and other parent volunteers or organizations) to develop promotional materials and activities that include consistent nutrition and physical activity messages.
- Conduct special nutrition and physical activity promotions and events that involve the entire child care program. For more information, see *Nutrition Promotion* in section 6.

- Provide appropriate orientation to relevant program policies for guest speakers and performers invited to address children.
- Provide nutrition and physical activity information and resources at registration, parent meetings, open houses, health fairs and professional development for staff members.
- Provide materials in child care and the community that promote healthy eating and physical activity, e.g., program Web site, offices of local health providers, school-based health centers and afterschool programs.
- Provide healthy meal and snack ideas to families in language they can understand.
- Designate individuals who are responsible for communicating health messages to families, e.g., registered dietitian consultant, health consultant and teachers.

Resources

For resources on providing consistent health messages, see *Nutrition Handouts, Nutrition Promotions* and *Resources for Families* in section 10.

PROMOTING HEALTHY FOODS

Policy Recommendations

- The child care program promotes healthy food choices that meet the CACFP requirements, the Dietary Guidelines for Americans and the Connecticut Child Care Nutrition Standards.
- The child care program does not allow advertising or messages that promote less nutritious food and beverage choices. Food promotions and messages are consistent with nutrition education and health promotion, and emphasize nutrient-rich foods such as fruits, vegetables, whole grains and low-fat dairy products.

SMART STEPS

Messages in the child care environment consistently promote nutrient-rich foods such as fruits, vegetables, whole grains and low-fat dairy products.

Rationale

Marketing materials in the child care environment should support the concepts and practices in the child care program's nutrition and physical activity policies. Marketing targeted to children contributes to their choices about foods, beverages and physical activity. Many marketing techniques target the promotion of foods with little nutritional value, i.e., foods that are high in calories from fat and sugars with relatively few, if any, vitamins, minerals and other important nutrients. To promote healthy food choices and consistent messages for children, child care programs should not allow advertising that promotes less nutritious food and beverage choices. For more information, see *Rationale for Healthy Foods and Beverages in Child Care* in section 4.

Implementation Strategies

- Regularly introduce new food items for meals and snacks, e.g., highlight new recipes on the menu and feature a new item each month.
- Reinforce the food service department's role in a healthy child care environment by collaborating on special activities and events, e.g., connecting menus to nutrition education activities.
- Conduct food promotions, food tasting and cooking activities, as developmentally appropriate, that expose children to a variety of new healthy foods. Review all activities for compliance with the child care program's nutrition education standards and the CCCNS (see appendix C). For more information, see sections 4 and 6.
- Eliminate incentive programs that provide children with food as a reward. For more information, see *Food Rewards and Punishments* in section 5.
- Do not allow free samples or coupons for foods and beverages of low-nutrient density.
- If fundraisers are used, sell only nonfood items or healthy foods, e.g., fruit. For more information, see *Fundraising* in section 4.
- Do not allow books, curricula, school supplies and other items containing logos and brand names of foods and beverages with little nutritional value. For more information, see *Appropriateness of Nutrition Materials* in section 6.

Resources

For more information, see *CACFP Menus* and *Nutrition Promotions* in section 10.

ENGAGING FAMILIES

Policy Recommendations

- The child care program encourages family involvement to support and promote children's healthy eating and physical activity habits.
- The child care program provides families with education and resources on nutrition and physical activity in language they can understand. Nutrition education is provided for parents at least twice a year.
- The child care program supports families' efforts to provide a healthy diet and daily physical activity for their children through effective two-way communication strategies that share information from the child care program to home and from home to the child care program.
- The child care program communicates in ways that respect families' cultures and customs.

SMART STEPS

Provide information and education for families on nutrition and physical activity at least twice a year.

Rationale and Implementation Guidance

Families have a significant influence on helping their children develop healthy eating and physical activity habits. They can also be effective allies in promoting support for the child care program's nutrition and physical activity policies and practices. It is important for child care programs to communicate in ways that respect families' cultures and customs and promote their participation in health-related activities in child care and at home. Child care programs should provide multilingual signage and materials as appropriate to the languages of the local community. Messages should be culturally relevant and reflect the importance of good nutrition and healthy eating and physical activity habits.

To support the child care program's efforts, families need to understand — and help communicate to other families — the nutrition and physical activity issues that affect their children's health. Families can ensure that healthy meals are served at home and brought to child care. They can encourage healthy eating and regular physical activity for their children. Child care programs can provide information that encourages families to teach their children about health and nutrition, serve nutritious meals, participate in regular physical activity and limit screen time.

The *National Health and Safety Performance Standards* specify that nutrition information and education programs for parents should be conducted at least twice a year.[38] They also indicate that child care programs should seek parent input at least twice a year regarding the strengths and needs of the facility. Head Start regulations specify that parent education activities must include opportunities to assist families with food preparation and nutrition skills.[39]

Implementation Strategies

- Orient families to the program's nutrition and physical activity policies during enrollment.
- Encourage regular family involvement in the child care program's nutrition and physical activity efforts. Request families' input on nutrition and physical activity issues through surveys, forums, focus groups, committees, organizations and other means.

- Recruit parents to serve on the child care program's health advisory team. For more information, see *Health Advisory Team* in this section and *Step 1 — Identify Policy Development Team* in section 3.
- Provide nutrition education opportunities for families at least twice a year, e.g., workshops and cooking demonstrations.
- Encourage parents to plan, promote and conduct nutrition education activities and events in collaboration with program staff members.
- Provide health resources for families, such as a book of health-related community supports or a resource library with current materials and information on health and wellness in language families can understand.
- Provide information on nutrition and physical activity in language families can understand, e.g., providing healthy eating seminars, sending home nutrition information, postings on program Web site, providing handouts and resources, including articles in program newsletters and any other appropriate methods for reaching families.
- Provide a tear-off form at the bottom of newsletters, handouts and other informational materials that parents can use to submit questions or concerns about specific issues.
- Send menus and nutrition information home with children.
- Offer nutrition education and physical activities at family nights and other program events.
- Include home activities on nutrition and physical activity, as developmentally appropriate, e.g., creating a healthy snack or meal, going grocery shopping and planning active family games.
- Provide guidance for families on sending healthy snacks and meals from home and avoiding foods and beverages that do not meet the CCCNS. Provide families with a list of foods that meet the CCCNS (see appendix C), ideas for packing healthy meals and snacks, and providing healthy celebrations (see appendix F). For more information, see *Parent-Provided Meals and Snacks* in section 4.
- Invite parents and family members to eat with their children in the child care setting.
- Provide opportunities for families to share culturally diverse eating practices and traditions with others in the child care community, e.g., ask families to submit healthy snack recipes that can be regularly incorporated into program cooking activities.
- Provide developmentally appropriate opportunities for physical activity that involve the whole family, e.g., family sports night, dances, games that involve physical activity and walk-a-thons.
- Support families' efforts to provide their children with opportunities to be physically active outside child care, e.g., promoting community opportunities for physical activity, special events and physical activity challenges, and sharing information about physical activity through the program Web site, newsletter or other take-home materials.

Resources

Bright Futures Nutrition Family Fact Sheets, National Center for Education in Maternal and Child Health, 2002: http://www.brightfutures.org/nutritionfamfact/index.html

Core Nutrition Messages, USDA, 2009: http://www.fns.usda.gov/fns/corenutritionmessages/Messages.htm

Fit Source, National Child Care Information and Technical Assistance Center, U.S. Department of Health and Human Services: http://nccic.acf.hhs.gov/fitsource/ (click on "For Parents")

Helping Youth Make Better Food Choices, Action for Healthy Kids, 2009: http://www.actionforhealthykids.org/resources/files/boardafhkfoodchoicechallenges.pdf

Lunch Box Handouts, University of California Cooperative Extension, San Luis Obispo County, 2007: http://cesanluisobispo.ucdavis.edu/Nutrition,_Family_and_Consumer_Science208/Lunch_Box_Handouts.htm

Maximizing the Message: Helping Moms and Kids Make Healthier Food Choices, USDA, 2008: http://www.fns.usda.gov/fns/corenutritionmessages/Files/Guidebook.pdf

Mealtime Memo for Child Care, National Food Service Management Institute: http://www.olemiss.edu/depts/nfsmi/Information/Newsletters/Mealtime_memo_index.html

MyPyramid for Kids (6–11), USDA: http://www.mypyramid.gov/kids/index.html

MyPyramid for Preschoolers, USDA: http://www.mypyramid.gov/pyramid/grains.html

Nibbles for Health: Nutrition Newsletters for Parents of Young Children, USDA, March 2003: http://www.fns.usda.gov/tn/Resources/nibbles.html

Stay Active Physical Activity Tips (Birth to 12 months, Ages 1 to 2, Ages 3 to 5, Ages 6 and older) in *Best Practices for Physical Activity: A Guide to Help Children Grow Up Healthy,* The Nemours Foundation, 2009: http://www.nemours.org/content/dam/nemours/www/filebox/service/preventive/nhps/paguidelines.pdf

Ten Tips Nutrition Education Series, USDA, 2009: http://www.mypyramid.gov/tips_resources/tentips.html

For more resources on providing information to families, see *Engaging Families, Nutrition Handouts* and *Resources for Families* in section 10.

PARTNERING WITH COMMUNITY ORGANIZATIONS

Policy Recommendations

- The child care program partners with the community to provide consistent health messages and support activities that promote healthy eating and physical activity.

Rationale

Child care programs can enhance limited resources and more effectively promote consistent health messages to children and families by partnering with community organizations, e.g., nonprofit health organizations, local businesses, faith-based organizations, libraries, local health departments, local colleges and their students and local heath care providers. Partnerships with community organizations can include a variety of activities related to nutrition, physical activity and wellness, such as health initiatives and resources, nutrition workshops, health fairs, health screenings and physical activity challenges.

SMART STEPS

Seek partnerships with community organizations to promote nutrition and physical activity for children.

Implementation Strategies

- Identify potential partners as appropriate to local needs and identify activities or programs that can be addressed by community collaborations (see *Potential Community Partners* below).
- Participate in community-based nutrition and physical activity campaigns sponsored by public health agencies or organizations, e.g., the *Fruits & Veggies More Matters* campaign.
- Participate in physical activity fundraisers, as developmentally appropriate, that teach children about health issues, e.g., the American Heart Association's *Jump Rope for Heart* and *Hoops for Heart* and the American Diabetes Association's *School Walk for Diabetes.*
- Ask community partners for education materials that are appropriate to the child care program's nutrition and physical activity efforts.
- Enlist community partners, as appropriate, to help provide professional development for staff members in nutrition and physical activity.

POTENTIAL COMMUNITY PARTNERS

- Nonprofit health organizations, e.g., American Cancer Society and American Heart Association
- Expanded Food and Nutrition Education Program (EFNEP) and Cooperative Extension
- YMCA and YWCA
- Boy Scouts and Girl Scouts
- Boys and Girls Clubs, 4-H clubs
- Local civic organizations, e.g., Kiwanis, Lions and Rotary Club
- Faith-based groups
- School Readiness Councils
- Local early care and education councils and organizations
- School districts and groups, e.g., school wellness team, Family Resource Centers, health and physical education teachers, health services staff members and high school clubs
- Town park and recreation programs
- Youth sports leagues
- Libraries
- Local hospitals, clinics and medical professionals
- Local health organizations and coalitions
- Local businesses
- Physical fitness programs for children with disabilities, e.g., Unified Sports and Special Olympics
- Local universities and colleges and their students
- Local health departments and districts
- Social service agencies, e.g., local United Way and local Youth and Family Services office
- Public service departments, e.g., fire, police and emergency medical services

- Work with community programs to promote resources for families, such as food banks, the Supplemental Nutrition Assistance Program (SNAP) and the Special Supplemental Nutrition Program for Women, Infants and Children (WIC).
- Work with local hospitals to provide wellness programs for children, families and staff members.
- Partner with the local school district's wellness team to collaborate on school-based health initiatives.
- Invite students from local universities or colleges with nutrition and physical education programs to conduct nutrition and physical activity initiatives.

Resources

Fruits & Veggies More Matters, Produce for Better Health Foundation:
http://www.fruitsandveggiesmorematters.org

Hoops for Heart, American Heart Association:
http://www.americanheart.org/presenter.jhtml?identifier=2441

Jump Rope for Heart, American Heart Association:
http://www.americanheart.org/presenter.jhtml?identifier=2360

School Walk for Diabetes, American Diabetes Association: http://schoolwalk.diabetes.org

For more resources to assist with community-based initiatives, see *Partnering with Community Organizations* in section 10.

9 — EVALUATION

POLICY COMPONENT EVALUATION

POLICY AREAS

This section addresses best practices for evaluation in the child care environment including policy recommendations, rationale, implementation strategies and resources for the following two policy areas:

- Monitoring
- Policy Review

MONITORING

Policy Recommendations

- The child care program develops a plan to evaluate the implementation of nutrition and physical activity policies and practices. The plan:
  - addresses how policy impact will be evaluated, including changes to staff members' practices and children's behavior; and
  - designates who is responsible for ensuring policy compliance, such as the health advisory team or program administrator.
- In facilities with multiple sites, the child care program designates an individual at each site who ensures compliance with program policies and reports on the site's compliance to the health advisory team, program administrator or designee.

SMART STEPS

Develop a plan to evaluate whether policies and practices are being implemented and working as intended.

Rationale

For policies to be successful, the child care program must establish a plan to evaluate implementation and sustain local efforts. This includes feedback and documentation based on relevant local data. Evaluation is critically important because it helps to:

- develop well-designed policies and programs;
- ensure accountability to funding agencies; and
- make incremental improvements in policies, practices and programs on a continuous basis.

Child care programs can use or build upon existing evaluation efforts, such as the Head Start Annual Self-Assessment, Connecticut School Readiness Program Preschool Program Evaluation System (CSRPPES), Early Childhood Environmental Rating Scale (ECERS) and requirements for accreditation or reaccreditation (e.g., NAEYC and NAFCC). Head Start regulations specify that parents and appropriate community agencies are involved in planning, implementing and evaluating nutrition services.[39] State licensing regulations require that licensed child care centers conduct an annual review of all policies.[37] This provides a good opportunity for child care programs to evaluate their current policies and practices and determine whether any changes are needed.

Implementation Strategies

- Develop procedures and a schedule for monitoring the implementation of policy areas and share with all staff members.
- Regularly observe staff members to determine if routine practices are consistent with policy requirements.
- Provide regular training and guidance for staff members on implementing the policy requirements.
- Identify evaluation methods that address the specific areas addressed by the child care program's policies.
- Assess relevant changes in nutrition and physical activity practices using a variety of methods, such as staff and parent surveys, observation of children's eating behaviors and data collection.
- Collect specific measurable information related to the child care program's policy statements. For example, the number of children and families reached with nutrition education activities, changes in the health curriculum, time spent by children in physical activity, percentage of meals and snacks that meet the CCCNS, number of staff and parent training sessions conducted, changes in children's behaviors (e.g., increased consumption of fruits and vegetables) and changes in children's health.
- Determine what changes occurred, such as the frequency of nutrition education for children, parents and staff members, time spent by children in daily physical activity and the nutritional quality of foods available to children, e.g., CACFP meals and snacks, celebrations and other foods and beverages available in child care.

It is important to note that the absence of changes in children's health does not necessarily indicate that policies or practices are unsuccessful. Changes in children's health (e.g., obesity, tooth decay, diabetes and iron-deficiency anemia) take time. It is difficult to evaluate the impact of policies on children's health outcomes because they are also influenced by what happens at home and outside child care.

- Identify whether activities and programs are implemented as planned and why or why not. Look at indicators that contrast actual and planned performance, such as family satisfaction surveys and observations of children's food choices.
- As appropriate, partner with local hospitals, universities, health departments, community organizations or agencies and other institutions for help with the evaluation process. Evaluations with outside providers must be conducted in a way that complies with all applicable state and federal confidentiality laws, such as the Family Education Rights and Privacy Act (FERPA).

Resources

Building Mealtime Environments and Relationships (BMER) — An Inventory for Feeding Young Children in Group Settings, University of Idaho, 2005: http://www.ag.uidaho.edu/feeding/buildingpdf.htm

Healthy Behaviors for Children and Families: Developing Exemplary Practices in Nutrition, Physical Activity and Food Security in Afterschool Programs, Center for Collaborative Solutions, 2008: http://www.afterschoolsolutions.org/documents/Nutrtion%20Guide

Nutrition and Physical Activity Self Assessment for Child Care (NAPSACC), Center for Health Promotion and Disease Prevention (HPDP), University of North Carolina at Chapel Hill, 2004: http://www.napsacc.org/ (download at http://www.center-trt.org/index.cfm?fa=opinterventions.agreement&intervention=napsacc)

Preschool Outdoor Environment Measurement Scale (POEMS), North Carolina State University: http://www.poemsnc.org/poems.html

Preschool Wellness Policy Evaluation Tool, Rudd Center for Food Policy and Obesity, Yale University, 2010: http://www.yaleruddcenter.org/what_we_do.aspx?id=165

Steps to Nutrition Success Checklist — Child Care Centers: A Program Self-assessment Resource, National Food Service Management Institute, 2003: http://www.nfsmi.org/documentlibraryfiles/PDF/20080222015036.pdf

Steps to Nutrition Success Checklist — Family Day Care Homes: A Program Self-assessment Resource, National Food Service Management Institute, 2003: http://www.nfsmi.org/documentlibraryfiles/PDF/20080222015216.pdf

In addition to the *Preschool Wellness Policy Evaluation Tool*, the Rudd Center for Food Policy and Obesity has developed several tools to evaluate nutrition and physical activity in the child care environment. These include a director survey, physical activity assessment, indoor environment assessment, meal observation and meal behavior assessment, policy coding tool and menu review tool. For more information, visit the Rudd Center Web site at http://www.yaleruddcenter.org/what_we_do.aspx?id=165. For additional resources on evaluation, see *Assessment* and *Evaluation* in section 10.

POLICY REVIEW

Policy Recommendations

- The child care program identifies a strategy and schedule to regularly review policy compliance, assess progress and determine areas in need of improvement. As part of that process, the child care program regularly reviews current nutrition and physical activity policies and observes program practices.
- The child care program determines whether policy revisions are needed based on local evaluation data, national and state standards, regulations and research on health trends and effective programs. As necessary, the child care program revises current policies and develops work plans to facilitate their implementation.

SMART STEPS

Regularly review program policies and practices to determine if changes are needed.

Rationale

The policy process is ongoing — it does not end with the development of the policy document. Policies that met the child care program's needs several years ago may no longer be relevant today. It is important for child care programs to regularly review policy compliance, assess progress and determine areas to improve. This includes ongoing review of current nutrition and physical activity policies and practices. The results of these local evaluation efforts often necessitate revisions to the current policy language. Policy revisions may be necessary to respond to:

- research and evidence on health trends and effective programs;
- national and state standards and guidelines regarding nutrition and physical activity;
- local data regarding children's eating and physical activity behaviors, health and achievement (for more information, see *Children's Health Data* in section 3);
- state and federal initiatives and legislation;
- local evaluation data regarding the effectiveness of policy implementation;
- changing program priorities; and
- other local, state and federal issues.

The review process provides a good opportunity to reprioritize program needs and develop an action plan for implementation. It also allows the child care program to communicate with staff members and

families about the policies and expected practices. State licensing regulations require that licensed child care centers must notify parents and staff members within five days of any policy changes.[37] For more information, see *Step 4 — Prioritize Needs and Develop an Action Plan* in section 3.

Implementation Strategies

- Observe nutrition and physical activity practices at least every six months to ensure they are consistent with the child care program's policies.
- Provide ongoing reinforcement of policy goals with staff members and families through meetings, trainings, newsletters and other methods. For more information, see *Professional Development* in section 6 and *Engaging Families* in section 8.
- Determine a periodic schedule for policy review that meets local needs, for example, every year. In accordance with state licensing regulations, licensed child care centers must evaluate policies annually.[37]
- Determine whether policy revisions are needed, based on local evaluation data and any changes to national and state standards, regulations, children's health data, children's eating behaviors and other issues.
- Use the results of policy self-evaluation tools, such as the Rudd Center for Food Policy and Obesity's *Preschool Wellness Policy Evaluation Tool*, to assist in identifying policy areas and practices to improve.
- Identify recommendations for policy revisions and obtain administrative approval.
- Communicate policy changes and rationale to staff members and families in language they can understand. Provide training for staff members and families on policy revisions, as needed.
- Develop a plan to implement, monitor and evaluate the revised policies.

Resources

The resources listed in the policy recommendations for *Monitoring* can also be used to review the child care program's policies and practices (see *Resources*). For additional resources on evaluation, see *Assessment* and *Evaluation* in section 10.

10 — RESOURCES

The resources indicated below are available on the CSDE's online resource lists, *Healthy School Environment Resources* (http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Nutrition/hse_resource_list.pdf) and *Nutrition-Related Resources* (http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Nutrition/nutrition_resources.pdf). The CSDE updates these lists regularly.

INTRODUCTION

Child and Adult Care Food Program (CACFP)
Nutrition-Related Resources: Click on *Resources for Child Nutrition Programs* then *Child and Adult Care Food Program*.

Child Care Policies to Promote Healthy Lifestyles
Nutrition-Related Resources: Click on *Child Care Policies to Promote Healthy Lifestyles*.

Health and Achievement
Healthy School Environment Resources: Click on *Health and Achievement*.

Data and Trends
Healthy School Environment Resources: Click on *School Policies to Promote Healthy Lifestyles* then *Data and Trends*.

Obesity Statistics
Healthy School Environment Resources: Click on *School Policies to Promote Healthy Lifestyles* then *Obesity Statistics*.

EIGHT STEPS FOR CREATING POLICY

Assessment
Healthy School Environment Resources: Click on *School Policies to Promote Healthy Lifestyles* then *Assessment*.

Child and Adult Care Food Program (CACFP)
Nutrition-Related Resources: Click on *Resources for Child Nutrition Programs* then *Child and Adult Care Food Program*.

Child Care Policies to Promote Healthy Lifestyles
Nutrition-Related Resources: Click on *Child Care Policies to Promote Healthy Lifestyles*.

Data and Trends
Healthy School Environment Resources: Click on *School Policies to Promote Healthy Lifestyles* then *Data and Trends*.

Developing and Implementing Policies
Healthy School Environment Resources: Click on *School Policies to Promote Healthy Lifestyles* then *Developing and Implementing Policies*.

Health Advisory Team
Healthy School Environment Resources: Click on *School Policies to Promote Healthy Lifestyles* then *School Health Teams*.

NUTRITION STANDARDS

CACFP Menus
Nutrition-Related Resources: Click on *Menus, Recipes and Nutrient Information*.

Celebrations
Healthy School Environment Resources: Click on *Food at School* then *Celebrations*.

Cultural Diversity
Nutrition-Related Resources: Click on *Cultural Diversity*.

Dietary Guidelines
Nutrition-Related Resources: Click on *General Nutrition and Health* then *Dietary Guidelines*.

Engaging Families
Healthy School Environment Resources: Click on *School Policies to Promote Healthy Lifestyles* then *Engaging Families*.

Feeding Infants
Nutrition-Related Resources: Click on *Nutrition for Young Children* then *Feeding Infants*.

