



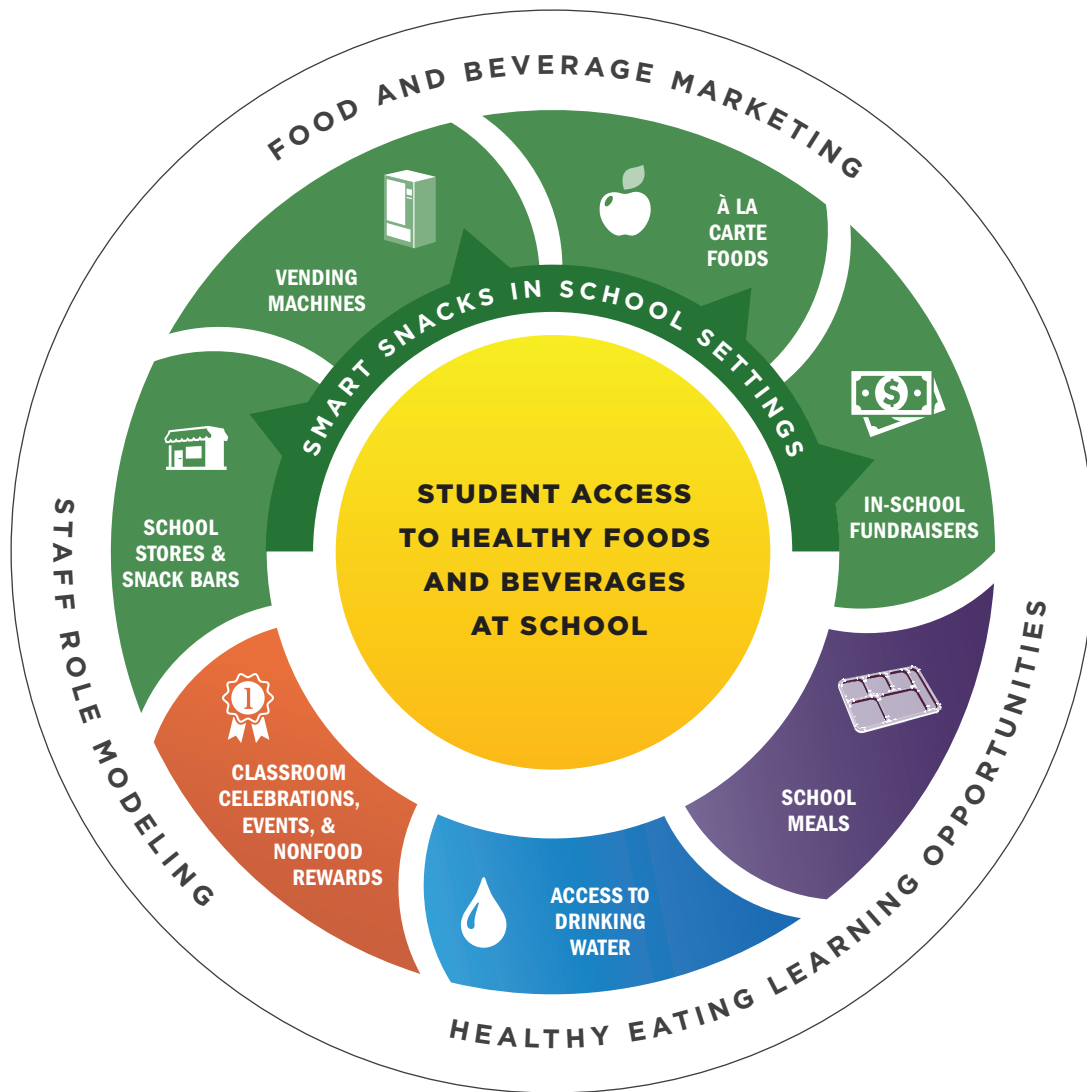
Comprehensive Framework
for Addressing the
**SCHOOL
NUTRITION
ENVIRONMENT
AND SERVICES**

Revised February 2019



**Centers for Disease
Control and Prevention**
National Center for Chronic
Disease Prevention and
Health Promotion

Components of the School Nutrition Environment



The figure above shows how many different parts of the school nutrition environment influence students' access to healthy foods and beverages at school.

The **circle** around the figure represents the boundary of the school grounds.

The colorful **components** inside the figure represent different ways that foods and beverages are sold, served, or offered to students during the school day:

- **Green** is for the settings where foods and beverages must meet the Smart Snacks in School standards.
- **Purple** is for school meals (breakfast and lunch).
- **Blue** is for access to drinking water.
- **Orange** is for other opportunities where students can receive or consume foods and beverages at school.

The floating text around the figure—like Food and Beverage Marketing—indicates components of the school nutrition environment that can affect all settings. These components help build demand for nutritious foods and beverages at school, and they can help students build healthy eating habits for life.

Introduction

US children attend school for at least 6 hours a day and are exposed to multiple opportunities to make decisions that affect their health during this time.^{1,2} Schools can use the [Whole School, Whole Community, Whole Child \(WSCC\) model](#) to create environments that help students make healthy choices.³

The WSCC model includes the school nutrition environment and services,³ which refers to

- The foods and beverages that are available to students throughout the school day.
- Information and messages about food, beverages, and nutrition that students encounter on school grounds.

A healthy school nutrition environment makes it easier for students to make healthy choices by giving them access to nutritious and appealing foods and beverages, consistent and accurate messages about good nutrition, and ways to learn about and practice healthy eating.⁴⁻⁵ Within a healthy school nutrition environment, school nutrition services provide meals that meet federal nutrition standards for the National School Lunch Program and School Breakfast Program, as well as the health and nutrition needs of all students.³ They also help make sure that foods and beverages sold outside of school meal programs meet Smart Snacks in School nutrition standards.³

Components of the School Nutrition Environment

The school nutrition environment includes the components described in this section.

School Meals

School meals are the lunches and breakfasts served through the National School Lunch Program and School Breakfast Program.⁶ These meals must meet federal nutrition standards set by the US Department of Agriculture (USDA). These standards require a variety of fruits, vegetables, and whole grains; set limits on saturated fat and sodium; and set both minimum and maximum calorie levels.⁷ All students can participate in school meal programs, and some students are eligible to receive free or reduced-price meals.^{2,8}



Smart Snacks in School

Smart Snacks in School refers to the national nutrition standards for foods and beverages sold during the school day outside of school meal programs.⁹ (For the purpose of competitive food standards implementation, the school day is defined as the period from midnight before to 30 minutes after the end of the official school day.) These items are called competitive foods because they can compete with participation in school meal programs.¹⁰ As of the 2014–2015 school year, these foods and beverages must meet or exceed Smart Snacks in School nutrition standards, which include limits on fat, sugar, sodium, and calorie content.⁹ The following are all considered competitive foods:

IN-SCHOOL FUNDRAISERS

Many schools raise money during the school day for school-led extracurricular activities, and these fundraisers often involve the sale of food to students (such as bake sales).¹¹ Although all foods sold as part of fundraisers during the school day must meet Smart Snacks in School nutrition standards, state agencies that administer school meal programs have the authority to exempt an infrequent number of fundraisers from meeting these standards each year.⁹



À LA CARTE FOODS

Most schools offer students the option to buy foods and beverages in the cafeteria that are not a complete school meal. These items may be an entrée or side item from a school meal (such as a vegetable side dish) or other items that are not part of the school meal (such as chips). All à la carte foods must meet Smart Snacks in School nutrition standards⁹ (Any entrée item offered as part of the lunch program or the breakfast program is exempt from all competitive food standards if it is serviced as a competitive food on the day of service or the day after service in the lunch or breakfast program.)



VENDING MACHINES

The majority of middle and high schools and some elementary schools have vending machines with foods and beverages that students can buy.¹² Vending machines may be located in the cafeteria or in other areas of the school. Most school districts restrict when students can access these machines.¹³ Foods and beverages sold to students in vending machines must meet Smart Snacks in School nutrition standards.⁹ Vending machines in areas that are not accessible to students, such as teacher break rooms, are not included in these standards.