Food Labels
Nutrition-Related Resources: Click on *General Nutrition and Health* then *Food Labels*.

Fruits and Vegetables
Nutrition-Related Resources: Click on *General Nutrition and Health* then *Fruits and Vegetables*.

Healthy Fundraisers
Healthy School Environment Resources: Click on *Food at School* then *Healthy Fundraisers and School Stores*.

Menu Planning and Recipes
Nutrition-Related Resources: Click on *Menus, Recipes and Nutrient Information* then *Menu Planning and Recipes*.

Nutrient Analysis
Nutrition-Related Resources: Click on *Menus, Recipes and Nutrient Information* then *Nutrient Analysis*.

Nutrition for Young Children
Nutrition-Related Resources: Click on *Nutrition for Young Children*.

Nutrition Handouts
Nutrition-Related Resources: Click on *Promoting Nutrition and Physical Activity* then *Handouts for Children, Parents and School Staff Members*.

Nutrition Policies
Nutrition-Related Resources: Click on *Child Care Policies to Promote Healthy Lifestyles*.

Nutrition Standards
Healthy School Environment Resources: Click on *Food at School* then *Nutrition Standards*.

Resources for Families
Nutrition-Related Resources: Click on *Nutrition for Young Children* then *Resources for Families*.

Special Diets
Nutrition-Related Resources: Click on *Special Diets*.

Whole Grains
Nutrition-Related Resources: Click on *General Nutrition and Health* then *Whole Grains*.

EATING ENVIRONMENT

Alternatives to Food Rewards
Healthy School Environment Resources: Click on *Food at School* then *Alternatives to Food Rewards*.

Behavior Management
Healthy School Environment Resources: Click on *Physical Activity and Physical Education* then *Behavior Management*.

Developing Healthy Eating Habits
Nutrition-Related Resources: Click on *Nutrition for Young Children* then *Developing Healthy Eating Habits*.

Feeding Infants
Nutrition-Related Resources: Click on *Nutrition for Young Children* then *Feeding Infants*.

Food Safety
Nutrition-Related Resources: Click on *Food Safety*.

Play Then Eat
Healthy School Environment Resources: Click on *Physical Activity and Physical Education* then *Recess*.

Qualifications of Food Service Personnel
Nutrition-Related Resources: Click on *Resources for Child Nutrition Programs* then *Qualifications of Food Service Personnel*.

Modeling Healthy Behaviors
Healthy School Environment Resources: Click on *School Policies to Promote Healthy Lifestyles* then *Modeling Healthy Behaviors.*

Staff Wellness
Healthy School Environment Resources: Click on *Resources for Child Nutrition Programs* then *Staff Wellness*.

Training for Food Service Personnel
Nutrition-Related Resources: Click on *Resources for Child Nutrition Programs* then *Training for Food Service Personnel*.

NUTRITION EDUCATION

Afterschool Programs
Nutrition-Related Resources: Click on *Resources for Child Nutrition Programs* then *Afterschool Snack Program*.

Cultural Diversity
Nutrition-Related Resources: Click on *Nutrition Education* then *Cultural Diversity*.

Curriculum Development
Healthy School Environment Resources: Click on *Nutrition Education* then *Curriculum Development*.

Dietary Guidelines
Nutrition-Related Resources: Click on *General Nutrition and Health* then *Dietary Guidelines*.

Evaluating Nutrition Education Materials
Healthy School Environment Resources: Click on *Nutrition Education* then *Evaluating Nutrition Education Materials.*

Integrating Nutrition
Healthy School Environment Resources: Click on *Nutrition Education* then *Connecting with Existing Curricula*.

Nutrition Education
Healthy School Environment Resources: Click on *Nutrition Education.*

Nutrition Handouts
Nutrition-Related Resources: Click on Promoting Nutrition and Physical Activity then Handouts for Children, Parents and School Staff Members.

Nutrition Promotions
Healthy School Environment Resources: Click on *Nutrition Education* then *Nutrition Promotions.*

Partnering with Community Organizations
Healthy School Environment Resources: Click on *School Policies to Promote Healthy Lifestyles* then *Partnering with Community Organizations*.

Training for Teachers and Staff Members
Healthy School Environment Resources: Click on *Nutrition Education* then *Training for Teachers and Staff*.

Training for Food Service Personnel
Nutrition-Related Resources: Click on *Resources for Child Nutrition Programs* then *Training for Food Service Personnel.*

PHYSICAL ACTIVITY

Behavior Management
Healthy School Environment Resources: Click on *Physical Activity and Physical Education* then *Behavior Management*.

Classroom-Based Physical Activity
Healthy School Environment Resources: Click on *Physical Activity and Physical Education* then *Classroom-Based Physical Activity*.

Evaluating Physical Education
Healthy School Environment Resources: Click on *Physical Activity and Physical Education* then *Evaluating Physical Education*.

Guidelines and Standards
Healthy School Environment Resources: Click on *Physical Activity and Physical Education* then *Guidelines and Standards*.

Physical Activity Before and After School
Healthy School Environment Resources: Click on *Physical Activity and Physical Education* then *Physical Activity Before and After School*.

Play Then Eat
Healthy School Environment Resources: Click on *Physical Activity and Physical Education* then *Recess*.

Physical Activity Policies
Nutrition-Related Resources: Click on *Child Care Policies to Promote Healthy Lifestyles*.

Programs to Promote Physical Activity
Healthy School Environment Resources: Click on *Physical Activity and Physical Education* then *Programs to Promote Physical Activity*.

Reducing Screen Time
Healthy School Environment Resources: Click on *Physical Activity and Physical Education* then *Reducing Screen Time*.

COMMUNICATION AND PROMOTION

Afterschool Programs
Nutrition-Related Resources: Click on *Resources for Child Nutrition Programs* then *Afterschool Snack Program*.

CACFP Menus
Nutrition-Related Resources: Click on *Menus, Recipes and Nutrient Information*.

Engaging Families
Healthy School Environment Resources: Click on *School Policies to Promote Healthy Lifestyles* then *Engaging Families.*

Engaging Children
Healthy School Environment Resources: Click on *School Policies to Promote Healthy Lifestyles* then *Engaging Students*.

Nutrition Handouts
Healthy School Environment Resources: Click on *Promoting Nutrition and Physical Activity* then *Handouts for Children, Parents and School Staff Members.*

Health Advisory Teams
Healthy School Environment Resources: Click on *School Policies to Promote Healthy Lifestyles* then *School Health Teams*.

Nutrition Promotions
Healthy School Environment Resources: Click on *Nutrition Education* then *Nutrition Promotions*.

Partnering with Community Organizations
Healthy School Environment Resources: Click on *School Policies to Promote Healthy Lifestyles* then *Partnering with Community Organizations*.

Resources for Families
Nutrition-Related Resources: Click on *Nutrition for Young Children* then *Resources for Families*.

EVALUATION

Assessment
Healthy School Environment Resources: Click on *School Policies to Promote Healthy Lifestyles* then *Assessment*.

Data and Trends
Healthy School Environment Resources: Click on *School Policies to Promote Healthy Lifestyles* then *Data and Trends*.

Evaluation
Healthy School Environment Resources: Click on *School Policies to Promote Healthy Lifestyles* then *Evaluation*.

REFERENCES

[1] Bruening, K.S., Gilbride, J.A., Passannante, M.R., & McClowry, S. (1999). Dietary intake and health outcomes among young children attending 2 urban day-care centers. *Journal of the American Dietetic Association*, 99(12):1529-1535.

[2] Bruening, K.S., Gilbride, J.A., & Passannante, M.R. (1997). The Child and Adult Care Food Program: Diet and three health outcomes in urban preschoolers attending day care. *Journal of the American Dietetic Association,* 97(9 Suppl.): A89.

[3] Association of State and Territorial Health Officials (ASTHO) and the Society of State Directors of Health, Physical Education and Recreation (SSDHPER). (2002). *Making the Connection: Health and Student Achievement*.

[4] Alaimo, K., Olson, C.M., & Frongillo, E.A. (2001). Food insufficiency and American school-aged children's cognitive, academic and psychosocial development. *Pediatrics,* 108(1):44-53.

[5] Murphy, J.M., Wehler, C.A., Pagano M.E., Little M., Kleinman R.E., & Jellinek, M.S. (1998). Relationship between hunger and psychosocial functioning in low-income American children. *Journal of American Academy of Child and Adolescent Psychiatry,* 37(2):163-170.

[6] Schwimmer, J.B., Burwinkle, T.M., & Varni, J.W. (2003). Health-related quality of life of severely obese children and adolescents. *Journal of the American Medical Association,* 289(14):1813-1819.

[7] Tershakovec, A.M., Weller, S.C., & Gallagher, P.R. (1994). Obesity, school performance, and behavior of black, urban elementary school children. *International Journal of Obesity,* 18(5):323-327.

[8] National Institute for Health Care Management (NIHCM) Foundation. (August 2004). *Obesity in young children: Impact and intervention.* [Research Brief]. Retrieved on March 10, 2010 from http://www.nihcm.org/~nihcmor/pdf/OYCbrief.pdf.

[9] Data A., Sturm, R., & Magnabosco, J.L. (2004). Childhood overweight and academic performance: National study of kindergartners and first-graders. *Obesity Research,* 12:58-68.

[10] Minnesota Department of Children, Families and Learning. (1998). *School Breakfast Programs: Energizing the Classroom.* St Paul, MN: Author.

[11] Murphy, J.M., Pagano, M.E., Nachmani, J., Sperling, P., Kane, S., & Kleinman, R.E.. (1998). The relationship of school breakfast to psychosocial and academic functioning: Cross-sectional and longitudinal observations in an inner-city school sample. *Archives of Pediatrics and Adolescent Medicine,* 152:899-907.

[12] Centers for Disease Control and Prevention. (n.d.). *Physical Inactivity & Unhealthy Weight Control Behaviors and Academic Achievement.* [Fact Sheet]. Retrieved on March 10, 2010 from http://www.cdc.gov/healthyyouth/health_and_academics/pdf/physical_inactivity_unhealthy_weight.pdf.

[13] Etnier, J.L., Salazaw, W., Landers, D.M., Petruzzello. S.J., Han, M., & Nowell, P. (1997). The influence of physical fitness and exercise upon cognitive functioning: A meta-analysis. *Journal of Sport and Exercise Physiology,* 19(3):249-277.

[14] California Department of Education. (2002). *State study proves physically fit kids perform better academically.* Sacramento, CA: Author

[15] New York City Department of Health and Mental Hygiene. (2009). Higher levels of fitness associated with better academic performance. *NYC Vital Signs,* 8(1):1-4. Retrieved on March 10, 2010 from http://www.nyc.gov/html/doh/downloads/pdf/survey/survey-2009fitnessgram.pdf.

[16] Symons, C.W., Cinelli, B., James, T.C., & Groff, P. (1997). Bridging student health risks and academic achievement through comprehensive school health programs. *Journal of School Health,* 67(6): 220-227.

[17] Shepard, R.J. (1997). Curricular physical activity and academic performance. *Pediatric Exercise Science,* 9:113-126.

[18] Robert Wood Johnson Foundation. (Summer 2009). *Active Education: Physical Education, Physical Activity and Academic Performance.* [Research Brief]. Retrieved on March 10, 2010 from http://www.rwjf.org/files/research/20090925alractiveeducation.pdf.

[19] Ogden, C.L., Carroll, M.D., Curtin, L.R., Lamb, M.M., & Flegal, K.M. (2010). Prevalence of high body mass index in US children and adolescents, 2007-2008, *Journal of the American Medical Association,* 303(3):242-249.

[20] Centers for Disease Control and Prevention, National Center for Health Statistics. (2006). *Prevalence of Overweight Among Children and Adolescents: United States, 2003-2004.* Retrieved on March 10, 2010 from http://www.cdc.gov/nchs/data/hestat/overweight/overwght_child_03.htm.

[21] Centers for Disease Control and Prevention. (July 24, 2009). Obesity prevalence among low-income, preschool-aged children — United States, 1998–2008. *Morbidity and Mortality Weekly Report,* 58(28):769-773.

[22] Serdula, M.K., Ivery, D., Coates, R.J., Freedman, D.S., Williamson, D.F., & Byers, T. (1993). Do obese children become obese adults? A review of the literature. *Preventive Medicine*, 22(2):167-177.

[23] Berenson, G.S., Srinivasan, S.R., Bao, W., Newman, W.P., Tracy, R.E., & Wattigney, W.A. (1998). Association between multiple cardiovascular risk factors and atherosclerosis in children and young adults. The Bogalusa Heart Study. *New England Journal of Medicine,* 338(23):1650-1656.

[24] U.S. Department of Agriculture Center for Nutrition Policy and Promotion. (2009). The quality of children's diets in 2003-04 as measured by the Healthy Eating Index – 2005. *Nutrition Insight,* 43. Retrieved on March 10, 2010 from http://www.cnpp.usda.gov/Publications/NutritionInsights/Insight43.pdf.

[25] Piernas, C., & Popkin, B.M. Trends in snacking among U.S. children. (2010). *Health Affairs,* 29(3):398-404.

[26] U.S. Department of Health and Human Services. (2008). *Physical Activity Guidelines for Americans.* Washington, DC: Office of Disease Prevention and Health Promotion.

[27] U.S. Department of Health and Human Services and U.S. Department of Agriculture. (2005). *Dietary Guidelines for Americans*, 2005, 6th Edition. Washington, DC: U.S. Government Printing Office.

[28] National Association for Sport and Physical Education. (2009). *Active Start: A Statement of Physical Activity Guidelines for Children Birth to Age 5,* 2nd edition. Reston, VA: Author.

[29] Taylor, R.W., Murdoch, L. Carter, P., Gerrard, D.F., Williams, S.M., & Taylor, B.J. (2009). Longitudinal study of physical activity and inactivity in preschoolers: The FLAME study. *Medicine & Science in Sports & Exercise,* 41(1): 96-102.

[30] Centers for Disease Control and Prevention. (June 6, 2008). Youth Risk Behavior Surveillance — United States, 2007. Surveillance Summaries. *Morbidity and Mortality Weekly Report,* 57(SS-4):1-131.

[31] Connecticut State Department of Education. (2008). Unpublished Data on the Connecticut Physical Fitness Assessment from the 2008-09 Strategic School Profiles. Hartford, CT: Author.

[32] Iruka, I.U., & Carver, P.R. (2006). *Initial Results from the 2005 NHES Early Childhood Program Participation Survey (NCES 2006-075).* U.S. Department of Education. Washington, DC: National Center for Education Statistics.

[33] U.S. Department of Health and Human Services. (2010). *The Surgeon General's Vision for a Healthy and Fit Nation.* Rockville, MD: U.S. Department of Health and Human Services, Office of the Surgeon General.

[34] National Association of State Boards of Education. (2000). *Fit, Healthy and Ready to Learn: A School Health Policy Guide. Part I: Physical Activity, Healthy Eating and Tobacco-Use Prevention.* Alexandria, VA: Author.

[35] U.S. Department of Agriculture. *The Local Process: How to Create and Implement a Local Wellness Policy*. Retrieved on March 10, 2010 from http://www.fns.usda.gov/tn/Healthy/wellnesspolicy_steps.html.

[36] Centers for Disease Control and Prevention. (2005). *School Health Index: A Self-Assessment and Planning Guide*. Elementary school version. Atlanta, GA: Author.

[37] State of Connecticut Department of Public Health. (2009). *Statutes and Regulations for Licensing Child Day Care Centers and Group Day Care Homes.* Hartford, CT: Author.

[38] American Academy of Pediatrics, American Public Health Association and National Resource Center for Health and Safety in Child Care and Early Education. (2002.) *Caring for Our Children: National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care, Second Edition.* Elk Grove Village, IL: American Academy of Pediatrics.

[39] U.S. Department of Health and Human Services (2008). Head Start Performance Standards and Other Regulations, *Code of Federal Regulations*, title 45, section 1304.23 Child Nutrition.

[40] U.S. Department of Agriculture. (2010). Child and Adult Care Food Program Regulations, *Code of Federal Regulations*, title 7, section 226.

[41] The National Association for the Education of Young Children. (2005). *NAEYC Early Childhood Program Standards and Accreditation Criteria: The Mark of Quality in Early Childhood Education.* Washington, DC: Author.

[42] The National Association for Family Child Care Foundation. (2005). *Quality Standards for NAFCC Accreditation, Fourth Edition*. Salt Lake City, UT: Author.

[43] State of Connecticut Department of Public Health. (2009). *Statutes and Regulations for Licensing Family Day Care Homes.* Hartford, CT: Author.

[44] American Dietetic Association. (2005). Policy of the American Dietetic Association: Benchmarks for nutrition programs in child care settings. *Journal of the American Dietetic Association,* 105(6): 979-986.

[45] American Academy of Pediatrics. (2005). Policy statement: Breastfeeding and the use of human milk. *Pediatrics,* 115(2):496-506.

[46] American Dietetic Association. (2009). Position of the American Dietetic Association: Promoting and supporting breastfeeding. *Journal of the American Dietetic Association*, 109(11): 1926-1942.

[47] U.S. Department of Agriculture. (2001). *Feeding Infants: A Guide for Use in the Child Nutrition Programs.* Washington, DC: Author.

[48] American Academy of Pediatrics. (2001). Policy statement: The use and misuse of fruit juice in pediatrics. *Pediatrics,* 107(5):1210-1213.

[49] Sweitzer, S.J., Briley, M.E., & Robert-Gray, C. (2009). Do sack lunches provided by parents meet the nutritional needs of young children who attend child care? *Journal of the American Dietetic Association*, 109(1):141-144.

[50] Ziegler, P., Briefel, R., Ponza, M., Novak, T., & Hendricks, K. (2006). Nutrient intakes and food patterns of toddlers' lunches and snacks: Influence of location. *Journal of the American Dietetic Association*, 106(1):S124-S134.

[51] Johnson, R.K., Appel, L.J., Brands, M., Howard, B.V., Lefevre, M., Lustig, R.H., Sacks F., Steffen, L.M., Wylie-Rosett, J.; on behalf of the American Heart Association Nutrition Committee of the Council on Nutrition, Physical Activity, and Metabolism and the Council on Epidemiology and Prevention. (2009). Dietary sugars intake and cardiovascular health: A scientific statement from the American Heart Association. *Circulation,* 120:1011-1020.

[52] U.S. Department of Agriculture. (2008). *Inside the Pyramid: How Many Discretionary Calories Can I Have?* Retrieved on March 10, 2010 from http://www.mypyramid.gov/pyramid/discretionary_calories_amount_print.html.

[53] Briley, M., Jastrow, S., Vikers, J., & Robert-Gray, C. (1999). Dietary intake at child-care centers and away: Are parents and care providers working as partners or at cross-purposes? *Journal of the American Dietetic Association,* 99(8):950-954.

[54] Bannon, L., & Schwartz, M. (2006) Impact of nutrition messages on children's food choice: Pilot study. *Appetite*,46(2):124-9.

[55] Warren, E., Parry. O., Lynch, R., & Murphy, S. (2008). 'If I don't like it then I can choose what I want': Welsh school children's accounts of preference for and control over food choice. *Health Promotion International,* 23(2):144-151.

[56] Getlinger, M.J., Laughlin, V.T., Bell, E., Akre, C., & Arhmandi, B.H. (1996). Food waste is reduced when elementary-school children have recess before lunch. Journal of the American Dietetic Association, 96(9):906-8.

[57] Bergman, E.A., Buergel, N.S., Englund, T.F., & Femrite, A. (2004). The Relationship of Meal and Recess Schedules to Plate Waste in Elementary Schools. The Journal of Child Nutrition & Management, 28(2).

[58] Satter, E. (1986). *Child of Mine: Feeding with Love and Good Sense.* Palo Alto, CA: Bull Publishing Company.

[59] Satter, E. (1987). *How to Get Your Kid to Eat But Not Too Much.* Palo Alto, CA: Bull Publishing Company.

[60] Gable, S., & Lutz, S. (2001). Nutrition socialization experiences of children in the Head Start Program. *Journal of the American Dietetic Association,* 101(5): 572-577.

[61] Puhl, R., & Schwartz, M.B. (2003). If you are good you can have a cookie: The link between childhood food rules and adult eating behaviors. *Eating Behaviors,* 4(3): 283-293.

[62] Birch, L.L. Development of food preferences. (1999). *Annual Review of Nutrition*, 19:41-62.

[63] Fisher, J., & Birch L.L. (1999). Restricting access to palatable foods affects children's behavioral response, food selection and intake. *American Journal of Clinical Nutrition,* 69(6):1264-72.

[64] Connecticut State Department of Public Health. (2007). *Connecticut Public Health Code Section 19-13-B42. Sanitation of Places Dispensing Foods or Beverages.* Hartford, CT: Author.

[65] Centers for Disease Control and Prevention. (June 14, 1996). Guidelines for school health programs to promote lifelong healthy eating. *Morbidity and Mortality Weekly Report,* 45(RR-9);1-33.

[66] DeCiccio, C.M., & Bergman, E.A. (1997). Nutrition knowledge and attitudes of elementary school teachers in Washington state. *Journal of the American Dietetic Association,* 97(Suppl. 9):A38.

[67] Britten, P., & Morris, K.L. (1998). Structural analysis of the relationships of elementary teachers' training, self-efficacy, and time spent teaching nutrition. *Journal of Nutrition Education and Behavior,* 30(4):218-224.

[68] Nahikian-Nelms, M. (1997). Influential Factors of caregiver behavior at mealtime: A study of 24 child-care programs. *Journal of the American Dietetic Association,* 97(5): 505-509.

[69] Almeida, M., Patye R.R., Dowda M., Sirard, J., & Shuler, L. (2002). Physical and social environmental determinants of physical activity in preschool children. *Medicine & Science in Sports & Exercise,* 34(5):S300

[70] Hannon, J.C., & Brown, B.B. (2008). Increasing preschoolers' physical activity intensities: An activity-friendly preschool playground intervention. *Preventive Medicine,* 46(6):532-536.

[71] American Academy of Pediatrics. (2008). *Back to Sleep, Tummy to Play.* [Brochure]. Retrieved on March 10, 2010 from http://www.healthychildcare.org/pdf/SIDStummytime.pdf.

[72] The Nemours Foundation. (2009). *Best Practices for Physical Activity: A Guide to Help Children Grow Up Healthy.* Newark, DE: Author.

[73] Jarrett, O.S., Maxwell, D.M., Dickerson, C., Hoge, P., Davies, G., & Yetley, A. (1998). Impact of recess on classroom behavior group effects and individual differences. *The Journal of Educational Research,* 92(2):121-126.

[74] Mahar, M.T., Murphy, S.K., Rowe, D.A., Golden, J., Shields, A.T., & Raedeke, T.D. (2006). Effects of a classroom-based program on physical activity and on-task behavior. *Medicine and Science in Sports and Exercise,* 38 (12):2086-2094.

[75] Committee on Sports Medicine and Council on School Health of the American Academy of Pediatrics. (2006). Policy statement: Active healthy living: prevention of childhood obesity through increased physical activity. *Pediatrics,* 117(5): 1834-1842.

[76] American Academy of Pediatrics. Committee on Public Education. (2001). Children, adolescents, and television. *Pediatrics,* 107(2):423–426.