SCHOOL STORES AND SNACK BARS

Some schools have school stores, snack bars, canteens, and snack carts where students can buy foods and beverages.¹² Similar to vending machines, these stores and snack bars may be located in the cafeteria or in other areas on the school grounds. Foods and beverages sold in school stores and snack bars must meet Smart Snacks in School nutrition standards.⁹



Classroom Celebrations, Events, and Nonfood Rewards

Students are sometimes given foods and beverages during classroom celebrations, parties, and special events or as rewards for academic achievement or positive classroom behavior. These items are not sold to students, but are offered by teachers or parents. Examples include cupcakes or other treats for birthday celebrations and coupons from local restaurants. Schools and parents can work together to ensure that celebrations, events, and rewards support health.² For example, they can provide only healthy foods and beverages at celebrations and events and offer nonfood items for rewards. Ideas for nonfood rewards include extra time for recess, stickers, or a note of recognition from a teacher or principal.



Access to Drinking Water

Schools participating in school meal programs must make plain drinking water available to students at no cost during lunch periods and when breakfast is served in the cafeteria.^{2,14} All schools can further increase access to drinking water and support adequate hydration by making sure that drinking fountains are clean and maintained and by allowing students to carry water bottles.¹⁵



Staff Role Modeling

When teachers, staff, and administrators demonstrate healthy eating, it can help to reinforce this behavior with students and contribute to consistent messages in schools about the importance of consuming healthier foods and beverages.² Teachers, staff, and administrators can model healthy behaviors to students by being physically active, consuming healthy foods and beverages, and getting involved in the school's employee wellness program.

Food and Beverage Marketing

Marketing for foods and beverages can be seen in schools on posters, the fronts of vending machines, in-school television advertisements, textbook covers, sports equipment, and scoreboards and as part of coupon giveaways and contests to win food prizes (such as pizza parties).¹⁶ Experts have recommended that school districts put policies and practices into place that promote foods and beverages that support

healthy diets (such as fruits and vegetables and plain water).^{17,18} Effective approaches include putting nutritious items where they are easy for students to choose (such as prominent places in cafeteria lines); using verbal prompts, parental outreach, and point-of-purchase promotions; and using pricing strategies to encourage students to buy healthy items.²

Healthy Eating Learning Opportunities

Healthy eating learning opportunities are nutrition education strategies and environmental supports that help students adopt food and beverage choices that support health and well-being.¹⁹ They provide knowledge and skills to help children choose and consume healthy foods and beverages. They can also be delivered through multiple venues, such as the cafeteria, classroom, and school gardens.

Nutrition education should be part of a comprehensive health education curriculum, but may also be integrated throughout the school curriculum.² For example, students could learn how to cook in family and consumer science classes and how to analyze food advertisements in language arts classes. School gardens and farm to school activities also provide opportunities for hands-on learning about food, nutrition, and healthy eating.

Resources to Support a Healthy School Nutrition Environment

Schools can use the following resources, which are available online, to create a healthy school nutrition environment.

General School Nutrition Resources

School Health Guidelines to Promote Healthy Eating and Physical Activity

Guidelines that can serve as the foundation for developing, implementing, and evaluating school-based healthy eating and physical activity policies and practices for students.

Tips for Teachers

Information about low- and no-cost ways that teachers can support healthy eating and physical activity in the classroom.

School Health Index

An online self-assessment and planning tool designed to help schools improve their health and safety policies and practices, including those on healthy eating.

WellSAT 3.0

Online tool that measures the quality of written school district wellness policies.

USDA School Nutrition Environment and Wellness Resources

School nutrition resources, including best practices, success stories, menu planning, and healthy fundraisers and celebrations.

Voices for Healthy Kids

Fact sheets, infographics, and tool kits to help state agencies and local school boards implement school meals and Smart Snacks in School nutrition standards; increase access to clean, free drinking water; strengthen local wellness policies and wellness councils; and get rid of marketing for unhealthy foods and beverages in schools.

Action for Healthy Kids

Resources and tools for schools. Free registration required to access these tools.

Alliance for a Healthier Generation

Information about the Healthy Schools Program and resources for schools, including tools for Smart Snacks and school meals.

Resources by Topic

SCHOOL MEALS

USDA School Meals

Description of school meal programs and links to regulations, policy memos, and technical assistance resources.