[77] Vandewater, E.A., Rideout, V.J., Wartella, E.A., Huang, X., Lee, J.H., & Shim, M. (2007). Digital childhood: Electronic media and technology use among infants, toddlers and preschoolers. *Pediatrics*, 119;e106-e1015.

[78] Rideout, V.J., Foehr, U.G., & Roberts, D.F. (2010). *Generation M2: Media in the Lives of 8- to 18-Year Olds,* Menlo Park, CA: Henry J. Kaiser Family Foundation.

[79] Zimmerman, F.J., & Christakis, D.A. (2005). Children's television viewing and cognitive outcomes: A longitudinal analysis of national data. *Archives of Pediatric & Adolescent Medicine*, 159(7):619-625.

[80] Zimmerman, F.J., Christakis, D.A., & Meltzoff, A.N. (2007). Associations between media viewing and language development in children under age 2 years. *Pediatrics*, 151(4):364-368.

[81] Gortmaker, S., Must, A., Sobol, A., Peterson, K., Colditz, G., & Dietz, W. (1996). Television viewing as a cause of increasing obesity among children in the United States, 1986–1990. *Archives of Pediatric & Adolescent Medicine,* 150(4):356–362.

[82] Lumeng, J., Rahnama, S., Appugliese, D., Kaciroti, N., & Bradley, R. (2006). Television exposure and overweight risk in preschoolers. *Archives of Pediatric & Adolescent Medicine,* 160(4):417–422.

[83] Proctor M., Moore L., Gao D., Cupples, L., Bradlee, M., Hood, M., & Ellison, R. (2003). Television viewing and change in body fat from preschool to early adolescence: The Framingham Children's Study. *International Journal of Obesity,* 27:827–833.

[84] Miller S.A., Taveras, E.M., Rifas-Shiman, S.L., & Gillman, M.W. (2008). Association between television viewing and poor diet quality in young children. *International Journal of Pediatric Obesity,* 3(3):168-176.

[85] Christakis, D.A., & Garrison, M.M. (2009). Preschool-aged children's television viewing in child care settings. *Pediatrics,* 124(6):1627-1632.

[86] National Association for Sport and Physical Education. (2009). *Position Statement: Physical Activity Used as Punishment and/or Behavior Management.* Reston, VA: Author.

APPENDICES

CACFP MEAL PATTERN FOR CHILDREN[1]

CACFP MEAL PATTERN	AGES 1 AND 2	AGES 3–5	AGES 6–12[2]
BREAKFAST			
Milk, fluid	½ cup[3]	¾ cup	1 cup
Vegetables and Fruits Vegetable(s) and/or fruit(s) or Full-strength fruit or vegetable juice or An equivalent quantity of any combination of the above vegetables and fruits	¼ cup	½ cup	½ cup
Grains and Breads[4] Bread or Cornbread, biscuits, rolls, muffins, etc. or Cold dry cereal or Cooked cereal or Cooked pasta or noodle products or Cooked cereal grains or An equivalent quantity of any combination of the above grains and breads	 ½ slice ½ serving ¼ cup or 1/3 ounce[5] ¼ cup ¼ cup ¼ cup	 ½ slice ½ serving 1/3 cup or ½ ounce ¼ cup ¼ cup ¼ cup	 1 slice 1 serving ¾ cup or 1 ounce ½ cup ½ cup ½ cup
SNACK (SUPPLEMENT) Serve any two of the following four components (must be two DIFFERENT components):			
Milk, fluid	½ cup[3]	½ cup	1 cup
Vegetables and Fruits Vegetable(s) and/or fruit(s) or Full-strength fruit or vegetable juice[6] or An equivalent quantity of any combination of the above vegetables and fruits	½ cup	½ cup	¾ cup
Grains and Breads[4] Bread or Cornbread, biscuits, rolls, muffins, etc. or Cold dry cereal[5] or Cooked cereal or Cooked pasta or noodle products or Cooked cereal grains or An equivalent quantity of any combination of the above grains and breads	 ½ slice ½ serving ¼ cup or 1/3 ounce ¼ cup ¼ cup ¼ cup	 ½ slice ½ serving 1/3 cup or ½ ounce ¼ cup ¼ cup ¼ cup	 1 slice 1 serving ¾ cup or 1 ounce ½ cup ½ cup ½ cup
Meat and Meat Alternates Lean meat or poultry or fish[7] or Alternate protein products[8] or Cheese or Cottage cheese or Eggs or Cooked dry beans or peas or Peanut butter or soynut butter or other nut or seed butters or Peanuts or soynuts or tree nuts or seeds[9] or Yogurt[10], plain or flavored, unsweetened or sweetened or An equivalent quantity of any combination of the above meat and meat alternates	 ½ ounce ½ ounce ½ ounce ⅛ cup ½ large egg ⅛ cup 1 tablespoon ½ ounce 2 ounces or ¼ cup	 ½ ounce ½ ounce ½ ounce ⅛ cup ½ large egg ⅛ cup 1 tablespoon ½ ounce 2 ounces or ¼ cup	 1 ounce 1 ounce 1 ounce ¼ cup ½ large egg ¼ cup 2 tablespoons 1 ounce 4 ounces or ½ cup

CACFP MEAL PATTERN FOR CHILDREN[1], continued

CACFP MEAL PATTERN	AGES 1 AND 2	AGES 3–5	AGES 6–12[2]
LUNCH/SUPPER			
Milk, fluid	½ cup[3]	¾ cup	1 cup
Vegetables and Fruits[11]			
Vegetable(s) and/or fruit(s)	¼ cup total	½ cup total	¾ cup total
Grains and Breads[4]			
Bread or	½ slice	½ slice	1 slice
Cornbread, biscuits, rolls, muffins, etc. or	½ serving	½ serving	1 serving
Cooked pasta or noodle products or	¼ cup	¼ cup	½ cup
Cooked cereal grains or	¼ cup	¼ cup	½ cup
An equivalent quantity of any combination of the above grains and breads			
Meat and Meat Alternates			
Lean meat or poultry or fish[7] or	1 ounce	1 ½ ounces	2 ounces
Alternate protein products[8] or	1 ounce	1 ½ ounces	2 ounces
Cheese or	1 ounce	1 ½ ounces	2 ounces
Cottage cheese or	⅛ cup	⅛ cup	¼ cup
Eggs or	½ large egg	¾ large egg	1 large egg
Cooked dry beans or peas or	¼ cup	⅜ cup	½ cup
Peanut butter or soynut butter or other nut or seed butters or	2 tablespoons	3 tablespoons	4 tablespoons
Peanuts or soynuts or tree nuts or seeds[9,12] or	½ ounce[12] = 50%	¾ ounce[12] = 50%	1 ounce[12] = 50%
Yogurt[10], plain or flavored, unsweetened or sweetened or	4 ounces or ½ cup	6 ounces or ¾ cup	8 ounces or 1 cup
An equivalent quantity of any combination of the above meat and meat alternates			

1 The meal pattern chart shows the minimum amounts of each component that the CACFP facility must make available to each child by in order to claim reimbursement for the meal. Children may be served larger portions but not less than the minimum quantities specified.

2 Emergency shelters can serve CACFP meals to residents ages 18 or younger and to children of any age who have disabilities. At-risk afterschool care centers can serve CACFP snacks to students ages 18 or younger.

3 For the purposes of the requirements, a cup means a standard measuring cup (8 fluid ounces).

4 Bread, pasta or noodle products and cereal grains must be whole grain or enriched. Cornbread, biscuits, rolls, muffins, etc., must be made with whole-grain or enriched meal or flour. Cereal must be whole grain or enriched or fortified. Bran and germ are credited the same as enriched or whole-grain meal or flour. All products must meet the minimum serving sizes specified in "Serving Sizes for Grains/Breads in the CACFP" (see *Nutrition Policies and Guidance: Crediting Foods — Grains/Breads* at http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326).

5 Either volume (cup) or weight (ounce), whichever is less.

6 Juice cannot be served when milk is the only other snack component.

7 Edible portion as served, e.g., cooked lean meat without bone.

8 Alternate protein products must meet the requirements specified by the USDA (see "Alternate Protein Products" in *Nutrition Policies and Guidance: Crediting Foods — Meat/Meat Alternates* at http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326).

9 Tree nuts and seeds that may be used as meat alternates include almonds, Brazil nuts, cashews, filberts, macadamia nuts, peanuts, pecans, walnuts, pine nuts, pistachios and soynuts. Children younger than 4 are at the highest risk of choking. The USDA recommends that any nuts or seeds served to young children are in a prepared food and are ground or finely chopped.

10 To increase nutrient variety, yogurt should not be served when milk is the only other snack component.

11 Serve two or more different kinds of vegetables and/or fruits. Full-strength 100 percent vegetable or fruit juice may be counted to meet not more than half of this requirement.

12 At lunch or supper, no more than half the requirement shall be met with nuts or seeds. Nuts or seeds must be combined with another meat/meat alternate to fulfill the requirement. For determining combinations, 1 ounce of nuts or seeds equals 1 ounce of cooked lean meat, poultry or fish.

CACFP INFANT MEAL PATTERN

MEAL	BIRTH — 3 MONTHS	4 MONTHS — 7 MONTHS	8 MONTHS — 11 MONTHS
Breakfast	4–6 fluid ounces (fl. oz.) breast milk[1, 2] or iron-fortified formula[3, 4]	4–8 fl. oz. breast milk[1, 2] or iron-fortified formula[3, 5] 0–3 tablespoons (Tbsp.) iron-fortified dry infant cereal (optional)[6, 7]	6–8 fl. oz. breast milk[1, 2] or iron-fortified formula[3, 8] 2–4 Tbsp. iron-fortified dry infant cereal[7, 8] 1–4 Tbsp. fruit and/or vegetable[8]
Lunch or Supper	4–6 fl. oz. breast milk[1, 2] or iron-fortified formula[3, 4]	4–8 fl. oz. breast milk[1, 2] or iron-fortified formula[3, 5] 0–3 Tbsp. iron-fortified dry infant cereal (optional)[6, 7] 0-3 Tbsp. fruit and/or vegetable (optional)[6]	6–8 fl. oz. breast milk[1, 2] or iron-fortified formula[3, 8] 2–4 Tbsp. iron-fortified dry infant cereal[7, 8] and/or 1–4 Tbsp. meat, fish, poultry, egg yolk or cooked dry beans or peas or ½–2 oz. cheese or ⅛–½ cup cottage cheese or 1–4 oz. cheese food or cheese spread[8] 1–4 Tbsp. fruit and/or vegetable[8]
Snack	4–6 fl. oz. breast milk[1, 2] or iron-fortified formula[3, 4]	4–6 fl. oz. breast milk[1, 2] or iron-fortified formula[3, 4]	2–4 fl. oz. breast milk[1, 2] or iron-fortified formula[3, 5] or fruit juice[9] 0–½ slice bread or 0–2 crackers[10] (optional)[6]

1 Breast milk or formula or portions of both may be served. The USDA recommends that breast milk be served in place of formula from birth through 11 months.

2 Breastfed infants who regularly consume less than the minimum amount of breast milk per feeding may be offered less, with additional breast milk offered if the infant is still hungry.

3 All infant formulas provided must meet CACFP requirements (see Nutrition Policies and Guidance for the Child and Adult Care Food Program: Feeding Infants at http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326).

4 Either the CACFP facility or parent must provide formula. Reimbursement may be claimed for meals containing parent-provided formula as the only component if the caregiver feeds the infant the meal.

5 Either the CACFP facility or parent must provide formula. Reimbursement may be claimed for meals containing parent-provided formula as the only component if 1) the infant is not yet developmentally ready for the optional meal components; and 2) the caregiver feeds the infant the meal.

6 A serving of this component is required only when the infant is developmentally ready to accept it. If optional foods are required, reimbursement may be claimed for meals containing parent-provided components when the CACFP facility provides (pays for) at least one component; and a complete meal, i.e., all the components that the infant is developmentally ready to accept, is supplied between parent-provided and facility-provided components.

7 Only iron-fortified dry infant cereal counts as a meal component in the CACFP Infant Meal Pattern. Adult cereals (ready-to-eat cold dry breakfast cereals and cooked breakfast cereals) do not count as a meal component. Adult cereals can be fed only as additional foods to older babies (at least 8 months) if the parent/guardian requests that they be served. All other required foods must also be served.

8 For 8 through 11 months, reimbursement may be claimed for meals containing parent-provided components when 1) the CACFP facility provides (pays for) at least one component; and 2) a complete meal, i.e., all the components that the infant is developmentally ready to accept, is supplied between parent-provided and facility-provided components.

9 Full-strength 100 percent fruit juice must be served.

10 Made from whole-grain or enriched meal or flour.

CONNECTICUT CHILD CARE NUTRITION STANDARDS

The Connecticut State Department of Education (CSDE) strongly recommends that all child care programs follow the Connecticut Child Care Nutrition Standards (CCCNS) for all foods and beverages available on site, including CACFP meals and snacks, celebrations, learning experiences, meetings and any other activities where foods and beverages are provided by the child care program or families. The CCCNS provides the healthiest choices in child care by promoting whole or minimally processed, nutrient-rich foods that are low in fat, added sugars and sodium. The standards reflect current nutrition science and national health recommendations from the Dietary Guidelines for Americans and national organizations, such as the National Academy of Sciences Institute of Medicine, American Academy of Pediatrics, American Dietetic Association and American Heart Association.

The CCCNS includes best practices, rationale and implementation strategies for the four CACFP meal pattern components. Foods and beverages that do not meet the CACFP meal pattern requirements are eliminated. The CCCNS also eliminates CACFP-creditable foods that are not nutrient rich, such as sweetened grain-based desserts, grain-based snack chips, fried or baked pre-fried vegetables and fried, baked pre-fried or high-fat meats and meat alternates. The standards for children are provided first, followed by the standards for infants. The chart below summarizes the CCCNS categories and the ages they address.

CATEGORIES OF THE CONNECTICUT CHILD CARE NUTRITION STANDARDS	
Children (Ages 1-12)*	**Infants (Birth through 11 months)**
• Grains and Breads	• Iron-fortified Infant Cereal, Bread and Crackers
• Vegetables and Fruits	• Vegetables and Fruits
• Meat and Meat Alternates	• Meat, Fish, Poultry, Egg Yolk and Cooked Dry Beans or Peas
• Milk	• Breast Milk, Iron-fortified Infant Formula and Fruit Juice
* The CACFP serves children from ages 1-12 in child care centers and family day care homes. Emergency shelters participating in the CACFP can serve meals to residents up through 18 years old and to children of any age who have disabilities. At-risk afterschool care centers can serve CACFP snacks and suppers to students ages 18 or younger.	

The CCCNS exceeds the menu planning requirements of CACFP regulations to provide the healthiest foods and beverages for infants and children. For specific information regarding the CACFP meal requirements, consult the CACFP Meal Pattern for Children (appendix A), the CACFP Infant Meal Pattern (appendix B) and the CSDE's *Nutrition Policies and Guidance for the Child and Adult Care Food Program* (http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326).

The Nutrition Facts label and ingredients list on food packages can be used to determine whether commercially prepared foods meet the CCCNS (see appendix D). Appendix E contains information on evaluating products for compliance with the CCCNS. For foods made from scratch, compliance can be determined by a nutrient analysis of the standardized recipe. For more information, see *Nutrient Analysis* in the CSDE's *Nutrition-Related Resources* at http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Nutrition/nutrition_resources.pdf.

The Connecticut Child Care Nutrition Standards are *recommendations* not requirements. They represent best practices for serving healthy foods throughout the child care environment. The CSDE strongly recommends implementing the CCCNS in all Connecticut child care programs, regardless of whether they participate in the CACFP.

The CCCNS is based on the following national guidelines and standards.

- *A Food Labeling Guide — Appendix C.* U.S. Food and Drug Administration. Center for Food Safety and Applied Nutrition, Revised April 2008. http://www.cfsan.fda.gov/~dms/2lg-xc.html
- *Best Practices for Healthy Eating: A Guide to Help Children Grow Up Healthy.* The Nemours Foundation, 2008. http://static.nemours.org/www-filebox/nhps/grow-up-healthy/cacfp-guideline.pdf
- *Breastfeeding and the Use of Human Milk Policy Statement (American Academy of Pediatrics Policy Statement).* Pediatrics, 115(2), February 2005. http://aappolicy.aappublications.org/cgi/reprint/pediatrics;115/2/496.pdf
- *Code of Federal Regulations (CFR) for the Child and Adult Care Food Program (7 CFR 226).* U.S. Department of Agriculture, January 1, 2010. http://www.fns.usda.gov/cnd/Care/Regs-Policy/policymemo/226.pdf
- *Code of Federal Regulations (CFR) for the Special Supplemental Nutrition Program for Women, Infants and Children (WIC): Revisions in the WIC Food Packages, Interim Rule (7 CFR 246).* U.S. Department of Agriculture, December 6, 2007. http://www.fns.usda.gov/wic/regspublished/wicfoodpkginterimrulepdf.pdf
- *Connecticut Nutrition Standards for Food in Schools*. Connecticut State Department of Education, 2009. http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Student/NutritionEd/CTnutritionStandards.pdf
- *Dietary Guidelines for Americans.* U.S. Department of Agriculture and U.S. Department of Health and Human Services, 2005. http://www.healthierus.gov/dietaryguidelines/
- *Dietary Sugars Intake and Cardiovascular Health, A Scientific Statement from the American Heart Association.* Circulation, Volume 120, September 15, 2009. http://circ.ahajournals.org/cgi/reprint/120/11/1011
- *Dietary Recommendations for Children and Adolescents — A Guide for Practitioners, Consensus Statement from the American Heart Association.* Circulation, Volume 112, 2005. http://circ.ahajournals.org/cgi/reprint/112/13/2061
- *Feeding Infants: A Guide for Use in the Child Nutrition Programs.* U.S. Department of Agriculture, 2001. http://www.fns.usda.gov/tn/Resources/feeding_infants.html
- *MyPyramid for Kids (6–11).* U.S. Department of Agriculture, 2005. http://www.mypyramid.gov/kids/index.html
- *MyPyramid for Preschoolers.* U.S. Department of Agriculture, 2008. http://www.mypyramid.gov/preschoolers/index.html
- *Nutrition Guidance for Healthy Children Aged 2 to 11 Years (Position of the American Dietetic Association).* Journal of the American Dietetic Association, 108(6), June 2008. http://www.eatright.org/About/Content.aspx?id=8371
- *Nutrition Standards for Foods in Schools: Leading the Way Toward Healthier Youth.* Institute of Medicine of the National Academies, The National Academies Press, 2007. http://www.iom.edu/Reports/2007/Nutrition-Standards-for-Foods-in-Schools-Leading-the-Way-toward-Healthier-Youth.aspx
- *Optimizing Bone Health and Calcium Intakes of Infants, Children, and Adolescents (American Academy of Pediatrics Clinical Report).* Pediatrics, 117(2), February 2006. http://aappolicy.aappublications.org/cgi/reprint/pediatrics;117/2/578.pdf
- *The Use and Misuse of Fruit Juice in Pediatrics (American Academy of Pediatrics Policy Statement).* Pediatrics, 107(5), May 2001. http://aappolicy.aappublications.org/cgi/reprint/pediatrics;107/5/1210.pdf

CACFP MEAL PATTERN COMPONENT — GRAINS AND BREADS[1]

NUTRITION STANDARDS FOR GRAINS AND BREADS

A serving contains:

- no more than 35 percent of calories from fat and no chemically altered fat substitutes.[2]
- less than 10 percent of calories from saturated fat.
- less than 0.5 gram of trans fat and no hydrogenated or partially hydrogenated oils.
- no more than 35 percent of calories from sugars and no artificial sweeteners, nonnutritive sweeteners or sugar alcohols.[2]
- no more than 200 milligrams of sodium.

See appendices D and E for information on using food labels to determine whether a product meets these standards.

Practices to Meet the Standards

- Serve only products that meet the *Nutrition Standards for Grains and Breads* (see box) in portion sizes that are consistent with the CACFP Meal Pattern for Children (see appendix A).[3]
- Choose whole grains for most breads, grains, pastas and cereals (see "Determining if a Product is Whole Grain" under *Rationale and Guidance* on the next page). Look for whole grain to be listed as the first ingredient or that the food contains the entire grain kernel.
- Serve whole grains for at least half of the CACFP grains and breads servings at meals and snacks each day.
- Read labels and choose foods that are good sources of fiber (at least 2.5 grams per serving) most often.
- Prepare grains and breads with minimal or no added fat. If fat is used, choose polyunsaturated and monounsaturated fats (see definitions in the Glossary). Do not serve any foods made with hydrogenated or partially hydrogenated oils.
- Serve whole-grain breakfast cereals that meet the *Nutrition Standards for Grains and Breads* and that contain at least 2.5 grams of fiber per serving.
- Limit condiments, such as margarine, butter, jelly, jam, syrup and cream cheese.[4] If served, provide low-fat or fat-free, low-sugar and low-sodium varieties separately from the food so children can decide whether to add them.[2] Use portion control measures as age appropriate, such as preportioned servings or portion control (PC) packets.

Do Not Serve

- Sweetened grain-based baked goods such as cinnamon rolls, doughnuts, pastries, toaster pastries, croissants, muffins, cookies (including animal and graham crackers), cereal or grain bars, cakes, cup cakes, brownies, cheesecakes, pies and rice cereal treats.[5]
- Grain-based snack chips (regular and reduced fat), such as corn-based chips (e.g., Doritos, Fritos and Sunchips), tortilla chips and puffed corn snacks (e.g., Cheetos and Jax).

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[1] Children younger than 4 are at the highest risk of choking. Avoid grains and breads that could cause choking, such as hard pretzels, bread sticks, tortilla chips, granola bars, croutons, rice cakes and ready-to-eat cold or cooked breakfast cereals with nuts, seeds, raisins and hard pieces of whole-grain kernels or other hard food pieces.

[2] Do not serve any foods containing chemically altered fat substitutes (e.g., Olestra, Olean and Simplesse), artificial sweeteners (e.g., acesulfame potassium, aspartame, neotame, saccharin, sucralose and tagatose), nonnutritive sweeteners (e.g., stevia or Rebiana) or sugar alcohols (e.g., sorbitol, mannitol, xylitol, maltitol, maltitol syrup, lactitol, erythritol, isomalt and hydrogenated starch hydrolysates). For more information, see definitions in the Glossary.

[3] The CACFP serving sizes for grains and breads depend on the type of food. For more information, see *Serving Sizes for Grains/Breads in the Child and Adult Care Food Program* at http://www.sde.ct.gov/sde/LIB/sde/pdf/deps/nutrition/CACFP/Crediting_Foods/ServingsGB_CACFP.pdf.

[4] Condiments do not contribute to the CACFP Meal Pattern for Children, but they can increase the palatability and acceptance of many nutrient-rich foods. Their use should be limited since they are generally high in fat, sugars and sodium with little nutritional value.

[5] Some sweetened grain-based baked goods (such as animal crackers, graham crackers, whole-grain low-fat muffins and carrot-raisin cookies made with whole-grain flour) may be acceptable if they meet the specified *Nutrition Standards for Grains and Breads* above. Many muffins are high in fat and sugars and are nutritionally equivalent to cake.

RATIONALE AND GUIDANCE

Whole Grains: The Dietary Guidelines for Americans recommend a variety of grains daily, especially whole grains. At least half the recommended daily servings of grains should be whole grains. Whole grains are nutrient rich. They contain vitamins, minerals, fiber, antioxidants and other health-enhancing substances. Whole-grain products (such as whole-wheat bread and brown rice) provide more nutrients than refined enriched products (such as white bread and white rice). For more information, see "whole grains" in the Glossary.

Determining if a Product is Whole Grain: A whole-grain food is one labeled as a whole-grain product or with a whole grain listed first in the product's ingredients label. Examples include whole wheat/whole-wheat flour; whole oats/oatmeal; whole-grain cornmeal; whole-grain corn, whole ground corn; whole rye; whole-grain barley; wild rice; brown rice; bulgur (cracked wheat); buckwheat; triticale; millet; quinoa; and sorghum. The Food and Drug Administration (FDA) labeling laws allow products to state "whole grain" if they contain at least 51 percent whole grain by weight and the entire grain kernel. While these foods contain whole grain they are not 100 percent whole grain. Read labels carefully to choose products that are 100 percent whole grain most often.

Sweetened Grains and Grain-Based Snack Chips: The CACFP Meal Pattern for Children allows sweetened grain-based foods (e.g., doughnuts, sweet rolls, toaster pastries, cookies and cake) and grain-based snack chips (e.g., wheat or corn tortilla chips). However, the CCCNS eliminates these foods because they are not nutrient-rich choices. They are generally made from enriched flour; contain few nutrients; and are high in fat, sugars and sodium. Research indicates that most children consume too many of these unhealthy choices (see *Rationale for Healthy Foods and Beverages in Child Care* in section 4). Eliminating these foods in child care helps parents balance children's food choices at home and gives children a better chance of meeting their daily MyPyramid recommendations.

Fiber: The Dietary Guidelines recommend 14 grams of fiber per 1,000 calories consumed. This equals 19 grams of fiber daily for children ages 1 to 3 and 25 grams of fiber for ages 4 to 8. For ages 9 to 13, girls need 26 grams of fiber and boys need 31 grams of fiber. The FDA defines good sources of fiber as foods with at least 2.5 grams of fiber per serving. High-fiber foods contain at least 5 grams of fiber per serving. The Nutrition Facts label indicates the amount of fiber per serving (see appendix D). Read labels and choose good or high sources of fiber most often.

Fat: The Dietary Guidelines recommend keeping total fat intake between 30 to 35 percent of calories for children ages 2 to 3 and between 25 to 35 percent of calories for children and adolescents ages 4 to 18, with most fats coming from sources of polyunsaturated and monounsaturated fatty acids, such as fish, nuts and vegetable oils. Higher fat intakes generally increase saturated fat and make it more difficult to avoid consuming excess calories. The Dietary Guidelines recommend limiting saturated fat to less than 10 percent of total calories. High intakes of saturated fats, trans fats and cholesterol increase the risk of unhealthy blood lipid levels, which may increase the risk of coronary heart disease.

Trans fats: Due to their negative impact on children's health, the CCCNS does not allow foods containing artificial trans fats. The FDA regulations allow food labels to state "0 grams" trans fats if a serving contains less than 0.5 gram. To avoid artificial trans fats, read ingredients and select products without hydrogenated or partially hydrogenated oils. For more information, see definition for "trans fats" in the Glossary.

Sugars: Added sugars provide calories without any nutrients, unlike the naturally occurring sugars in nutrient-rich foods such as fruits, some vegetables and milk. The Nutrition Facts label lists total sugars and does not differentiate between those that are added or naturally occurring (see appendix D). The Institute of Medicine (IOM) recommends that foods contain no more than 35 percent of calories from total sugars. The Dietary Guidelines recommend choosing foods and beverages without added sugars. The American Heart Association recommends no more than half of daily discretionary calories from added sugars. Most children consume about four times that amount. For more information, see "added sugars" and "discretionary calories" in the Glossary.

Artificial and Nonnutritive Sweeteners: The CCCNS does not advocate reducing sugars through the use of any nonnutritive sweeteners (artificial or natural) or sugar alcohols because the philosophy of the CCCNS is to focus on whole or minimally processed foods that are naturally nutrient rich and low in added sugars. Children need to learn to enjoy the natural favors of healthy foods that have not been artificially enhanced with a sweet taste. There is little evidence on the long-term safety of nonnutritive sweeteners in childhood. Some research suggests that nonnutritive sweeteners can increase cravings for sweet foods and lead to increased calorie consumption. For more information, see "artificial sweeteners" and "nonnutritive sweeteners" in the Glossary.

Sodium: The sodium limit for grains and breads is based on the IOM standard of no more than 200 milligrams of sodium. Processed foods account for the majority of sodium in the diet. Most children exceed the Dietary Guidelines' recommended daily sodium limit due to consumption of processed foods. For more information, see "sodium" in the Glossary.

CACFP MEAL PATTERN COMPONENT — VEGETABLES AND FRUITS[1]

NUTRITION STANDARDS FOR VEGETABLES AND FRUITS

BEST CHOICE

Whole Vegetables and Fruits

- Serve only whole vegetables and fruits (fresh, frozen, canned and dried) prepared and packaged without added fats, sugars or sodium.[1]

LIMIT

Processed Vegetables and Fruits
(prepared or packaged with added fats, sugars or sodium)

- Serve no more than once per week between all meals and snacks. No more than once per cycle menu is strongly recommended.

A serving contains:

- no more than 35 percent of calories from fat and no chemically altered fat substitutes.[2]
- less than 10 percent of calories from saturated fat.
- less than 0.5 gram of trans fat and no hydrogenated or partially hydrogenated oils.
- limited added sugars.
- no artificial sweeteners, nonnutritive sweeteners or sugar alcohols.[2]
- no more than 200 milligrams of sodium. For soups, no more than 480 milligrams of sodium.

See appendices D and E for information on using food labels to determine whether a product meets these standards.

Practices to Meet the Standards

Whole Vegetables and Fruits[1]

- Serve fresh vegetables and fruits (whole or cut up) whenever possible, but at least three times a week at meals.[1]
- Offer a different fruit and a different vegetable every day and include a variety at every meal, such as fresh or frozen fruit; fresh or frozen vegetables; canned fruits in their natural juices or water; canned vegetables with no or low sodium; and dried fruit and vegetables without added sugars or sweeteners.[1,2]
- Serve vegetables from each of the following groups several times a week: dark green (broccoli, spinach and most greens); orange (carrots, sweet potatoes, winter squash and pumpkin); legumes (cooked dry beans or peas); starchy (corn, white potatoes and green peas); and other vegetables (tomatoes, cabbage, celery, cucumber, lettuce, onions, peppers, green beans, cauliflower, mushrooms and summer squash).[1,2,3]
- Serve a good source of vitamin C every day and a good source of vitamin A at least three times per week.[4]
- **Meals and Snacks:** At breakfast, lunch and supper, serve only whole vegetables and fruits instead of juice.[1] At lunch and supper, serve a vegetable for at least one of the two required servings of vegetables/fruits, not including fried or baked pre-fried vegetables, e.g., french fries, potato puffs and hash brown patties. At snack, serve whole fruits and vegetables at least twice a week.[1]
- **Juice (100 percent):** Best choice is not to serve any juice. If 100 percent juice is served, limit to two servings total per week: one serving per week at breakfast and one serving per week at snack on two different days. A serving is limited to 2 fluid ounces (¼ cup) for ages 12 to 24 months and 4 fluid ounces (½ cup) for ages 2 and older.[5]

Processed Vegetables and Fruits[1]

- If processed vegetables and fruits are served, choose only products that meet the nutrition standards for Processed Vegetables and Fruits (see box) in portion sizes that are consistent with the CACFP Meal Pattern for Children (see appendix A). Limit to no more than once per week. No more than once per cycle menu is ideal.
- Limit condiments, such as salad dressings and sauces.[6] If served, provide low-fat or fat-free, low-sugar and low-sodium varieties separately from the food so children can decide whether to add them.[2] Use portion control measures as age appropriate, such as preportioned servings or portion control (PC) packets.

Do Not Serve

- Fruits or vegetables that can cause choking.[1]
- Fruits or vegetables with artificial sweeteners, nonnutritive sweeteners and sugar alcohols.
- Fruit-based drinks that contain less than 100 percent real fruit juice.
- Unpasteurized juices. These juices pose a high risk of foodborne illness.
- 100 percent juice with added sugars or sweeteners (natural, artificial or nonnutritive), sugar alcohols or other added ingredients such as artificial flavors and colors, preservatives, flavor enhancers and emulsifiers or thickeners. For more information, see *Juice Ingredients* in *Rationale and Guidance* on the next page.
- Canned fruit in heavy syrup.
- Fried or baked pre-fried vegetables, e.g., french fries, potato puffs and hash brown patties.

- Commercially prepared fruit snacks that are not made with 100 percent fruit, such as Fruit Roll-Ups and similar items. These products are not fruit and are not creditable as a vegetable/fruit in the CACFP Meal Pattern for Children.
- Dried fruit with added sweeteners (natural, artificial or nonnutritive) or sugar alcohols.[2]

RATIONALE AND GUIDANCE

Recommended Daily Servings: The Dietary Guidelines encourage consumption of a variety of fruits and vegetables daily. The daily recommendation for ages 2 to 5 is at least 1 cup vegetables and 1 cup fruit; and for ages 6 to 11, at least 2½ cups vegetables and 1½ cups fruit. These amounts vary depending on a child's age, gender and activity level. Few children consume the recommended amounts of fruits and vegetables.

Whole Fruits and Vegetables: Fruits and vegetables provide essential vitamins, minerals and other health-enhancing substances that may protect against many chronic diseases. They are high in fiber and help children feel fuller longer. To ensure adequate fiber and nutrient intake, the Dietary Guidelines recommend that most servings are from whole fruits and vegetables (fresh, frozen, canned and dried) instead of 100 percent juice. Whole fruits and vegetables provide nutrients and fiber that may be lost in the processing of juice.

Juice Limits: The AAP recommends that most fruits and vegetables come from whole food rather than juice. Juice does not offer any nutritional benefits over whole fruits and vegetables. The AAP recommends limiting daily juice consumption to 4-6 ounces for ages 1 to 6 and 8-12 ounces for ages 7 to 18. Excessive juice consumption may be linked to children becoming overweight or obese and is associated with tooth decay and diarrhea. Continuous consumption of juice during the day can decrease children's appetite for nutritious foods. The CCCNS limits the serving size and frequency of juice in child care to ensure that children's overall daily consumption does not exceed the AAP's recommended limits.

Juice Ingredients: The FDA labeling regulations allow 100 percent juice to contain added ingredients and still be labeled "100% juice." However, the CCCNS does not allow these ingredients because they are not needed in children's diets. Examples include artificial flavors, artificial colors (e.g., red 40, blue 1, yellow 5 and 6 and titanium dioxide), preservatives (e.g., sodium benzoate and potassium sorbate), flavor enhancers (e.g., ethyl maltol) and emulsifiers or thickeners (e.g., glycerol esters of wood rosin, xanthan gum and guar gum). Read labels to identify 100 percent juice products without these added ingredients.

Fat: Same rationale as previously indicated (see *Grains and Breads* in this section). The fat limits apply only to vegetables and fruits with added fat.

Sugars: Same rationale as previously indicated (see *Grains and Breads* in this section). The CCCNS does not address the naturally occurring sugars contained in fruits and some vegetables. Naturally occurring sugars are not a concern because fruits and vegetables are nutrient rich, containing vitamins, minerals, fiber and other health-enhancing substances. Read ingredients to identify processed products with added sugars and limit to no more than once per week. No more than once per cycle menu is ideal. For more information, see "added sugars" in the Glossary.

Artificial and Nonnutritive Sweeteners: Same rationale as previously indicated (see *Grains and Breads* in this section).

Sodium: The sodium limit applies only to processed vegetables and fruits. It is based on the IOM standard of no more than 200 milligrams of sodium. The sodium limit of no more than 480 milligrams for soups is based on the FDA's definition of "healthy" entrees and the IOM sodium standard for entrees. Child care programs are encouraged to further reduce sodium content by preparing soups from scratch when possible and reading labels to purchase varieties lowest in sodium. For more information, see "sodium" in the Glossary.

[1] Children younger than 4 are at the highest risk of choking. Do not serve the following fruits and vegetables to children younger than 4: dried fruit and vegetables; raw vegetables; cooked or raw whole corn kernels; hard pieces of raw fruit such as apple, pear or melon; and whole grapes, berries, cherries, melon balls and cherry or grape tomatoes. Cut fresh and frozen vegetables and fruits into bite-size pieces and cook before serving.

[2] Do not serve any foods containing chemically altered fat substitutes (e.g., Olestra, Olean and Simplesse), artificial sweeteners (e.g., acesulfame potassium, aspartame, neotame, saccharin, sucralose and tagatose), nonnutritive sweeteners (e.g., stevia or Rebiana) or sugar alcohols (e.g., sorbitol, mannitol, xylitol, maltitol, maltitol syrup, lactitol, erythritol, isomalt and hydrogenated starch hydrolysates). For more information, see definitions in the Glossary.

[3] In the CACFP Meal Pattern for Children, legumes (cooked dry beans or peas) can be counted as either a vegetable or a meat alternate, but not both in the same meal.

[4] For good sources of vitamins A and C, see the CSDE's *Nutrition Policies and Guidance for the Child and Adult Care Food Program: Planning Healthy Menus* at http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326.

[5] For ages 6 to 12 at snack, the required CACFP portion size for a vegetable or fruit is ¾ cup. Since the CCCNS limits a serving of juice to ½ cup, an additional ¼ cup of fruit or vegetable must be served to meet the snack requirements for this age group.

[6] Condiments do not contribute to the CACFP Meal Pattern for Children, but they can increase the palatability and acceptance of many nutrient-rich foods. Their use should be limited since they are generally high in fat, sugars and sodium with little nutritional value.

CACFP MEAL PATTERN COMPONENT — MEAT AND MEAT ALTERNATES[1]

NUTRITION STANDARDS FOR MEAT AND MEAT ALTERNATES

A serving contains:

- no more than 35 percent of calories from fat, except for eggs, low-fat or reduced fat natural cheese, nuts, seeds and nut or seed butters without added fat. No chemically altered fat substitutes.[2]
- less than 10 percent of calories from saturated fat, except for eggs, low-fat or reduced fat natural cheese, nuts, seeds and nut or seed butters without added fat.
- no more than 35 percent of calories from sugars and no artificial sweeteners, nonnutritive sweeteners or sugar alcohols.[2] For yogurt, no more than 4 grams total sugars per ounce.
- less than 0.5 gram of trans fat and no hydrogenated or partially hydrogenated oils.
- no more than 200 milligrams of sodium for meat and meat alternates served at snack and no more than 480 milligrams of sodium for meat and meat alternates served at meals including combination entrees.[3]

See appendices D and E for information on using food labels to determine whether a product meets these standards.

Practices to Meet the Standards

- Serve only products that meet the *Nutrition Standards for Meat and Meat Alternates* (see box) in portion sizes that are consistent with the CACFP Meal Pattern for Children (see appendix A).
- Serve lean meat; skinless poultry; fish; cooked dry beans or peas (legumes); nuts; seeds; nut or seed butters, such as peanut, almond, cashew and sunflower (without added fat, sugars or sodium); eggs; low-fat yogurt; and low-fat, part-skim or reduced fat natural cheese, e.g., low-fat cheddar and part-skim mozzarella.[1,4]
- Prepare meat and meat alternates with minimal or no added fat. If fat is used, choose polyunsaturated and monounsaturated fats (see definitions in the Glossary). Do not serve any meat or meat alternates made with hydrogenated or partially hydrogenated oils.
- When meat or meat alternate entree items include bread or grains, choose whole grains most often (see *Grains and Breads* in this section).
- Limit condiments, such as margarine, butter, ketchup, mustard, mayonnaise, sauces and gravies.[5] If served, provide low-fat or fat-free, low-sugar and low-sodium varieties separately from the food so children can decide whether to add them.[2] Use portion control measures as age appropriate, such as preportioned servings or portion control (PC) packets.

Do Not Serve

- High-fat foods such as sausage, hot dogs and processed luncheon meats, e.g., pepperoni, salami and bologna.
- Fried foods or baked commercially prepared pre-fried foods, such as chicken nuggets, fish sticks and corn dogs, unless they meet the specified *Nutrition Standards for Meat and Meat Alternates*.

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[1] For children younger than 4, meat should be cut into bite-size pieces to avoid choking. Any nuts or seeds should be in a prepared food and ground or finely chopped. Nut butters should be thinly spread. Check for food allergies before serving.

[2] Do not serve any foods containing chemically altered fat substitutes (e.g., Olestra, Olean and Simplesse), artificial sweeteners (e.g., acesulfame potassium, aspartame, neotame, saccharin, sucralose and tagatose), nonnutritive sweeteners (e.g., stevia or Rebiana) or sugar alcohols (e.g., sorbitol, mannitol, xylitol, maltitol, maltitol syrup, lactitol, erythritol, isomalt and hydrogenated starch hydrolysates). For more information, see definitions in the Glossary.

[3] Combination entree items include at least two CACFP food components (e.g., grains/breads and meat/meat alternates), such as pizza, bean burrito, beef stew, hamburger on a bun, and turkey and cheese sandwich. For more information, see *Evaluating Combination Foods* under *Rationale and Guidance* on the next page.

[4] In the CACFP Meal Pattern for Children, legumes (cooked dry beans or peas) can be counted as either a vegetable or a meat alternate, but not both in the same meal. Yogurt is counted as a meat alternate for children ages 1 and older.

[5] Condiments do not contribute to the CACFP Meal Pattern for Children, but they can increase the palatability and acceptance of many nutrient-rich foods. Their use should be limited since they are generally high in fat, sugars and sodium with little nutritional value.

- Full-fat, natural cheese (e.g., cheddar and Colby) except for children younger than 2.
- Process cheese foods, process cheese spreads and process cheese products, e.g., Velveeta and Cheez Whiz.
- Yogurt containing artificial or nonnutritive sweeteners, e.g., "light" yogurt.[2]
- Shark, swordfish, king mackerel, tile fish and albacore tuna. These foods have potentially high mercury levels that are dangerous to children.

RATIONALE AND GUIDANCE

Evaluating Combination Foods: Combination entree items are foods containing at least two CACFP food components that are prepared together, e.g., lasagna, beef stew and pizza. For example, pizza contains crust (grain/bread) and cheese (meat/meat alternate). Combination entree items are evaluated for compliance with the CCCNS based on the specified *Nutrition Standards for Meat and Meat Alternates* (see previous page). If the entree item contains at least two food components that are prepared separately and then assembled (e.g., hamburger on a bun), each component can be evaluated separately under the standards for the appropriate category. For example, the hamburger is evaluated under the *Nutrition Standards for Meat and Meat Alternates* and the bun is evaluated under the *Nutrition Standards for Grains and Breads* (see *Grains and Breads* in this section).

Fat: Same rationale as previously indicated (see *Grains and Breads* in this section). Meat and dairy products account for the majority of saturated fat in the American diet. Cheese provides the most saturated fat, followed by beef. For children ages 2 and older, choosing lean meat and meat alternates and low-fat, part-skim and reduced-fat natural cheese can significantly lower the amount of fat and saturated fat in children's diets. A diet lower in fat is associated with lower risk of overweight, obesity, cardiovascular disease and some cancers. Full-fat, nutrient-rich foods (e.g., cheese and yogurt) should not be restricted for children younger than 2. This age group needs sufficient fat for normal growth and development.

Exemptions to Fat Limits: The CCCNS allows exemptions to the fat limits for certain nutrient-rich foods that are naturally high in fat, including eggs, natural low-fat and reduced-fat cheese, nuts, seeds, and nut and seed butters. Eggs are good sources of easily digestible protein. Natural low-fat and reduced-fat cheese is a good source of protein and calcium. The majority of fat in nuts, seeds and nut and seed butters is unsaturated, which promotes cardiovascular health.

Trans fats: Same rationale as previously indicated (see *Grains and Breads* in this section).

Sugars: Same rationale as previously indicated (see *Grains and Breads* in this section). Meat and meat alternates generally do not contain added sugars with the exception of yogurt (see *Exemptions to Sugar Limits* below).

Exemptions to Sugar Limits: Yogurt is a nutrient-rich food. Most yogurt exceeds 35 percent of calories from sugars because it contains naturally occurring sugars. To avoid eliminating yogurt based on sugar content, the CCCNS for yogurt addresses *total sugars* instead of percentage of calories from sugars. Plain low-fat yogurt contains about 18 grams of naturally occurring sugars in 8 ounces (2.25 grams per ounce). Flavored yogurt also contains added sugars. Many popular brands contain close to 5 grams of total sugars (naturally occurring and added) per ounce. The standard of no more than 4 grams of total sugars per ounce limits *added* sugars for most yogurt to about 35 percent of calories. Acceptable products can contain 16 grams of total sugars in 4 ounces (½ cup), 24 grams of total sugars in 6 ounces (¾ cup) and 32 grams of total sugars in 8 ounces (1 cup). To further decrease sugar content, mix equal parts of plain yogurt with a sweetened yogurt that contains no more than 4 grams of sugars per ounce.

Artificial and Nonnutritive Sweeteners: Same rationale as previously indicated (see *Grains and Breads* in this section). Meat and meat alternates generally do not contain artificial or nonnutritive sweeteners with the exception of light yogurt. Read labels for commercially prepared meat and meat alternates to ensure that they do not contain artificial or nonnutritive sweeteners. For more information, see "artificial sweeteners" and "nonnutritive sweeteners" in the Glossary.

Sodium: The sodium limit for meat and meat alternates is based on standards from the FDA and the IOM. The IOM recommends that snacks contain no more than 200 milligrams of sodium and entree items contain no more than 480 milligrams of sodium. To meet the FDA food labeling definition for "healthy," an entree item cannot contain more than 480 milligrams of sodium. For more information, see "sodium" in the Glossary.

CACFP MEAL PATTERN COMPONENT — MILK

NUTRITION STANDARDS FOR MILK

- Unflavored whole milk for ages 12 to 23 months.
- Unflavored low-fat (1%) or fat-free (nonfat or skim) milk for ages 24 months or older.

Practices to Meet the Standards

- Ages 12 to 23 months: Serve only unflavored whole milk or lactose-free whole milk.[1]
- Ages 24 months or older: Serve only unflavored, low-fat (1%) milk, fat-free (nonfat) milk or lactose-free milk (1% or nonfat).[1]
- Serve nutritionally equivalent nondairy beverages such as soy or rice milk to children only if an appropriate medical statement is provided.[2]
- Serve plain water as an additional beverage item only if it is not offered as a choice instead of milk. Water is not a component of the CACFP Meal Pattern for Children and does not contribute to a reimbursable meal or snack. (For more information, see *Access to Drinking Water* in section 4.) If served, water cannot contain any added ingredients, such as sweeteners (natural, artificial or nonnutritive), sugar alcohols, caffeine and flavors.[3]

Do Not Serve

- Flavored milk, e.g., chocolate, strawberry and vanilla.
- Milk with added sugars, sweeteners (natural, artificial or nonnutritive) or sugar alcohols.[3]
- Low-fat or nonfat milk to ages 12 to 23 months.
- Whole milk to ages 24 months or older.
- Raw milk, e.g., raw cow's milk. Raw milk can be contaminated with harmful bacteria. Only pasteurized milk products can be used.

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[1] Lactose-free milk counts as fluid milk in the CACFP Meal Pattern for Children and can be substituted for regular milk.

[2] CACFP facilities can provide milk substitutions for children only when an appropriate medical statement is completed and on file. This statement must be signed by a licensed physician if the child is disabled or by a recognized medical authority if the child is not disabled but has other medical or special dietary needs. For more information, see *Nutrition Policies and Guidance for the Child and Adult Care Food Program: Accommodating Special Dietary Needs* at http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326.

[3] Do not serve any beverages containing artificial sweeteners (e.g., acesulfame potassium, aspartame, neotame, saccharin, sucralose and tagatose), nonnutritive sweeteners (e.g., stevia or Rebiana) or sugar alcohols (e.g., sorbitol, mannitol, xylitol, maltitol, maltitol syrup, lactitol, erythritol, isomalt and hydrogenated starch hydrolysates). For more information, see definitions in the Glossary.

RATIONALE AND GUIDANCE

Recommended Daily Servings: The Dietary Guidelines recommend that children ages 2 to 8 should consume 2 cups per day of nonfat or low-fat milk or equivalent milk products. Children ages 9 and older should consume 3 cups per day of fat-free or low-fat milk or equivalent milk products. The CACFP Meal Pattern for Children requires fluid milk as a meal component for all breakfasts, lunches and suppers. Milk can be served as one of the two required snack components. For more information, see the CACFP Meal Pattern for Children (appendix A).

Fat Content of Milk: Children younger than 2 should be served only whole milk. Reduced-fat milk (2%), low-fat milk (1%) and nonfat (skim) milk are not appropriate for this age group as young children need adequate amounts of fat for normal growth and development. Whole and 2% milk are major sources of saturated fat in children's diets. After age 2, children do not need the added fat and saturated fat from whole or 2% milk. For children ages 2 and older, the AAP recommends serving low-fat (1%) or fat-free milk. Low-fat and fat-free milk provide a significant amount of calcium and other needed nutrients while helping to lower children's fat and saturated fat consumption. Low-fat and fat-free milk contain as much calcium and Vitamin D as 2% and whole milk without the extra calories and saturated fat.

Sugars: The Dietary Guidelines recommend choosing foods and beverages without added sugars. The American Heart Association (AHA) recommends a limit for added sugars to maintain a healthy weight, decrease cardiovascular risk and meet essential nutrient needs. The AHA specifies that added sugars should not be more than half of an individual's discretionary calorie allowance. (For more information, see "discretionary calories" in the Glossary.) For children ages 4-8, this means limiting added sugars from all foods and beverages to about 5 ¼ teaspoons per day. Most children consume four times this amount.

A 1-cup serving of flavored milk provides about 3 teaspoons of added sugars. When children drink flavored milk they can quickly reach their limit of added sugars before consuming any other foods, such as sweetened beverages, sweetened breakfast cereals and desserts. The CCCNS allows only unflavored milk to help children meet the AHA's recommended limits for added sugars and to encourage children to learn to enjoy the natural taste of plain milk.

Artificial and Nonnutritive Sweeteners: Same rationale as previously indicated (see Grains and Breads in this section). Artificial or nonnutritive sweeteners are not found in plain unflavored milk but may be found in some flavored milks. Many flavored waters also contain these ingredients. For more information, see "artificial sweeteners" and "nonnutritive sweeteners" in the Glossary.

OTHER FOODS

NUTRITION STANDARDS FOR OTHER FOODS

- Serve only foods and beverages that meet the CACFP Meal Pattern for Children and the CCCNS.
- Do not serve other foods and beverages.

Other foods include "noncreditable" foods and beverages that do not count toward the four food components (meat/meat alternates, vegetables/fruits, grains/breads and milk) of the CACFP Meal Pattern for Children. Other foods generally contain fat, added sugars and sodium with little nutritional value.

The CCCNS eliminates these foods and beverages in child care because they provide extra calories with few nutrients, and children have many opportunities to consume these less nutritious choices outside child care. Serving only healthy foods in child care helps parents balance children's food choices at home and gives children a better chance of meeting their daily MyPyramid recommendations. Current research on children's eating habits supports this approach because most children consume too many calories from fats and sugars (see *Rationale for Healthy Foods and Beverages in Child Care* in section 4).

This list of other foods is not all inclusive. The CCCNS also eliminates some foods that are creditable in the CACFP Meal Pattern for Children but contain fat, sugars and sodium with few nutrients, such as:

- sweetened grain-based desserts (e.g., cakes, cookies, doughnuts and brownies);
- grain-based snack chips (e.g., tortilla chips, corn chips and Sunchips);
- fried or baked pre-fried vegetables (e.g. french fries and potato puffs); and
- fried, baked pre-fried or high-fat meats and meat alternates (e.g., chicken nuggets, fish sticks, processed luncheon meats, full-fat cheese and process cheese foods).

For more information, see the CCCNS for *Grains and Breads, Vegetables and Fruits* and *Meat and Meat Alternates* in this section.

Practices to Meet the Standards

- Serve only beverages that meet the CACFP Meal Pattern for Children (see appendix A) and the nutrition standards specified in this section for milk and juice. For more information, see the CCCNS for *Milk and Vegetables and Fruits* in this section.
- Serve only foods that meet the CACFP Meal Pattern for Children (see appendix A) and the nutrition standards specified in this section for grains, breads, vegetables, fruits, meat and meat alternates. For more information, see the CCCNS for *Grains and Breads, Vegetables and Fruits* and *Meat and Meat Alternates* in this section.
- Do not serve other foods and beverages, such as the examples listed below.
  - Soft drinks, regular or diet.
  - Sports drinks or energy drinks, regular or diet.
  - Sugary beverages, such as fruit-based drinks with added sweeteners; sweetened iced teas; punch; hot chocolate; and lemonade.
  - Artificially sweetened beverages such as diet soft drinks, teas, lemonade and punch.
  - Coffee, decaffeinated coffee, herbal coffee and iced coffee.
  - Tea, decaffeinated tea, herbal tea and iced tea (regular or diet).
  - Waters with added sugars or sweeteners (natural, artificial or nonnutritive), sugar alcohols or other ingredients. For more information, see definitions in the Glossary.
  - Any other beverages that are not part of the CACFP Meal Pattern for Children (see appendix A) and that do not meet the nutrition standards specified in this section for milk or juice. For more information, see the CCCNS for *Milk* and *Vegetables and Fruits* in this section.
  - Candy and chocolate (all kinds, including sugar free).
  - Potato chips, regular, reduced fat and baked.

- Snack chips, regular, reduced fat and baked.
- Popcorn, regular and reduced fat, e.g., Smartfood popcorn.
- Caramel popcorn and popcorn cakes.
- Gelatin, flavored or sugar free.
- Commercially prepared fruit snacks that are not made with 100 percent fruit, such as fruit roll-ups and similar items. These are generally made with juice from concentrates and contain other ingredients such as corn syrup, sugar, modified food starch, starch, fruit puree, gelatin and artificial flavors and colors.
- Ice cream, sherbet, frozen yogurt, Italian ice, popsicles and frozen novelties.
- Pudding.
- Marshmallows.
- Bacon.
- Canned soups that are not creditable in the CACFP Meal Pattern for Children, e.g., beef barley, beef noodle, turkey or chicken noodle and turkey or chicken rice.
- Any other foods that do not meet the nutrition standards specified in this section for grains, breads, vegetables, fruits, meat and meat alternates. For more information, see the CCCNS for *Grains and Breads, Vegetables and Fruits* and *Meat and Meat Alternates.*

CACFP INFANT MEAL PATTERN COMPONENT — IRON-FORTIFED INFANT CEREAL, BREAD AND CRACKERS[1]

NUTRITION STANDARDS FOR INFANT BREADS AND CRACKERS

A serving contains:

- less than 0.5 gram of trans fat, no hydrogenated or partially hydrogenated oils and no chemically altered fat substitutes.[2]
- no more than 35 percent of calories from sugars and no artificial sweeteners, nonnutritive sweeteners or sugar alcohols.[2]
- no more than 200 milligrams of sodium.

See appendices D and E for information on using food labels to determine whether a product meets these standards.

Practices to Meet the Standards

- For infants who are at least 4 months old and developmentally ready, serve iron-fortified infant cereal. Introduce iron-fortified rice cereal first followed by iron-fortified oat and barley infant cereal.[1]
- For infants who are at least 8 months old and developmentally ready, serve commercially prepared whole-grain or enriched age-appropriate bread and crackers for snack only. Allowable bread and crackers include teething biscuits, strips of dry bread or toast, and plain crackers low in salt and without nuts, seeds or hard pieces of whole-grain kernels, e.g., soda crackers or graham crackers without honey.[3,4]
- Serve only products that meet the *Nutrition Standards for Infant Breads and Crackers* (see box) in portion sizes that are consistent with the CACFP Infant Meal Pattern (see appendix B).
- For infants who are at least 8 months old and developmentally ready for adult breakfast cereals, serve only whole-grain cereals containing no more than 6 grams of sugars per serving.[5]
- Do not use condiments (such as margarine, butter, jelly, jam, syrup and cream cheese) with bread and crackers. These foods do not contribute to the CACFP Infant Meal Pattern and add unnecessary fat, sugars and sodium to infants' diets.

Do Not Serve

- Sweetened grain-based baked goods such as cinnamon rolls, donuts, pastries, toaster pastries, croissants, muffins, cookies, cereal or grain bars, cakes, cup cakes, brownies, cheesecakes, pies and rice cereal treats. These foods contain added sugars and fat and are not appropriate for infants.
- Baked goods containing artificial trans fats, e.g., hydrogenated or partially hydrogenated oils.
- Baked goods made with whole eggs such as pancakes, waffles or muffins. These foods can cause allergic reactions.
- Foods that could cause choking such as hard pretzels, bread sticks, tortilla chips, granola bars, croutons, rice cakes and breads or crackers containing nuts, seeds or hard pieces of whole-grain kernels.
- Adult breakfast cereals (cold or hot) for infants less than 8 months, e.g., Cheerios, Kix, Life and oatmeal.[5]
- Commercially prepared cereal mixtures such as commercial jarred baby food cereals.

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[1] The CACFP Infant Meal Pattern does not contain the extensive grains/breads component of the CACFP Meal Pattern for Children. It includes only iron-fortified infant cereal and, when infants are developmentally ready (at least 8 months of age), bread and crackers. These foods should only be introduced in consultation with parents. The AAP recommends that infants are at least 6 months before solid foods are introduced.

[2] Do not serve any foods containing chemically altered fat substitutes (e.g., Olestra, Olean and Simplesse), artificial sweeteners (e.g., acesulfame potassium, aspartame, neotame, saccharin, sucralose and tagatose), nonnutritive sweeteners (e.g., stevia or Rebiana) or sugar alcohols (e.g., sorbitol, mannitol, xylitol, maltitol, maltitol syrup, lactitol, erythritol, isomalt and hydrogenated starch hydrolysates). For more information, see definitions in the Glossary.

[3] Bread and crackers can be served to infants at snack only when they are at least 8 months old are developmentally ready. Consult with families about bread and crackers being introduced at home so the CACFP facility can serve the same food at the same time.

[4] Honey and foods containing honey (even prepared foods such as honey graham crackers) cannot be served to infants. Honey can cause allergies and foodborne illness.

[5] Adult ready-to-eat cold dry breakfast cereals and cooked breakfast cereals can be served to infants at least 8 months old when they are developmentally ready, if parents request that they be served. However, they are not creditable as a food component in the CACFP Infant Meal Pattern. For more information, see *Adult Cereals* under *Rationale and Guidance* on the next page.

RATIONALE AND GUIDANCE

Solid Foods: The AAP recommends exclusive consumption of breast milk for at least the first six months of life, followed by the gradual introduction of solid foods from 6 to 12 months. The CACFP Infant Meal Pattern allows the introduction of solid foods between 4 to 6 months based on an infant's developmental readiness. The child care program should consult with parents regarding their infant's developmental readiness and any solid foods being introduced at home.

Allowable Grain-Based Foods: Iron-fortified infant cereal and specific types of bread and crackers are the only allowable grain-based foods in the CACFP Infant Meal Pattern. Additional grains and breads can be served to infants when parents request that they be served and infants are at least 8 months old and developmentally ready to accept them. However, these additional foods are not creditable as food components in the CACFP Infant Meal Pattern. The CCCNS addresses additional nutrition standards for these foods, since most commercially prepared grain-based foods (such as breads and crackers) contain added fat, sugars and sodium.

Adult Cereals: Adult ready-to-eat cold dry breakfast cereals (e.g., Cheerios, Kix and Life) and cooked breakfast cereals (e.g., oatmeal and cream of wheat) are not part of the CACFP Infant Meal Pattern. They should not be served to babies younger than 8 months. These cereals often contain mixed grains and are usually higher in salt and sugars than infant cereals. They may also contain hard pieces of food that could cause choking such as raisins, dates, nuts or uncooked whole grain flakes. Adult cereals can be fed only as an additional food to older babies (at least 8 months) if the family requests that they be served. To provide a reimbursable infant meal, the child care program must serve all other required foods specified in the CACFP Infant Meal Pattern (see appendix B).

Commercially Prepared Cereal Mixtures: Commercially prepared cereal mixtures are not an allowable component in the CACFP Infant Meal Pattern because the portion of each food component in the mixture is not specified. They also have the potential to cause an allergic reaction because they may contain a new food that the infant has not tried.

Sweetened Grain-Based Baked Goods: Most baked goods (such as cinnamon rolls, doughnuts, pastries, toaster pastries, croissants, muffins, cookies, cereal or grain bars, cakes, cupcakes, brownies, cheesecakes, pies and rice cereal treats) are inappropriate for infants because they provide calories but few nutrients. Babies have small stomachs and can fill up easily. They need nutritious foods to ensure they get the nutrients needed for healthy growth and development. Baked goods may be a choking risk. They can also contain ingredients that cause food allergies and promote tooth decay.

Added Fat: The CCCNS for Infants does not restrict the natural fat content of nutrient-rich foods such as natural cheese and yogurt. Infants need full-fat, nutrient-rich foods for normal growth and development. However, the CCCNS for Infants restricts foods with added fats and artificial trans fats because they are not needed in infants' diets (see *Trans Fats* below).

Trans Fats: Due to their negative impact on children's health, the CCCNS does not allow foods containing artificial trans fats. Food labeling regulations allow food labels to state "0 grams" trans fats if a serving contains less than 0.5 gram. To avoid artificial trans fats, read ingredients and select products without hydrogenated or partially hydrogenated oils. For more information, see "trans fats" in the Glossary.

Sugars: Sweetened foods may fill up infants without providing essential nutrients. Sugars eaten alone, added to foods or in prepared foods provide unnecessary calories and promote the development of tooth decay. Sugars should not be added to infant foods to provide flavor. It is best for children to develop a liking for the natural flavor of foods. Honey should never be fed to babies less than 1 year old, including honey alone (e.g., yogurt with honey or peanut butter with honey) or in cooking, baking or prepared foods (e.g., honey graham crackers). Honey may contain botulism spores that can cause a serious type of foodborne illness. After babies' digestive systems mature, honey can be tolerated. For more information, see "added sugars" in the Glossary.

Artificial and Nonnutritive Sweeteners: Artificially sweetened foods or beverages are not appropriate for infants. Infants are growing rapidly and have no need for low calorie foods and drinks. Artificial sweeteners, nonnutritive sweeteners and sugar alcohols have not been proven safe for consumption by infants. For more information, see "artificial sweeteners," "nonnutritive sweeteners" and "sugar alcohols" in the Glossary.

Sodium: Infants do not need foods with added sodium. Salt should not be added in cooking. When commercial bread or crackers are purchased, they should be low in sodium. The sodium limit for infant breads and crackers is based on the IOM standard of no more than 200 milligrams of sodium. For more information, see "sodium" in the Glossary.

CACFP INFANT MEAL PATTERN COMPONENT — VEGETABLES AND FRUITS[1, 2]

NUTRITION STANDARDS FOR INFANT VEGETABLES AND FRUITS

A serving contains:

- no added fat or chemically altered fat substitutes.[3]
- less than 0.5 gram of trans fat and no hydrogenated or partially hydrogenated oils.
- no added sugars, artificial sweeteners, nonnutritive sweeteners or sugar alcohols.[3]
- no added salt and no more than 200 milligrams of sodium.

Practices to Meet the Standards

- Serve only fruits and vegetables that meet the *Nutrition Standards for Infant Vegetables and Fruits* (see box) in portion sizes that are consistent with the CACFP Infant Meal Pattern (see appendix B).
- Offer a variety of different fruits and vegetables including:
  - commercially prepared baby fruits
  - commercially prepared baby vegetables
  - fresh or frozen fruits[4, 5]
  - fresh or frozen vegetables[4, 5]
  - canned fruits in their natural juices or water[4, 5]
  - canned vegetables with no added sodium[4, 5]
- Serve fruits and vegetables plain, without added fat, salt, honey, sugars or other sweeteners (including natural, artificial or nonnutritive) or sugar alcohols.[3] Do not serve any fruits or vegetables made with hydrogenated or partially hydrogenated oils.
- Do not use condiments (such as margarine, butter, mustard, ketchup, mayonnaise, salad dressings, sour cream and sauces) with vegetables and fruits. These foods do not contribute to the CACFP Infant Meal Pattern and add unnecessary fat, sugars and sodium to infants' diets.

Do Not Serve

- Fruits and vegetables with added fat, salt, honey, sugars or other sweeteners (including natural, artificial or nonnutritive) or sugar alcohols.[3]
- 100 percent fruit and vegetable juices until infants are at least 12 months of age and can drink from a cup. For more information, see *Vegetables and Fruits* in the CCCNS for Children.
- Fruit-based drinks containing less than 100 percent real fruit juice and added sweeteners (natural, artificial or nonnutritive) or sugar alcohols.
- Commercially prepared baby food dinners listing a fruit or vegetable as the first ingredient.
- Fried or baked pre-fried vegetables, e.g., french fries, potato puffs and hash brown patties.
- Commercially prepared fruit snacks that are not made with 100 percent fruit, such as Fruit Roll-Ups and similar items. These products are not fruit and are a choking hazard for infants.
- Home-prepared high-nitrate vegetables such as beets, carrots, collard greens, spinach and turnips to babies less than 6 months old. For more information, see *Home-Prepared Vegetables High in Nitrates* under *Rationale and Guidance* on the next page.
- Fruits and vegetables that are choking hazards for infants. For more information, see *Fruit and Vegetable Choking Hazards* under *Rationale and Guidance* on the next page.

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[1] The CACFP Infant Meal Pattern includes an optional vegetable/fruit component at lunch/supper for infants 4 months and older (when they are developmentally ready to accept it) and for infants at least 8 months old at breakfast and lunch/supper. These foods should only be introduced in consultation with parents. The AAP recommends that infants are at least 6 months before solid foods are introduced.

[2] Do not serve any vegetables or fruits until an infant is at least 4 months old and developmentally ready to accept them. Consult with families to verify that children do not have food allergies before serving a fruit or vegetable for the first time.

[3] Do not serve any foods containing chemically altered fat substitutes (e.g., Olestra, Olean and Simplesse), artificial sweeteners (e.g., acesulfame potassium, aspartame, neotame, saccharin, sucralose and tagatose), nonnutritive sweeteners (e.g., stevia or Rebiana) or sugar alcohols (e.g., sorbitol, mannitol, xylitol, maltitol, maltitol syrup, lactitol, erythritol, isomalt and hydrogenated starch hydrolysates). For more information, see definitions in the Glossary.

[4] For ages 4 through 7 months, mash, strain or puree all fruits and vegetables to prevent choking. For ages 8 through 11 months, cut vegetables and fruit into bite-size pieces and cook before serving. Corn should be pureed and cooked before serving.

[5] Citrus fruits (e.g., orange, tangerine and grapefruit), pineapple or tomato juices or tomato products may cause allergic reactions and should not be given before 6 months of age.

RATIONALE AND GUIDANCE

Fruit and Vegetable Choking Hazards: Some fruits and vegetables pose a choking risk and cannot be served to children under age 4. These include:

- dried fruit and vegetables;
- raw vegetables;
- cooked or raw whole corn kernels;
- hard pieces of raw fruit such as apple, pear or melon; and
- whole grapes, berries, cherries, melon balls, or cherry or grape tomatoes.

Commercially Prepared Baby Food Dinners: Commercially prepared baby food dinners that contain more than one food item (e.g., baby food dinners with vegetables and meat) are not creditable as a food component in the CACFP Infant Meal Pattern. They do not specify the amount of each CACFP food component and may contain a new food that could cause an allergic reaction.

Home-Prepared Vegetables High in Nitrates: Home-prepared vegetables such as beets, carrots, collard greens, spinach and turnips are high in nitrates and should only be fed to babies ages 6 months and older. The naturally occurring nitrates in these vegetables can be converted to nitrites in very young babies. Nitrites bind iron in the blood and make it difficult to carry oxygen. If the nitrites are high enough, this can result in a condition called methemoglobinemia, in which a baby has blue skin and difficulty breathing. Commercially prepared baby food spinach, beets and carrots contain only traces of nitrates and are not considered a risk to babies less than 6 months old.

Juice: Vegetable juice is not part of the CACFP Infant Meal Pattern and cannot be served to infants younger than 12 months. Fruit juice is not part of the *Vegetables and Fruits* component of the CACFP Infant Meal Pattern. It is an additional beverage that can be offered to infants 8 months and older at snack only. However, the CCCNS is stricter and allows 100 percent juice only for infants 12 months and older. Whole baby food fruits and vegetables are better for infants than juice because they provide nutrients and fiber that may be lost when juice is processed. For more information on the juice recommendations of the CCCNS for Infants, see *Infant Beverages* in this section.

Added Fat: Same rationale as previously indicated (see *Iron-Fortified Infant Cereal, Bread and Crackers* in this section).

Trans Fats: Same rationale as previously indicated (see *Iron-Fortified Infant Cereal, Bread and Crackers* in this section). Read labels for commercially prepared vegetables and fruits to ensure that they do not contain hydrogenated or partially hydrogenated oils.

Sugars: Same rationale as previously indicated (see *Iron-Fortified Infant Cereal, Bread and Crackers* in this section). The CCCNS does not address the naturally occurring sugars contained in fruits and some vegetables. Naturally occurring sugars are not a concern because fruits and vegetables are nutrient rich, containing vitamins, minerals, fiber and other health-enhancing substances. Read labels for commercially prepared vegetables and fruits to ensure that they do not contain added sugars.

Artificial and Nonnutritive Sweeteners: Same rationale as previously indicated (see *Iron-Fortified Infant Cereal, Bread and Crackers* in this section). Read labels for commercially prepared vegetables and fruits to ensure that they do not contain artificial or nonnutritive sweeteners.

Sodium: Same rationale as previously indicated (see *Iron-Fortified Infant Cereal, Bread and Crackers* in this section). Read labels for commercially prepared vegetables and fruits to ensure that they do not contain added sodium.

CACFP INFANT MEAL PATTERN COMPONENT — MEAT AND MEAT ALTERNATES[1, 2]

NUTRITION STANDARDS FOR INFANT MEAT AND MEAT ALTERNATES

A serving contains:

- no added fat or chemically altered fat substitutes.[3]
- less than 0.5 gram of trans fat and no hydrogenated or partially hydrogenated oils.
- no added sugars, artificial sweeteners, nonnutritive sweeteners or sugar alcohols.[3]
- no added salt and no more than 200 milligrams of sodium.

Practices to Meet the Standards

- Serve only meat and meat alternates that meet the *Nutrition Standards for Infant Meat and Meat Alternates* (see box) in portion sizes that are consistent with the CACFP Infant Meal Pattern (see appendix B).
- Serve lean meat, skinless poultry (chicken, turkey), fish, cooked dry beans or peas (legumes), egg yolks and natural cheese, e.g., cheddar, mozzarella, muenster and provolone.[2, 4]
- Serve meat and meat alternates plain without added fat, salt, honey, sugars, sweeteners (including natural, artificial or nonnutritive) or sugar alcohols.[3] Do not serve any meat or meat alternates made with hydrogenated or partially hydrogenated oils.
- Do not use condiments (such as margarine, butter, ketchup, mustard, mayonnaise, sauces and gravies) with meat and meat alternates. These foods do not contribute to the CACFP Infant Meal Pattern and add unnecessary fat, sugar and sodium to infants' diets.

Do Not Serve

- Sausage, bacon and processed luncheon meats, e.g., pepperoni, salami and bologna.
- Baked pre-fried foods, e.g., chicken nuggets, fish sticks and corn dogs.
- Fried foods.
- Process cheese food, cheese spread and cheese products, e.g., Velveeta and Cheez Whiz.
- Nuts, seeds, and nut and seed butters, e.g., peanut, almond, cashew and sunflower. These foods are choking hazards and can cause possible food allergies.
- Shark, swordfish, king mackerel, tile fish and albacore tuna. These foods have potentially high mercury levels that are dangerous to children.
- Shellfish, e.g., shrimp, lobster, crab, crawfish, scallops, oysters and clams. These types of seafood can cause severe allergic reactions in some babies.
- Commercially prepared baby food meals.
- Meat and meat alternates with added fat, salt, honey, sugars or other sweeteners (natural, artificial or nonnutritive) and sugar alcohols.[3]
- Yogurt containing artificial or nonnutritive sweeteners, e.g., "light" yogurt.[3, 5]

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[1] The CACFP Infant Meal Pattern includes a meat/meat alternate component for ages 8 through 11 months at lunch and supper. For infants, the meat/meat alternate category is limited to lean meat, boneless fish, poultry, cheese, egg yolk, cooked dry beans or peas and cheese. These foods should only be introduced in consultation with parents.

[2] Do not serve any meat or meat alternates until an infant is at least 8 months old. Before serving a meat or meat alternate for the first time, consult with families to verify that the infant has tried the food at home and does not have food allergies.

[3] Do not serve any foods containing chemically altered fat substitutes (e.g., Olestra, Olean and Simplesse), artificial sweeteners (e.g., acesulfame potassium, aspartame, neotame, saccharin, sucralose and tagatose), nonnutritive sweeteners (e.g., stevia or Rebiana) or sugar alcohols (e.g., sorbitol, mannitol, xylitol, maltitol, maltitol syrup, lactitol, erythritol, isomalt and hydrogenated starch hydrolysates). For more information, see definitions in the Glossary.

[4] All meat and meat alternates should be pureed, ground, mashed or finely chopped to prevent choking.

[5] Yogurt is not creditable in the CACFP Infant Meal Pattern. However, it may be served as an additional food item when infants are at least 8 months old and are developmentally ready to eat it, if parents request that it be served.

RATIONALE AND GUIDANCE

Commercially Prepared Baby Food Meals: Commercially prepared baby food meals may contain a new food that the infant has not tried and may cause an allergic reaction. The portion of each food component in the mixture is not specified and cannot be counted as a food component in the CACFP Infant Meal Pattern.

Process Cheese Products: While process cheese products are allowed in the CACFP Infant Meal Pattern, the CCCNS is stricter and does not allow these foods. Process cheese food, cheese spread and cheese products contain additional ingredients that are not in natural cheese. They are higher in moisture content and lower in protein content than natural cheese, and they are often high in sodium. The CCCNS allows natural cheese for infants. For more information, see "natural cheese" in the Glossary.

Yogurt: Yogurt is not a creditable food in the CACFP Infant Meal Pattern. It should not be served to babies younger than 8 months. Yogurt can be fed only as an additional food to older babies (at least 8 months) if they are developmentally ready to accept it and the family requests that it is served. To provide a reimbursable infant meal, the child care program must serve all other required foods specified in the CACFP Infant Meal Pattern (see appendix B).

Full-fat yogurt can be served to infants. Yogurt is a nutrient-rich food but flavored yogurt is often high in added sugars. Limit added sugars by serving only plain yogurt sweetened with mashed fruit. Alternatively, mix equal parts of plain yogurt with a sweetened yogurt that contains no more than 4 grams of sugars per ounce. For more information, see *Exemptions to Sugar Limits* under *Rationale and Guidance* in the *Meat and Meat Alternates* section of the CCCNS for Children.

Added Fat: Same rationale as previously indicated (see *Iron-Fortified Infant Cereal, Bread and Crackers* in this section).

Trans Fats: Same rationale as previously indicated (see *Iron-Fortified Infant Cereal, Bread and Crackers* in this section). Read labels for commercially prepared meat and meat alternates to ensure that they do not contain hydrogenated or partially hydrogenated oils.

Sugars: Same rationale as previously indicated (see *Iron-Fortified Infant Cereal, Bread and Crackers* in this section). Read labels for commercially prepared meat and meat alternates to ensure that they do not contain added sugars.

Artificial and Nonnutritive Sweeteners: Same rationale as previously indicated (see *Iron-Fortified Infant Cereal, Bread and Crackers* in this section). Meat and meat alternates generally do not contain artificial or nonnutritive sweeteners with the exception of light yogurt. Read labels for commercially prepared meat and meat alternates to ensure that they do not contain artificial or nonnutritive sweeteners. For more information, see "artificial sweeteners" and "nonnutritive sweeteners" in the Glossary.

Sodium: Same rationale as previously indicated (see *Iron-Fortified Infant Cereal, Bread and Crackers* in this section). Read labels for commercially prepared meat and meat alternates to ensure that they do not contain added sodium.

CACFP INFANT MEAL PATTERN COMPONENT — INFANT BEVERAGES (BREAST MILK, IRON-FORTIFIED INFANT FORMULA AND FRUIT JUICE)

NUTRITION STANDARDS FOR INFANT BEVERAGES

- Breast milk (preferred).
- Iron-fortified infant formula.[1]
- Water from a cup for infants 7 months and older.
- No 100 percent juice until 12 months.
- No other beverages.

Practices to Meet the Standards

- Serve only breast milk (preferred) or iron-fortified infant formula from birth through 11 months.[1,2]
- Serve water as an additional beverage item only when infants are at least 7 months old and can drink from a cup. Water cannot contain any added ingredients, such as flavors, sugars, sweeteners (natural, artificial or nonnutritive), sugar alcohols or caffeine.[3] Water is not a component of the CACFP Infant Meal Pattern and does not contribute to a reimbursable infant meal or snack.
- Serve 100 percent fruit juice only when infants are at least 12 months and can drink from a cup. For more information on the juice standards for children ages 12 months and older, see *Vegetables and Fruits* in the CCCNS for Children.

Do Not Serve

- Food or drink in a bottle other than breast milk (preferred) or iron-fortified infant formula unless medically necessary.[2]
- Cow's milk, lactose-free milk or nutritionally equivalent nondairy beverages such as soy or rice milk unless medically necessary.[2]
- 100 percent fruit and vegetable juices until an infant is at least 12 months and can drink from a cup.
- Soft drinks, regular or diet.[3]
- Sports drinks or energy drinks, regular or diet.[3]
- Sugary beverages, such as fruit-based drinks with added sweeteners; sweetened iced teas; punch; hot chocolate; and lemonade.
- Artificially sweetened beverages such as diet soft drinks, teas, lemonade and punch.[3]
- Coffee, decaffeinated coffee, herbal coffee and iced coffee.
- Tea, decaffeinated tea, herbal tea and iced tea (regular or diet).[3]
- Waters with added sugars or sweeteners (natural, artificial or nonnutritive), sugar alcohols or other ingredients.[3]
- Any other beverages that are not part of the CACFP Infant Meal Pattern (see appendix B).

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[1] All iron-fortified infant formulas served in the CACFP must meet the U.S. Department of Agriculture requirements. For more information, see *Nutrition Policies and Guidance for the Child and Adult Care Food Program: Feeding Infants* at http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326.

[2] CACFP facilities can provide an alternate formula or milk only when the appropriate medical statement is completed and on file. This statement must be signed by a licensed physician if an infant is considered disabled or by a recognized medical authority if an infant is not disabled but has medical or other special dietary needs. For more information, see *Nutrition Policies and Guidance for the Child and Adult Care Food Program: Accommodating Special Dietary Needs* at http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326.

[3] Do not serve any beverages containing artificial sweeteners (e.g., acesulfame potassium, aspartame, neotame, saccharin, sucralose and tagatose), nonnutritive sweeteners (e.g., stevia or Rebiana) or sugar alcohols (e.g., sorbitol, mannitol, xylitol, maltitol, maltitol syrup, lactitol, erythritol, isomalt and hydrogenated starch hydrolysates). For more information, see definitions in the Glossary.

RATIONALE AND GUIDANCE

Infant Beverages: The CACFP Infant Meal Pattern requires that infants from birth through 11 months must be fed either breast milk (preferred) or iron-fortified infant formula unless there is a medically documented dietary need. Consult the CACFP Infant Meal Pattern (appendix B) and the CSDE's *Nutrition Policies and Guidance for the Child and Adult Care Food Program: Feeding Infants* for specific information regarding infant meal and snack requirements.

Breast Milk: Breast milk is the optimal food for babies. The AAP recommends exclusive consumption of breast milk for at least the first six months of life. It is the only food a baby needs during this time and it continues to be an important source of nutrients for the first year. Breast milk contains the right balance of nutrients to meet babies' needs over time. The AAP recommends that breastfeeding should continue until 12 months of age or longer.

Iron-fortified Infant Formula: Iron-fortified infant formula is the best food for babies when they are not being breastfed or when a breastfeeding supplement is needed. Iron-fortified infant formula is specially formulated to have the right balance of nutrients and to be easily digested. Iron is a very important nutrient during the baby's first year and serving iron-fortified infant formula is the easiest way to ensure adequate intake of iron. For babies who are not breastfed, iron-fortified infant formula is the only food needed for at least the first six months of life and it continues to be an important source of nutrients for the baby's first year. All iron-fortified infant formulas served in the CACFP must meet the USDA requirements. For more information, see *Nutrition Policies and Guidance for the Child and Adult Care Food Program: Feeding Infants* at http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326.

Bottle Feeding: No food or drink other than breast milk (preferred) or iron-fortified infant formula should be served in a bottle. Adding food to a bottle deprives infants of the opportunity to learn to regulate their food intake because it provides too many calories too quickly. It also contributes to tooth decay. Food added to a bottle (e.g., infant cereal) does not help infants sleep through the night.

Drinking From a Cup: The AAP recommends that children ages 1 and older use a cup exclusively and not be allowed to carry it around throughout the day. Prolonged exposure of teeth to the sugars in juice, milk or formula is a major factor for tooth decay.

Water: Water is not creditable in the CACFP Infant Meal Pattern. However, it may be served as an additional beverage when infants are at least 7 months old and can drink from a cup. Water served to infants cannot contain any added ingredients, such as flavors, sugars, sweeteners (natural, artificial or nonnutritive), sugar alcohols or caffeine. For more information, see "added sugars," artificial sweeteners," and "nonnutritive sweeteners" in the Glossary.

Fruit Juice: The CACFP Infant Meal Pattern allows 100 percent fruit juice to be served to infants 8 months and older at snack only. However, the CCCNS is stricter because it allows 100 percent fruit juice only for children 12 months and older. To ensure adequate fiber and nutrient intake, the AAP and the Dietary Guidelines recommend that most servings of fruits and vegetables are from whole fruits and vegetables instead of juice. Juice does not offer any nutritional benefits over whole fruit. Whole baby food fruits and vegetables are better for infants than juice because they provide nutrients and fiber that may be lost when juice is processed. Excessive juice consumption may be linked to children becoming overweight or obese and is associated with tooth decay and diarrhea. For information on the juice standards for children ages 12 months and older, see *Vegetables and Fruits* in the CCCNS for Children.

Sugary Beverages: Sugary beverages such as fruit drinks, sports drinks and soft drinks are high in calories and low in key nutrients. Breast milk (preferred) and iron-fortified formula are the only beverages recommended for children during their first year to meet nutrient needs. Consumption of sugary beverages is associated with children becoming overweight or obese, calcium deficiency (because sugary beverages displace milk) and tooth decay.

Artificial and Nonnutritive Sweeteners: Same rationale as previously indicated (see *Iron-Fortified Infant Cereal, Bread and Crackers* in this section).

OTHER FOODS

NUTRITION STANDARDS FOR OTHER FOODS

- Serve only foods and beverages that meet the CACFP Infant Meal Pattern and the CCCNS.
- Do not serve other foods and beverages to infants.

Other foods include "noncreditable" foods and beverages that do not count toward any food component (iron-fortified infant cereal, bread and crackers, vegetables/fruits, meat/meat alternates and breast milk, iron-fortified infant formula and fruit juice) in the CACFP Infant Meal Pattern. Other foods generally contain fat, added sugars and sodium with little nutritional value. Many are choking hazards for infants and can cause possible food allergies. The CCCNS eliminates these foods and beverages for infants in child care because they are inappropriate for this age group.

Practices to Meet the Standards

- Serve only beverages that meet the CACFP Infant Meal Pattern (see appendix B) and the nutrition standards specified in this section for breast milk, iron-fortified infant formula and fruit juice. For more information, see *Infant Beverages (Breast Milk, Iron-Fortified Infant Formula and Fruit Juice)* in this section.
- Serve only foods that meet the CACFP Infant Meal Pattern (see appendix B) and the nutrition standards specified in this section for iron-fortified infant cereal, bread, crackers, vegetables, fruits, meat and meat alternates. For more information, see *Iron-Fortified Infant Cereal, Bread and Crackers, Vegetables and Fruits* and *Meat and Meat Alernates* in this section.
- Do not serve other foods and beverages, such as the examples listed below. This list is not all inclusive.
  - Soft drinks, regular or diet.
  - Sports drinks or energy drinks, regular or diet.
  - Sugary beverages, such as fruit-based drinks with added sweeteners; sweetened iced teas; punch; hot chocolate; and lemonade.
  - Artificially sweetened beverages such as diet soft drinks, teas, lemonade and punch.
  - Coffee, decaffeinated coffee, herbal coffee and iced coffee.
  - Tea, decaffeinated tea, herbal tea and iced tea (regular or diet).
  - Waters with added sugars or sweeteners (natural, artificial or nonnutritive), sugar alcohols or other ingredients. For more information, see definitions in the Glossary.
  - Any other beverages that are not part of the CACFP Infant Meal Pattern (see appendix B) and that do not meet the nutrition standards specified in this section for milk or juice.
  - Candy and chocolate (all kinds, including sugar free).
  - Potato chips, regular, reduced fat and baked.
  - Snack chips, regular, reduced fat and baked.
  - Popcorn, regular and reduced fat, e.g., Smartfood popcorn.
  - Caramel popcorn and popcorn cakes.
  - Gelatin, flavored or sugar free.
  - Commercially prepared fruit snacks that are not made with 100 percent fruit, such as Fruit Roll-Ups and similar items. These are generally made with juice from concentrates and contain other ingredients such as corn syrup, sugar, modified food starch, starch, fruit puree, gelatin and artificial flavors and colors.
  - Ice cream, sherbet, frozen yogurt, Italian ice, popsicles and frozen novelties.
  - Pudding.
  - Marshmallows.
  - Bacon.
  - Cream cheese.
  - Any other foods or beverages that do not meet the CACFP Infant Meal Pattern and the nutrition standards specified in this section for iron-fortified infant cereal; bread and crackers; vegetables and fruits; and meat and meat alternates. Note: The exception is nutrient-rich foods that are developmentally appropriate for infants, e.g., adult breakfast cereals and yogurt for infants at least 8 months old. For more information, see *Iron-Fortified Infant Cereal, Bread and Crackers* and *Meat and Meat Alternates* in this section.

HOW TO READ A FOOD LABEL

Serving Size and Number of Servings

- The Nutrition Facts label is based on one serving, but many packages contain more. If you are eating more than one serving, the calories and nutrients must be multiplied by the number of servings. For example, 24 crackers provide 1 ½ servings and contain 50 percent more calories and nutrients.

Sodium

- Limit sodium to reduce the risk of high blood pressure.
- Less than 5 percent is low sodium and 20 percent or more is high sodium.

Fiber

- Most people do not get enough fiber. Foods with 10-19 percent Daily Value are good sources and foods with 20 percent or more are high sources.
- Choose whole-grain foods as often as possible by reading the ingredients list. Look for a whole grain to be the first ingredient. See "whole grains" in the Glossary for names of whole grains.

Sugars

- There is no percent Daily Value for sugars.
- Look for foods low in added sugars. The Nutrition Facts label lists total sugars (naturally occurring and added), so read the ingredients list to determine if any sugars are added. The closer sugar is to the beginning of the ingredient list, the more of it the food contains. See "added sugars" in the Glossary for names of sugars.

Wheat Thins Reduced Fat Crackers

Nutrition Facts

Serving Size	16 crackers (29g)
Servings Per Container	About 14

Amount Per Serving	
Calories 130	Calories from Fat 30
	% Daily Value*
Total Fat 3.5g	5%
Saturated Fat 0.5g	3%
Trans Fat 0g	
Polyunsaturated Fat 2g	
Monounsaturated Fat 0.5g	
Cholesterol 0mg	0%
Sodium 230 mg	10%
Potassium 60mg	2%
Total Carbohydrate 21g	7%
Dietary Fiber 2g	8%
Sugars 4g	
Protein 2 g	

Vitamin A 0%	• Vitamin C 0%
Calcium 2%	• Iron 4%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Potassium		3,500mg	3,500mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Ingredients: Whole Grain Wheat Flour, Unbleached Enriched Flour (Wheat Flour, Niacin, Reduced Iron, Thiamine Mononitrate {Vitamin B1}, Riboflavin {Vitamin B2}, Folic Acid), Sugar, Soybean Oil, Cornstarch, Malt Syrup (From Barley and Corn), Salt, Invert Sugar, Leavening (Calcium Phosphate and/or Baking Soda), Monoglycerides, Whole Grain Barley Flakes, Whole Grain Millet, Whole Grain Rye, Whole Grain Triticale, Vegetable Color (Annatto Extract, Turmeric Oleoresin).

Calories

- The label lists the number of calories in a single serving and how many calories come from fat.
- Low is 40 calories or less per serving. High is 400 calories or more per serving.
- Compare the calories per serving to the nutrients to see the "nutrient density" of the food.

Percent Daily Value

- Percent Daily Value shows how a serving of the food fits into an overall daily diet of 2,000 calories. People may need more or fewer calories, depending on age, gender and activity level.

Fats

- Look for foods that are lowest in saturated fat, trans fat and cholesterol.
- Most fats should be polyunsaturated or monounsaturated.
- There is no percent Daily Value for trans fat, but consume as little as possible.
- Labels can state "0 grams" trans fat if the serving contains less than 0.5 gram of trans fats, even if the food contains sources of artificial trans fats. Read labels and select products that do not contain hydrogenated or partially hydrogenated oils.

Nutrients

- Look for foods with higher percent daily values.

Ingredients

- Ingredients on product labels are listed by weight, from most to least. The closer an ingredient is to the beginning of the list, the more of it the food contains.

EVALUATING FOODS FOR COMPLIANCE WITH THE CCCNS

PERCENTAGE OF CALORIES FROM FAT*

Nutrition Facts

Serving Size 16 crackers (29g)
Servings Per Container About 14

Amount Per Serving	
Calories 130	Calories from Fat 30
	% Daily Value*
Total Fat 3.5g	5%
Saturated Fat 0.5g	3%
Trans Fat 0g	
Polyunsaturated Fat 2g	
Monounsaturated Fat 0.5g	
Cholesterol 0mg	0%
Sodium 230 mg	10%
Potassium 60mg	2%
Total Carbohydrate 21g	7%
Dietary Fiber 2g	8%
Sugars 4g	
Protein 2 g	

Vitamin A 0% • Vitamin C 0%
Calcium 2% • Iron 4%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Potassium		3,500mg	3,500mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Step 1.	From Nutrition Facts label, list ***fat grams*** per serving.	3.5	fat grams per serving
Step 2.	Multiply fat grams (Step 1) by 9 to get ***calories from fat*** (1 gram of fat equals 9 calories).	31.5	calories from fat
Step 3.	From Nutrition Facts label, list ***calories*** per serving.	130	calories per serving
Step 4.	Divide ***calories from fat*** (Step 2) by ***calories per serving*** (Step 3) to get ***percentage of calories from fat.***	**24.2**	percent of calories from fat

Step 5. Is the percentage of calories from fat ***35 percent or less?***

☑ Yes, product meets the CCCNS for percentage of calories from fat.

☐ No, product does ***not*** meet the CCCNS for percentage of calories from fat.

* Note: Fat calories are calculated based on the conversion formula of 9 calories per gram of fat. Labeling laws allow manufacturers to round down information on the Nutrition Facts label. Using the conversion formula to calculate percentage of calories from fat is more accurate, and may result in a different number than indicated on the Nutrition Facts label.

EVALUATING FOODS FOR COMPLIANCE WITH THE CCCNS

PERCENTAGE OF CALORIES FROM SATURATED FAT*

Nutrition Facts

Serving Size 16 crackers (29g)
Servings Per Container About 14

Amount Per Serving

Calories 130 Calories from Fat 30

	% Daily Value*
Total Fat 3.5g	5%
Saturated Fat 0.5g	3%
Trans Fat 0g	
Polyunsaturated Fat 2g	
Monounsaturated Fat 0.5g	
Cholesterol 0mg	0%
Sodium 230 mg	10%
Potassium 60mg	2%
Total Carbohydrate 21g	7%
Dietary Fiber 2g	8%
Sugars 4g	
Protein 2 g	

Vitamin A 0% • Vitamin C 0%
Calcium 2% • Iron 4%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Potassium		3,500mg	3,500mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Step 1.	From Nutrition Facts label, list ***saturated fat grams*** per serving.	0.5	saturated fat grams per serving
Step 2.	Multiply saturated fat grams (Step 1) by 9 to get ***calories from saturated fat*** (1 gram of fat equals 9 calories).	4.5	calories from saturated fat
Step 3.	From Nutrition Facts label, list ***calories*** per serving.	130	calories per serving
Step 4.	Divide ***calories from saturated fat*** (Step 2) by ***calories per serving*** (Step 3) to get ***percentage of calories from saturated fat.***	3.5	percent of calories from saturated fat

Step 5. Is the percentage of calories from saturated fat ***less than 10 percent***?

☑ Yes, product meets the CCCNS for percentage of calories from saturated fat.

☐ No, product does ***not*** meet the CCCNS for percentage of calories from saturated fat.

* Note: Saturated fat calories are calculated based on the conversion formula of 9 calories per gram of saturated fat. Labeling laws allow manufacturers to round down information on the Nutrition Facts label. Using the conversion formula to calculate percentage of calories from saturated fat is more accurate, and may result in a different number than indicated on the Nutrition Facts label.

EVALUATING FOODS FOR COMPLIANCE WITH THE CCCNS

PERCENTAGE OF CALORIES FROM SUGARS

Nutrition Facts

Serving Size 16 crackers (29g)
Servings Per Container About 14

Amount Per Serving
Calories 130 Calories from Fat 30

	% Daily Value*
Total Fat 3.5g	5%
Saturated Fat 0.5g	3%
Trans Fat 0g	
Polyunsaturated Fat 2g	
Monounsaturated Fat 0.5g	
Cholesterol 0mg	0%
Sodium 230 mg	10%
Potassium 60mg	2%
Total Carbohydrate 21g	7%
Dietary Fiber 2g	8%
Sugars 4g	
Protein 2 g	

Vitamin A 0% • Vitamin C 0%
Calcium 2% • Iron 4%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Potassium		3,500mg	3,500mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Step 1. From Nutrition Facts label, list ***grams of sugar*** per serving. — 4 — grams of sugars per serving

Step 2. Multiply grams of sugars (Step 1) by 4 to get ***calories from sugars*** (1 gram of sugar equals 4 calories). — 16 — calories from sugars

Step 3. From Nutrition Facts label, list ***calories*** per serving. — 130 — calories per serving

Step 4. Divide ***calories from sugars*** (Step 2) by ***calories per serving*** (Step 3) to get ***percentage of calories from sugars.*** — **12.3** — percent of calories from sugars

Step 5. Is the percentage of calories from sugars ***35 percent or less***?

☑ Yes, product meets the CCCNS for percentage of calories from sugars.

☐ No, product does ***not*** meet the CCCNS for percentage of calories from sugars.

IDEAS FOR HEALTHY CELEBRATIONS AND EVENTS[1]

The child care program serves healthy meals and snacks that meet the requirements of the Child and Adult Care Food Program (CACFP) and the recommendations of the Connecticut Child Care Nutrition Standards (CCCNS). To support children's health and the child care program's nutrition education efforts, all foods and beverages served at celebrations and other events on site meet the CCCNS (see appendix C). To protect food safety and guard against allergic reactions, all food provided by families to be shared with other children must be either whole fruits (e.g., apples, oranges or pears) or commercially prepared packaged foods that are unopened and, when possible, individually wrapped.

The categories of food and beverage items listed below will generally meet the CCCNS. However, the nutrition content of products varies greatly between recipes, brands and varieties. Before purchasing products, read food labels to determine compliance with the CCCNS (see appendices D and E). For foods made from scratch in the child care program, check the nutrient analysis of the recipe to determine compliance with the CCCNS. Check for food allergies before serving any foods or beverages to children.

- Milk (whole milk for children younger than 2 and 1% or fat-free milk for children ages 2 and older).
- 100 percent juice (without added sweeteners, artificial sweeteners, nonnutritive sweeteners, sugar alcohols or other added ingredients such as artificial flavors and colors, preservatives, flavor enhancers and emulsifiers or thickeners). Limit juice to ½ cup for ages 2 and older and ¼ cup for ages 12 to 24 months.
- Water (without added flavors, sweeteners, artificial sweeteners, nonnutritive sweeteners, sugar alcohols or caffeine).
- Fresh fruit assortment, fruit and low-fat natural cheese kabobs, fruit salad, fruit with low-fat yogurt topping.[2,3]
- Fruit smoothies (blend fruits such as berries, bananas and pineapple) or fruit and yogurt smoothies (blend fruit with low-fat yogurt).[3]
- Dried fruit (e.g., raisins, apricots and plums) without added sugar, sweeteners or artificial sweeteners.[2]
- Vegetable trays with low-fat or nonfat yogurt dip, salad, carrot-raisin salad or bean salad.[2,3]
- Celery and carrots with peanut butter and raisins or apples with peanut butter.[2]
- Whole-grain crackers with low-fat natural cheese cubes, low-fat string cheese or hummus.
- Whole-grain waffles or pancakes topped with fruit.
- Pretzels, rice cakes or bread sticks.[2]
- Graham crackers or animal crackers.
- Whole-grain pasta with low-fat shredded mozzarella cheese and marinara sauce.
- Whole-grain bagel slices with peanut butter, whole-wheat English muffin with low-fat natural cheese, or hot pretzels.[2]
- Pizza made with low-fat natural cheese, whole-grain crust and low-fat toppings (e.g., vegetables, lean ham and Canadian bacon) or pizza dippers with marinara sauce.
- Ham or turkey sandwiches or wraps with low-fat natural cheese and low-fat or fat-free, low-sugar and low-sodium condiments.
- Low-fat yogurt (without artificial sweeteners, nonnutritive sweeteners or sugar alcohols) with fresh or frozen berries.[3]
- Low-fat cottage cheese with fresh or frozen fruit.
- Yogurt parfaits or banana splits (low-fat yogurt and fruit topped with whole-grain cereal or granola or crushed graham crackers).[3]
- Quesadillas with low-fat natural cheese or bean burrito with salsa.
- Low-fat whole-grain granola bars (without artificial sweeteners, nonnutritive sweeteners or sugar alcohols).[2]
- Soft whole-corn tortilla with salsa or low-fat bean dip.
- Trail or cereal mix (whole-grain, low-sugar cereals mixed with dried fruit and pretzels).[2]
- Nuts and seeds without added fats or sugars.[2]

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[1] These foods and beverages do not necessarily meet the CACFP requirements for reimbursable meals and snacks. For specific information on crediting foods in the CACFP Meal Pattern for Children and CACFP Infant Meal Pattern, see *Nutrition Policies and Guidance for the Child and Adult Care Food Program: Crediting Foods* and *Nutrition Policies and Guidance for the Child and Adult Care Food Program: Feeding Infants* at http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326.

[2] Children younger than 4 are at the highest risk of choking. Avoid any grains/breads that could cause choking, such as hard pretzels, bread sticks, tortilla chips, granola bars, croutons, rice cakes and ready-to-eat cold or cooked breakfast cereals with nuts, seeds, raisins and hard pieces of whole-grain kernels or other hard food pieces. Do not serve dried fruit and vegetables; raw vegetables; cooked or raw whole corn kernels; hard pieces of raw fruit such as apple, pear or melon; and whole grapes, berries, cherries, melon balls and cherry or grape tomatoes. Cut fresh and frozen vegetables and fruits into bite-size pieces and cook before serving. Any nuts or seeds should be in a prepared food and ground or finely chopped. Spread peanut butter thinly.

[3] If sweetened low-fat yogurt is served, choose one with no more than 4 grams of total sugars per ounce and no nonnutritive sweeteners or sugar alcohols. For more information, see *Meat and Meat Alternates* in the CCCNS for Children (appendix C).

PHYSICAL ACTIVITY GUIDELINES FOR CHILDREN FROM BIRTH TO AGE 5

NATIONAL ASSOCIATION FOR SPORT AND PHYSICAL EDUCATION

Guidelines for Infants

Guideline 1 Infants should interact with caregivers in daily physical activities that are dedicated to exploring movement and the environment.

Guideline 2 Caregivers should place infants in settings that encourage and stimulate movement experiences and active play for short periods of time several times a day.

Guideline 3 Infants' physical activity should promote skill development in movement.

Guideline 4 Infants should be placed in an environment that meets or exceeds recommended safety standards for performing large-muscle activities.

Guideline 5 Those in charge of infants' well-being are responsible for understanding the importance of physical activity and should promote movement skills by providing opportunities for structured and unstructured physical activity.

Guidelines for Toddlers

Guideline 1 Toddlers should engage in a total of at least 30 minutes of structured physical activity each day.

Guideline 2 Toddlers should engage in at least 60 minutes and up to several hours per day of unstructured physical activity and should not be sedentary for more than 60 minutes at a time, except when sleeping.

Guideline 3 Toddlers should be given ample opportunities to develop movement skills that will serve as the building blocks for future motor skillfulness and physical activity.

Guideline 4 Toddlers should have access to indoor and outdoor areas that meet or exceed recommended safety standards for performing large-muscle activities.

Guideline 5 Those in charge of toddlers' well-being are responsible for understanding the importance of physical activity and promoting movement skills by providing opportunities for structured and unstructured physical activity and movement experiences.

Guidelines for Preschoolers

Guideline 1 Preschoolers should accumulate at least 60 minutes of structured physical activity each day.

Guideline 2 Preschoolers should engage in at least 60 minutes and up to several hours of unstructured physical activity each day, and should not be sedentary for more than 60 minutes at a time, except when sleeping.

Guideline 3 Preschoolers should be encouraged to develop competence in fundamental motor skills that will serve as the building blocks for future motor skillfulness and physical activity.

Guideline 4 Preschoolers should have access to indoor and outdoor areas that meet or exceed recommended safety standards for performing large-muscle activities.

Guideline 5 Caregivers and parents in charge of preschoolers' health and well-being are responsible for understanding the importance of physical activity and for promoting movement skills by providing opportunities for structured and unstructured physical activity.

Reprinted with permission from *Active Start: A Statement of Physical Activity Guidelines for Children Birth to Age 5*, National Association for Sport and Physical Education, 2009. http://www.aahperd.org/naspe/standards/nationalGuidelines/ActiveStart.cfm

PHYSICAL ACTIVITY GUIDELINES FOR CHILDREN AND ADOLESCENTS (AGES 6-17)

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

- Children and adolescents should engage in 60 minutes (one hour) or more of physical activity daily.

  - **Aerobic:** Most of the 60 or more minutes a day should be either moderate- or vigorous-intensity aerobic physical activity, and should include vigorous-intensity physical activity at least three days a week. Aerobic activities are those in which young people rhythmically move their large muscles. Running, hopping, skipping, jumping rope, swimming, dancing, and bicycling are all examples of aerobic activities. Aerobic activities increase cardiorespiratory fitness.

  - **Muscle-strengthening:** As part of their 60 or more minutes of daily physical activity, children and adolescents should include muscle-strengthening physical activity on at least three days of the week. Muscle-strengthening activities make muscles do more work than usual during activities of daily life. This is called "overload," and it strengthens the muscles. Muscle-strengthening activities can be unstructured and part of play, such as playing on playground equipment, climbing trees, and playing tug-of-war. They can also be structured, such as lifting weights or working with resistance bands.

  - **Bone-strengthening:** As part of their 60 or more minutes of daily physical activity, children and adolescents should include bone-strengthening physical activity on at least three days of the week. Bone-strengthening activities produce a force on the bones that promotes bone growth and strength. This force is commonly produced by impact with the ground. Running, jumping rope, basketball, tennis, and hopscotch are all examples of bone strengthening activities. Bone-strengthening activities can also be aerobic and muscle-strengthening.

- It is important to encourage young people to participate in physical activities that are appropriate for their age, that are enjoyable, and that offer variety.

moderate-intensity physical activity: Activity (exercise, play or movement) that is easily maintained and performed at an intensity that increases heart and breathing rates, e.g., brisk walking or bicycling.

vigorous-intensity physical activity: Activity (exercise, play or movement) that produces fatigue in a short period of time and is performed at an intensity in which heart rate and breathing are elevated to levels higher than those observed for moderate physical activity, e.g., running, jumping rope, lap swimming or aerobic dancing.

The chart on the next page, *Examples of Types of Physical Activities for Children and Adolescents,* summarizes examples of moderate-and vigorous-intensity aerobic physical activities and muscle-and bone-strengthening activities for children and adolescents.

EXAMPLES OF TYPES OF PHYSICAL ACTIVITIES FOR CHILDREN AND ADOLESCENTS

Type of Physical Activity	Children	Adolescents
Moderate–intensity aerobic	• Active recreation, such as hiking, skateboarding, rollerblading • Bicycle riding • Brisk walking	• Active recreation, such as canoeing, hiking, skateboarding, rollerblading • Brisk walking • Bicycle riding (stationary or road bike) • Housework and yard work, such as sweeping or pushing a lawn mower • Games that require catching and throwing, such as baseball and softball
Vigorous–intensity aerobic	• Active games involving running and chasing, such as tag • Bicycle riding • Jumping rope • Martial arts, such as karate • Running • Sports such as soccer, ice or field hockey, basketball, swimming, tennis • Cross-country skiing	• Active games involving running and chasing, such as flag football • Bicycle riding • Jumping rope • Martial arts, such as karate • Running • Sports such as soccer, ice or field hockey, basketball, swimming, tennis • Vigorous dancing • Cross-country skiing
Muscle-strengthening	• Games such as tug-of-war • Modified push-ups (with knees on the floor) • Resistance exercises using body weight or resistance bands • Rope or tree climbing • Sit-ups (curl-ups or crunches) • Swinging on playground equipment/bars	• Games such as tug-of-war • Push-ups and pull-ups • Resistance exercises with exercise bands, weight machines, hand-held weights • Climbing wall • Sit-ups (curl-ups or crunches)
Bone-strengthening	• Games such as hopscotch • Hopping, skipping, jumping • Jumping rope • Running • Sports such as gymnastics, basketball, volleyball, tennis	• Hopping, skipping, jumping • Jumping rope • Running • Sports such as gymnastics, basketball, volleyball, tennis
Note: Some activities, such as bicycling, can be moderate or vigorous intensity, depending upon level of effort.		

Source: *2008 Physical Activity Guidelines for Americans,* Chapter 3: Active Children and Adolescents, U.S. Department of Health and Human Services, 2008. http://www.health.gov/PAGuidelines/pdf/paguide.pdf

GLOSSARY

A Guide to Early Childhood Program Development: This 2007 CSDE document serves as a tool for developing high-quality early childhood programs. It provides guidance in developing curriculum, suggestions for appropriate and engaging content in key subject areas, ideas for successful teaching strategies, examples of appropriate contexts for learning, and suggested best practices. Examples in the guide are intended to make the performance standards found in Connecticut's Preschool Curriculum Framework come alive and help teachers plan with the standards in mind. http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Early/early_childhood_guide.pdf

added sugars: Sugars and syrups added to foods in processing or preparation, as opposed to the naturally occurring sugars found in foods like fruits, some vegetables and milk. Names for added sugars include brown sugar, corn sweetener, corn syrup, dextrose, fructose, fruit juice concentrates, glucose, high-fructose corn syrup, honey, invert sugar, lactose, malt syrup, maltose, molasses, raw sugar, sucrose, sugar and syrup.

artificial sweeteners: Ingredients with little or no calories used as sugar substitutes to sweeten foods and beverages. Artificial sweeteners are hundreds of times sweeter than sugar. Common artificial sweeteners include acesulfame potassium (Acesulfame-K, Sunett, Sweet & Safe, Sweet One), aspartame (Nutrasweet, Equal), neotame, saccharin (Sweet and Low, Sweet Twin, Sweet 'N Low Brown, Necta Sweet), sucralose (Splenda) and tagatose. These nonnutritive sweeteners are calorie-free, except for aspartame, which is very low in calories. The Connecticut Child Care Nutrition Standards do not allow foods or beverages with these ingredients (see appendix C). For more information, see "nonnutritive sweeteners" in this section.

at-risk afterschool care centers: Child care centers that are located within the boundaries of eligible low-income school attendance areas. Eligible facilities include public and private schools, nonresidential child care centers and outside school-hours care centers that have a structured, supervised afterschool enrichment program. Eligible facilities receive cash assistance for snacks and suppers served at no charge to students (ages 18 and younger) in afterschool programs. Cash assistance is available for up to one snack a day for each student. All snacks must meet the requirements of the CACFP Meal Pattern for Children (see appendix A). http://www.fns.usda.gov/cnd/CARE/Regs-Policy/Snacks/Afterschool_Snacks_Suppers.htm

carbohydrates: A category of nutrients that includes sugars (simple carbohydrates) and starch and fiber (complex carbohydrates). Foods in the basic food groups that provide carbohydrates — fruits, vegetables, breads, cereals, grains, milk and dairy products — are important sources of many nutrients. However, foods containing large amounts of added sugars provide calories but few, if any, nutrients. Carbohydrates are easily converted by the body to energy (calories). The Dietary Guidelines for Americans recommend consuming 45 to 65 percent of total daily calories from carbohydrates, especially complex carbohydrates. For more information, see "added sugars," "simple carbohydrates" and "complex carbohydrates" in this section.

Child and Adult Care Food Program (CACFP): The U.S. Department of Agriculture's federally assisted meal program providing nutritious meals and snacks to children in child care centers, family day care homes and emergency shelters and snacks and suppers to children participating in eligible at-risk afterschool care programs. The program also provides meals and snacks to adults who receive care in nonresidential adult day care centers. http://www.fns.usda.gov/cnd/care/

Child and Adult Care Food Program (CACFP) facilities: Child care centers, family day care homes, emergency shelters and at-risk afterschool care centers that participate in the USDA Child and Adult Care Food Program.

Child and Adult Care Food Program (CACFP) Meal Pattern for Children: The required food components and minimum serving sizes that facilities participating in the CACFP must provide to children ages 1-12 to receive federal reimbursement for meals and snacks served to children. (Note: Emergency shelters can serve CACFP meals to residents ages 18 or younger and to children of any age who have disabilities. At-risk afterschool care centers can serve CACFP snacks and suppers to students ages 18 or younger.) For more information, see the CACFP Meal Pattern for Children (appendix A).

Child and Adult Care Food Program (CACFP) Infant Meal Pattern: The required food components and minimum serving sizes that facilities participating in the CACFP must provide to infants from birth through 11 months to receive federal reimbursement for meals and snacks served to infants. For more information, see the CACFP Infant Meal Pattern (appendix B).

Child and Adult Care Food Program (CACFP) sponsor: A public or nonprofit private organization that is entirely responsible for the administration of the CACFP in one or more day care homes, child care centers, emergency shelters or at-risk afterschool care centers. For more information, see Section 226.2 Definitions in the *Code of Federal Regulations (CFR) for the Child and Adult Care Food Program (7 CFR 226)* at http://www.fns.usda.gov/cnd/Care/Regs-Policy/policymemo/CFR226-2008.pdf.

child care programs: All local and community-level child care programs, organizations and agencies that could be involved in developing policies, including CACFP participants (centers, family day care homes, at-risk afterschool centers and emergency shelters); local and community-level early care and education programs; afterschool programs; organizations and agencies, e.g., sponsoring agencies, community organizations, coordinating councils and municipalities; and other interested groups.

Child Development Associate (CDA) Credential: A national certification program for individuals working in early care and education, including centers, family day care homes and home visitors. http://www.cdacouncil.org/default.htm

Child Nutrition (CN) label: A statement that clearly identifies the contribution of a food product toward the meal pattern requirements, based on the USDA's evaluation of the product's formulation. Products eligible for CN labeling include main dish entrees that contribute to the meat/meat alternates component of the meal pattern requirements, bread items that contribute to the grains/breads component and juice and juice drink products that contain at least 50 percent full-strength juice by volume. (Note: Only 100 percent juice is creditable in Connecticut Child Nutrition Programs.) The CN label does *not* provide information or assurances regarding the nutrition content of the food. For more information, see "Child Nutrition (CN) Labeling Program" in *Nutrition Policies and Guidance: Crediting Foods — Introduction* at http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326.

children: In the CACFP, children include ages 1 through 12 for centers and family day care homes. Emergency shelters can serve CACFP meals to residents ages 18 and younger and to children of any age who have disabilities. At-risk afterschool care centers can serve CACFP snacks and suppers to students ages 18 and younger.

chemically altered fat substitutes: Compounds made by chemically manipulating food products to mimic the texture and flavor of fat while providing fewer calories and less metabolizable fat. Examples include Olestra, Olean and Simplesse. Fat substitutes can have negative side effects. The Connecticut Child Care Nutrition Standards do not allow foods or beverages with these ingredients (see appendix C).

cholesterol: A fat-like substance that performs important functions in the body such as making cell membranes and some hormones. There are two different types of cholesterol. *Blood (serum) cholesterol* circulates in the body in lipoproteins, such as low-density lipoprotein (LDL) and high-density lipoprotein (HDL). LDL is known as "bad" cholesterol because high levels can clog arteries, causing atherosclerosis. A high level of serum cholesterol is a major risk factor for coronary heart disease, which leads to heart attack. HDL is known as "good" cholesterol because high levels seem to protect against heart attack. *Dietary cholesterol* does not contain any calories. It comes from foods of animal origin, including meat, fish, poultry, eggs and dairy products. Plant foods (including vegetable oils) do not contain cholesterol. There is no dietary requirement for cholesterol because the body can make all it needs.

complex carbohydrates (starch and fiber): Complex carbohydrates include starch and fiber, which are made from three or more simple sugars linked together. Starch is the storage form of energy in plants and provides calories. Fiber is the structural framework of plants and does not contain any calories. Food sources of complex carbohydrates include legumes, starchy vegetables (e.g., potatoes, corn, dry beans and green peas), whole-grain breads and cereals, and nuts and seeds. For more information, see "dietary fiber" in this section.

Connecticut Charts-A-Course (CCAC): Connecticut's statewide professional development, program improvement and registry system for early care and education. CCAC offers a variety of supports to assist both individuals and programs in obtaining quality standards. http://www.ctcharts-a-course.org/

Connecticut Child Care Nutrition Standards (CCCNS): The CSDE's guidelines for the nutritional content of all foods and beverages served throughout the child care environment, including CACFP meals and snacks, celebrations and any other activities where foods and beverages are provided by the child care program or families. The CCCNS reflects current nutrition science and national health recommendations and promotes whole or minimally processed, nutrient-rich foods that are low in fat, added sugars and sodium. The CCCNS eliminates foods and beverages that do not contribute to the CACFP meal patterns, e.g., potato chips, ice cream, frozen novelties, pudding, gelatin, candy, bacon, soda, lemonade and fruit-flavored drinks. Foods that are creditable in the CACFP meal patterns but contain little nutritional value are also eliminated, such as sweetened grain-based desserts (e.g., cakes, cookies, doughnuts and brownies), grain-based snack chips (e.g., tortilla chips, corn chips and multigrain chips), fried or baked pre-fried vegetables (e.g., french fries and potato puffs) and fried, baked pre-fried or high-fat meats and meat alternates (e.g., chicken nuggets, fish sticks, processed luncheon meats, full-fat cheese and process cheese foods. For more information, see appendix C.

Connecticut Preschool Assessment Framework: This 2008 CSDE document is a curriculum-embedded tool for assessing 3- and 4-year-old children in their preschool classrooms. It was developed as a companion to the *Connecticut Preschool Curriculum Framework* and articulates comprehensive performance standards or learning outcomes. These curriculum and assessment frameworks provide a system for using standards in both planning curriculum and assessing children's progress. http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Early/Preschool_Assessment_Framework.pdf

Connecticut Preschool Curriculum Framework: This 2006 CSDE document provides preschool content standards and performance indicators for four domains of development: personal and social development; physical development; cognitive development; and creative expression/aesthetic development. http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Early/Preschool_framework.pdf

coordinated school health: A coordinated approach to school health that provides the framework for families, community-based partners and schools to work together to improve student achievement. It incorporates eight components: physical education; nutrition; school-family-community partnerships; health services; mental health services; healthy physical and emotional school environment; staff wellness; and comprehensive health education. A coordinated approach to school health reduces fragmentation, duplication of services and provides a streamlined system for service delivery that is cost effective. http://www.sde.ct.gov/sde/cwp/view.asp?a=2678&q=320726&sdePNavCtr=|45534|#45556

creditable food: A food or beverage that can be counted toward meeting the meal pattern requirements for a reimbursable meal or snack in the USDA Child Nutrition Programs.

cycle menu: A series of menus planned for a specific period of time, such as four weeks. The menus are different for each day and the menus repeat at the end of the time period. Cycle menus help to provide varied and balanced meals. They allow child care programs to take advantage of seasonal variety, save time and labor and reduce food cost.

daily value: A number on the Nutrition Facts panel of food labels that provides recommendations for daily intake of nutrients based on daily caloric intakes of 2,000 and 2,500 calories. The Nutrition Facts panel also includes "% Daily Value," which shows how a serving of the food fits into an overall daily diet of 2,000 calories. For more information, see appendix D.

developmentally appropriate: Refers to the suitably of the activity, equipment or instruction for the child's performance or ability level. For more information regarding developmentally appropriate policy recommendations, see *Use Applicable Recommendations and Strategies* in section 1.

Dietary Guidelines for Americans: A federal document that provides science-based advice for Americans ages 2 and older to promote health and to reduce risk for chronic diseases through diet and physical activity. The Dietary Guidelines are published jointly every five years by the U.S. Department of Health and Human Services and the U.S. Department of Agriculture and form the basis of federal food, nutrition education and information programs. http://www.healthierus.gov/dietaryguidelines/

dietary fiber: Nondigestible carbohydrates and lignin (a noncarbohydrate substance bound to fiber) that are naturally occurring in plants, e.g., gums, cellulose, fiber in oats and wheat bran. Fiber improves gastrointestinal health and reduces risk of several chronic diseases, such as heart disease, obesity, diabetes and colon cancer. There are two types of dietary fiber, insoluble and soluble. *Insoluble fibers* aid in digestion by adding bulk and softness to stools to promote regularity and prevent constipation. Insoluble fibers decrease the amount of "transit time" for food waste in the intestine. Insoluble fibers include whole-wheat products, wheat and corn bran, many vegetables (e.g., cauliflower, beans and potatoes) and the skins of fruits and root vegetables. *Soluble fibers* (e.g., gums, mucilages and pectin) bind to fatty substances in the body to promote their excretion as waste. They help lower blood cholesterol levels and also help regulate the body's use of sugars. Soluble fibers are found in dry beans and peas; oats; oatmeal; barley; psyllium seed husk; and many fruits and vegetables, such as apples, carrots, citrus fruits, strawberries, prunes, dry beans and other legumes.

Dietary Reference Intakes (DRIs): A set of nutrient-based reference values that expand upon and replace the former Recommended Dietary Allowances (RDAs) in the United States and the Recommended Nutrient Intakes (RNIs) in Canada. The DRIs include four reference values: Estimated Average Requirements (EARs), RDAs, Adequate Intakes (AIs) and Tolerable Upper Intake Levels (ULs).

discretionary calories: The daily calorie recommendations of MyPyramid include a small amount of "extra" or discretionary calories after basic nutrient needs are met. Many people overspend their daily discretionary calorie allowance by eating too many foods with fats and added sugars. For more information, see *Rationale for Healthy Foods and Beverages in Child Care* in section 4. http://www.mypyramid.gov/index.html

early childhood education consultant: As defined by the Connecticut Department of Public Health licensing regulations for child care centers, an individual who is a credentialed early childhood specialist with an Associate, Bachelors, Masters or Doctoral degree in early childhood education, child development or human development or a four-year degree in a related field with at least 12 credits in child development or early childhood education from an accredited college or university, who has two or more years experience administering a licensed child day care center that meets standards comparable to those in Connecticut. http://www.ct.gov/dph/lib/dph/daycare/pdf/Statutes_and_Regulations_Centers.pdf

enrichment: Adding back nutrients (usually vitamins or minerals) originally present in a food that were lost during processing. For example, white flour is enriched with thiamin, riboflavin, niacin and iron, which are lost when wheat is refined. Enriched refined grain products that conform to standards of identity are required by law to be fortified with folic acid, as well. Enrichment nutrients are added back in approximately the same levels as were originally present in the food. Regulations for the USDA Child Nutrition Programs require that all bread and grain products must be enriched if they are not whole grain.

family-style meal service: A method of meal service that allows children to serve themselves from common platters of food with assistance from supervising adults, while sitting together around a table.

fiber: A general term for the indigestible carbohydrates (e.g., pectin, cellulose, and other substances) that make up the framework of plants. Dietary fiber is the total amount of these materials that are not digested by humans. For more information, see "dietary fiber" in this section.

food components: The four food groups that compose the reimbursable CACFP meal, including meat/meat alternates, vegetables/fruits, grains/breads and milk. For more information on the individual food components, see *Nutrition Policies and Guidance for the Child and Adult Care Food Program: Crediting Foods* at http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326.

food item: In the CACFP Meal Pattern for Children, a food item is one of the three required foods for breakfast, one of the five required foods for lunch and supper, or one of the two required foods for snack.

fortification: Adding nutrients (usually vitamins or minerals) that were not originally present in a food or beverage or adding nutrients at levels that are higher than originally present. Fortification is used both for naturally nutrient-rich products based on scientifically documented health needs (e.g., fortifying milk with vitamin D to increase the body's absorption of calcium), and to enhance the perceived nutritional value of products with little or no natural nutritional value (e.g., fortifying "energy" bars made from processed flour with multiple vitamins and minerals). Fortification nutrients are added to products in varying amounts, from small percentages up to amounts greater than recommended intakes.

health advisory team: An advisory group of individuals representing the child care program, families and the community whose role is to provide advice and support for the child care program's health services component. The health advisory team can serve many purposes, such as developing policy language; developing guidance to clarify, support and promote policy implementation; program planning; monitoring implementation; evaluating progress; and revising policy as necessary.

health consultant: As defined by the Connecticut Department of Public Health licensing regulations for child care centers, a physician, physician assistant, advanced practice registered nurse or registered nurse holding a current and valid license in Connecticut or another state. http://www.ct.gov/dph/lib/dph/daycare/pdf/Statutes_and_Regulations_Centers.pdf

Healthy and Balanced Living Curriculum Framework: This 2006 CSDE document provides guidance for prekindergarten-Grade 12 curriculum development in comprehensive school health education (including nutrition) and physical education and shows connections between these two content areas. The purpose of the curriculum framework is to set high-level content standards and performance indicators that guide the development of curricula that challenge and motivate students and contribute to student learning and achievement. The standards are based on the *National Health Education Standards* and *Moving into the Future: The National Standards for Physical Education, 2nd edition.* http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Student/Healthy&BalancedLiving.pdf

hydrogenated oils: Oils that have undergone hydrogenation, a chemical process that adds hydrogen and changes the structure of unsaturated fatty acids to increase shelf life and flavor stability. Hydrogenation turns oils that are liquid at room temperature into solids, e.g., shortening and margarine. Oils can be either completely or partially hydrogenated. Partial hydrogenation results in the formation of trans fats, a type of fat that increases the risk for cardiovascular disease. Fully hydrogenated oil does not contain trans fat, e.g., fully hydrogenated palm oil. However, if the label lists "hydrogenated" vegetable oil, it could mean the oil contains some trans fat. When foods contain hydrogenated oils, they will be listed in the ingredients, e.g., hydrogenated cottonseed and soybean oil. For more information, see "trans fats" in this section.

Individualized Education Program (IEP): A written statement for a child with a disability that is developed, reviewed and revised in accordance with the Individuals with Disabilities Education Act (IDEA) and its implementing regulations. The IEP is the foundation of the student's educational program. It contains the program of special education and related services to be provided to the child with a disability covered by the IDEA.

infants: In the CACFP, infants include children from birth through 11 months.

iron-fortified infant formula: A formula that meets the Food and Drug Administration's definition under 21 CFR 107.10(b)(4) (i) that it "contains 1 milligram or more of iron in a quantity of product that supplies 100 kilocalories when prepared in accordance with label directions for infant consumption." The formula label must state "with iron" or "iron fortified." For more information, see *Nutrition Policies and Guidance for the Child and Adult Care Food Program: Feeding Infants* at http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326.

meal pattern components: See "food components" in this section.

meals: See "reimbursable meals" in this section.

medical authority: See "recognized medical authority" in this section.

menu item: Any planned main dish, vegetable, fruit, bread, grain or milk that is part of a CACFP reimbursable meal. Menu items consist of food items.

moderate-intensity physical activity: Activity (exercise, play or movement) that is easily maintained and performed at an intensity that increases heart and breathing rates, e.g., brisk walking or bicycling.

monosaturated fats: A type of unsaturated fat that is found in nuts, seeds, avocados and liquid vegetable oils, such as canola oil, olive oil, high oleic safflower and sunflower oils. Monosaturated fats may help lower blood cholesterol when used as part of an overall diet that is moderate in fat.

MyPyramid: The USDA's food guidance system to translate the recommendations of the Dietary Guidelines for Americans into a healthy eating plan. MyPyramid focuses on recommendations for daily servings of the food groups, as well as daily physical activity. http://www.mypyramid.gov/

MyPyramid for Preschoolers: The USDA's food guidance system for children ages 2 to 5. http://www.mypyramid.gov/preschoolers/index.html

natural cheese: Cheese that is produced directly from milk, such as cheddar, Colby, Monterey Jack, mozzarella, muenster, provolone, Swiss, feta and brie. Natural cheese also includes pasteurized blended cheese that is made by blending one or more different kinds of natural cheese. Natural cheeses do not include pasteurized process cheese (e.g., American), pasteurized process cheese food, pasteurized process cheese spread or pasteurized process cheese products.

noncreditable food: A food or beverage that does not count toward any meal pattern component (meat/meat alternates, vegetables/fruits, grains/breads and milk) in the USDA Child Nutrition Programs. For more information, see "Noncreditable or 'Other' Foods" in *Nutrition Policies and Guidance: Crediting Foods —Introduction* at http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&q=322326.

nonnutritive sweeteners: Ingredients with no calories used as sugar substitutes to sweeten foods and beverages. Nonnutritive sweeteners are hundreds of times sweeter than sugar. Nonnutritive sweeteners include artificial sweeteners such as acesulfame potassium, neotame, saccharin and sucralose and natural sweeteners such as stevia (e.g., Rebiana, Truvia, PureVia and SweetLeaf). For a list of artificial sweeteners, see definition for "artificial sweeteners" in this section. The Connecticut Child Care Nutrition Standards do not allow foods or beverages with these ingredients (see appendix C).

nutrient-rich foods or nutrient-dense foods: Foods that provide substantial amounts of naturally occurring vitamins, minerals and other nutrients with relatively few calories. Nutrient-rich foods include lean sources of protein and complex carbohydrates that are low in total fat and saturated fats. Examples include fruits, vegetables, whole grains, low-fat or nonfat dairy products, lean meat, skinless poultry, fish, eggs and legumes. Foods and beverages that are not nutrient dense supply calories (from fat, added sugars and processed carbohydrates) but relatively small amounts of nutrients (and sometimes none at all), unless fortified. For more information, see "fortification" in this section. http://nutrientrichfoods.org/

nutrition standards: Guidelines for the nutritional content of foods and beverages that provide objective criteria for determining what can and cannot be offered, based on current nutrition science and national health recommendations. Nutrition standards help programs to increase healthy options and limit less healthy choices wherever foods and beverages are available. For more information, see "Connecticut Child Care Nutrition Standards" in this section.

partially hydrogenated oils: Oils that have been through partial hydrogenation to change their consistency from a liquid to a semi-solid, e.g., margarine. This process results in the formation of trans fats, a type of fat that increases the risk for cardiovascular disease. When products contain partially hydrogenated oils, they will be listed in the ingredients, e.g., partially hydrogenated cottonseed and soybean oil. For more information, see "hydrogenated oils" and "trans fats" in this section.

planned, ongoing and systematic program of instruction: At a minimum, for a program to be planned, it should have written goals and written learning objectives for the grades in which the program is taught. To be ongoing, the learning objectives should evolve from grade level to grade level. For a program to be systematic, it should be implemented equitably across each specific grade or course. For example, all kindergarten students should receive instruction in the same agreed-upon learning objectives across each kindergarten classroom. This does not mean that each kindergarten teacher must use the same materials or activities.

play: The means by which infants and young children explore their environment physically and increase their language, imagination and creative thinking. Play can be vigorous, but it does not always involve movements that result in meaningful energy expenditure.

physical activity: Bodily movement of any type, including recreational, fitness and sport activities, such as jumping rope, playing soccer and lifting weights; movement that occurs during daily routines and play; as well as daily activities such as walking to the store, taking the stairs or raking leaves. Physical activity includes structured and unstructured physical activity. For more information, see "structured physical activity" and "unstructured physical activity" in this section.

physical education: The phase of the general education program that contributes to the total growth and development of each child, primarily through movement experiences. Systematic and properly taught physical education includes the major content standards, including movement competence, maintaining physical fitness, learning personal health and wellness skills, applying movement concepts and skill mechanics, developing lifetime activity skills, and demonstrating positive social skills.

phytonutrients or photochemicals: Health-enhancing compounds found naturally in plant-based foods, such as legumes, vegetables, fruits, whole grains, nuts and seeds. Phytonutrients work together with nutrients and fiber to promote health by reducing the risk for many chronic diseases, such as heart disease and certain cancers. There are hundreds of different categories of phytonutrients, such as carotenoids; flavonoids (polyphenols), including isoflavones (phytoestrogens); inositol phosphates (phytates); lignans (phytoestrogens); isothiocyanates and indoles; phenols and cyclic compounds; saponins; sulfides and thiols; and terpenes. Plant-based foods contain different kinds and amounts of phytonutrients.

policy: An official written statement that provides guidance to all staff members and families regarding the child care program's vision and operating practices. Policy communicates the program's intent, objectives, requirements, responsibilities and standards. It guides the actions of staff members, families and children in the child care program.

polyunsaturated fats: A type of unsaturated fat that is found in fatty cold-water fish (e.g., salmon, mackerel and herring), nuts, seeds and liquid vegetable oils, such as safflower, sesame, soy, corn and sunflower. Polyunsaturated fats may help lower blood cholesterol when used as part of an overall diet that is moderate in fat.

practices: The habitual or customary actions or ways of doing something; for example, the ways of performing daily tasks either with the children or throughout the child care environment. Practices can either support or undermine the child care program's nutrition and physical activity policies.

preschooler: A child who is age 3 to 5.

recognized medical authority: A professional recognized by the Connecticut Department of Public Health who is a physician, physician assistant, doctor of osteopathy or advanced practice registered nurse (APRN). This includes nurse practitioners, clinical nurse specialists and certified nurse anesthetists who are licensed as APRNs.

Recommended Dietary Allowance (RDA): The average daily dietary intake level that is sufficient to meet the nutrient requirement of most healthy individuals in a particular life stage and gender group. The RDA is one of four reference values that comprise the Dietary Reference Intakes (DRIs). For more information, see "Dietary Reference Intakes" in this section.

reimbursable meals: Meals that meet the requirements of the U.S. Department of Agriculture's Child and Adult Care Food Program. CACFP meals for children must follow the CACFP Meal Pattern for Children (appendix A). CACFP meals for infants must follow the CACFP Infant Meal Pattern (appendix B).

registered dietitian consultant: As defined by the Connecticut Department of Public Health licensing regulations for child care centers, a person certified as a dietitian-nutritionist in Connecticut or another state. http://www.ct.gov/dph/lib/dph/daycare/pdf/Statutes_and_Regulations_Centers.pdf

saturated fats: A type of fat that can raise blood cholesterol, which is a risk factor for cardiovascular disease. Major sources of saturated fats include animal products (e.g., cheese, beef, milk, snack foods, butter and lard) and tropical vegetable oils (palm, palm kernel and coconut).

screen time: The amount of time spent watching television or DVDs and using the computer or other media. Screen time increases sedentary activity.

sedentary activity: Activity that does not involve much physical movement, such as reading, sitting at a computer, drawing or playing a board game. Sedentary activity provides little physical activity.

simple carbohydrates (sugars): Carbohydrates consisting of one (e.g., fructose and galactose) or two (e.g., lactose, maltose, sucrose) sugars. Sugars can be naturally present in foods (such as the fructose in fruit or the lactose in milk) or added to foods (such as sucrose or table sugar). Foods that naturally contain simple carbohydrates — such as fruits, milk and milk products and some vegetables — also contain vitamins and minerals. Foods that contain large amounts of added sugars — such as cookies, candy, pastries, sweetened baked goods, regular soft drinks and other sweetened drinks — provide calories with few, if any, nutrients. For more information, see "added sugars" in this section.

School Readiness Council: A council appointed by the chief elected official of the town or, in the case of a regional school district, the chief elected officials of the towns in the school district and the superintendent of schools for the school district. The council is composed of the chief elected official, or the official's designee; the superintendent of schools, or a management level staff person as the superintendent's designee; parents; representatives from local programs such as Head Start, family resource centers, nonprofit and for-profit child day care centers, group day care homes, prekindergarten and nursery schools, and family day care home providers; a representative from a health care provider in the community; and other representatives from the community who provide services to children. http://www.sde.ct.gov/sde/LIB/sde/pdf/deps/readiness/SR/GP_09_02.pdf

snacks: Snacks that meet the requirements of the U.S. Department of Agriculture's Child and Adult Care Food Program. CACFP snacks for children must follow the CACFP Meal Pattern for Children (appendix A). CACFP snacks for infants must follow the CACFP Infant Meal Pattern (appendix B).

sodium: Sodium is an essential nutrient, but very little is needed in the diet. Most Americans consume more than twice the limit recommended by the Dietary Guidelines. A high sodium intake increases the risk of high blood pressure in individuals who are sodium sensitive. High blood pressure increases the risk of coronary heart disease, stroke, congestive heart failure and kidney disease. Most sodium (77 percent) comes from salt added to foods by manufacturers. Table salt contains 40 percent sodium by weight. Sodium is used extensively in processed foods as a flavor and color enhancer, binder, preservative and stabilizer. Foods that are high in added sodium include descriptions such as broth, cured, pickled and smoked or ingredients listing salt, soda or sodium. Ingredients containing sodium include baking soda (sodium bicarbonate), baking powder, brine (salt and water), disodium phosphate, salt (sodium chloride), sodium caseinate, sodium citrate, sodium nitrate, sodium propionate and sodium sulfate.

standardized recipe: A recipe that a given food service operation has tested and adapted for use. This recipe produces the same good results and yield every time when the exact procedures are used with the same type of equipment, and the same quantity and quality of ingredients. Standardized recipes include specific information such as ingredients, weights and measures, preparation directions, serving directions, yield and portion size.

structured physical activity: Physical activity that is intentionally planned based on the child care program's physical activity goals and learning standards. It is scheduled and planned time for children to engage in adult-led or adult-supervised physical activities, e.g., going for a walk with adults or older children, playing simple games that are developmentally appropriate and inclusive, planned exercises, dancing, tumbling, swimming and climbing on play structures. Structured physical activity helps children learn to move and play in a variety of ways and learn social skills that help them to value and enjoy physical activity. For more information, see "physical activity" in this section.

sugar alcohols (polyols): A type of carbohydrate used as sugar substitutes to sweeten foods and beverages. Sugar alcohols are incompletely absorbed and metabolized by the body and contribute fewer calories than most sugars. They also perform other functions such as adding bulk and texture to foods. Common sugar alcohols include sorbitol, mannitol, xylitol, maltitol, maltitol syrup, lactitol, erythritol, isomalt and hydrogenated starch hydrolysates (HSH). Products with sugar alcohols are often labeled "sugar free." Large amounts of sugar alcohols may cause bloating, gas or diarrhea. The Connecticut Child Care Nutrition Standards do not allow foods or beverages with these ingredients (see appendix C).

sugars: See "added sugars" and "simple carbohydrates" in this section.

supplements: See "snacks" in this section.

toddler: A child who is 12 months to 3 years old.

trans fats: Trans fats include naturally occurring and artificial sources. Trans fats occur naturally in low amounts in some foods of animal origin, e.g., dairy products, beef and lamb. Most trans fats are artificially made as the result of "hydrogenation," a process where vegetable oils are made into a more solid (saturated) fat. Trans fats are used in food products to increase shelf life and enhance texture. The majority of trans fats in the American diet (80 percent) come from processed foods made with partially hydrogenated oils, such as cakes, cookies, crackers, snack chips, fried foods and margarine. Trans fats are worse than saturated fats in increasing blood cholesterol levels. They raise "bad" low-density lipoproteins (LDL) blood cholesterol and decrease "good" high-density lipoproteins (HDL) blood cholesterol, which are significant risk factors for cardiovascular disease. For more information, see "hydrogenated oils" and "partially hydrogenated oils" in this section.

unstructured physical activity: Physical activity or free play that is initiated by children as they explore their environment, e.g., playing on playground structures, playing outside with friends, inventing a new game, digging in the sandbox and running to catch a ball. Free play helps develop children's imagination, creativity, body awareness and sense of space and dimension. Children learn about the world by moving around in it and exploring its wonder, self-directing their activity in response to their own interests. For more information, see "physical activity" in this section.

vigorous-intensity physical activity: Activity (exercise, play or movement) that produces fatigue in a short period of time and is performed at an intensity in which heart rate and breathing are elevated to levels higher than those observed for moderate physical activity, e.g., running, jumping rope, lap swimming or aerobic dancing.

whole foods: Foods that are unprocessed or minimally processed and do not contain added ingredients, such as fat, sugars or sodium.

whole fruits and vegetables: Whole fruits and vegetables include fresh, frozen, canned and dried fruits and vegetables that are unprocessed or minimally processed and do not contain added ingredients, such as fat, sugars or sodium.

whole grains: Grains that consist of the entire kernel, including the starchy endosperm, the fiber-rich bran and the germ. All grains start out as whole grains, but many are processed to remove the bran and germ, which also removes many of the nutrients. Whole grains are nutrient rich, containing vitamins, minerals, fiber, and antioxidants and health-enhancing phytonutrients, such as lignans and flavonoids. Examples include whole wheat, whole oats/oatmeal, whole grain cornmeal, brown rice, whole rye, whole-grain barley, wild rice, buckwheat, triticale, bulgur (cracked wheat), millet, quinoa and sorghum. Whole grains and fiber both provide health benefits but they are not the same thing. Fiber content is not a good indicator of whether a food is whole grain because the fiber content and serving size of different categories of grains (e.g., cereal and bread) vary. Grain foods that are good sources of fiber, such as bran cereal, may contain bran or other added fiber without much or any whole grain. http://www.wholegrainscouncil.org

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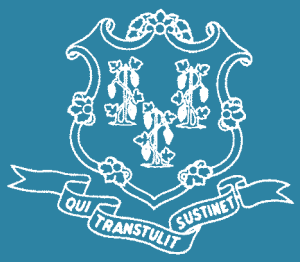
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