Smarter Lunchrooms Movement

Low- and no-cost strategies to help students choose and eat healthier options.

Institute of Child Nutrition

Trainings, tools, and resources for school food service personnel.

Alliance for a Healthier Generation

Guidance and resources for school meals, including sample menus and recipes, information on how to simplify the purchasing process, and strategies to prepare and promote healthy foods and beverages.

FoodCorps

Provides AmeriCorps leaders in schools to teach students about nutrition, gardening, and cooking and to help support healthy school meals.

Food Research and Action Center

Data and reports on school meals and school wellness.

SMART SNACKS IN SCHOOL

USDA Smart Snacks in School

Information about the Smart Snacks nutrition standards and a list of resources.

Alliance for a Healthier Generation

Tools that help identify products that meet the Smart Snacks nutrition standards, including a Smart Snacks Product Calculator and Product Navigator.

CDC Smart Snacks

Defines competitive foods, provides links to reports that outline the research behind the competitive foods nutrition standards, and provides audience-specific fact sheets to support the use of these standards.

IN-SCHOOL FUNDRAISERS

Alliance for a Healthier Generation

Multiple resources related to school fundraisers, including alternate fundraising ideas, a PowerPoint presentation, and a graphic about working with school nutrition services to choose products for in-school fundraisers.

Healthy Fundraisers: Promote Family Health and Well-Being

Handout with ideas for healthy fundraisers.

A+ Fundraisers for High Schools: A Guide to Having a Successful Fundraiser While Keeping Your Community Healthy

Guidance on healthy fundraisers for high school students.

CLASSROOM CELEBRATIONS, EVENTS, AND NONFOOD REWARDS

Tips for Teachers

Information about low- and no-cost ways that teachers can support healthy eating and physical activity in the classroom.

Healthy Non-Food Rewards

Fun and healthy ways to recognize students for positive behavior or academic accomplishments.

Healthy School Celebrations

Ideas for school celebrations that support healthy eating and physical activity.

Alliance for a Healthier Generation

Guidance and resources for healthy celebrations and nonfood rewards.

ACCESS TO DRINKING WATER

Increasing Access to Drinking Water in Schools

Background information, needs assessment tools, implementation strategies, and evaluation guidance on how to make sure students have access to drinking water as part of a healthy school nutrition environment.

Keep It Flowing: A Practical Guide to School Drinking Water Planning, Maintenance & Repair

Guidance on how to provide adequate numbers of properly maintained drinking fountains and tap water dispensers in school buildings.

FOOD AND BEVERAGE MARKETING

Food and Beverage Marketing Assessment Tool

Helps schools identify where food and beverage marketing is happening, determine if it meets Smart Snacks standards, and develop a plan for replacing noncompliant marketing materials.

District Policy Restricting Food and Beverage Advertising on School Grounds

Guidance on policy language to limit advertising in schools.

HEALTHY EATING LEARNING OPPORTUNITIES

Team Nutrition

Nutrition education lessons and materials for schools.

National Farm to School Network Resource Database

Nutrition education, school garden, and other educational materials developed by different organizations.

FARM TO SCHOOL

USDA Farm to School

Tools and resources to help schools (1) buy and serve local or regionally produced foods in school cafeterias and (2) provide food, agriculture, and nutrition education through multiple venues, such as school gardens, field trips to local farms, and cooking classes.

National Farm to School Network

Information, tools, and resources for communities working to buy local food and add food and agriculture education into school systems.

References

1. National Center for Education Statistics. Digest of Education Statistics, 2013. Alexandria, VA: National Center for Education Statistics, US Dept of Education; 2014.
2. Centers for Disease Control and Prevention. School health guidelines to promote healthy eating and physical activity. *MMWR Morb Mortal Wkly Rep.* 2011;60(RR-5):1–76.
3. Centers for Disease Control and Prevention. Components of the Whole School, Whole Community, Whole Child (WSCC) website. <http://www.cdc.gov/healthyschools/wscs/components.htm>. Accessed September 21, 2015.
4. Institute of Medicine. *Accelerating Progress in Obesity Prevention: Solving the Weight of the Nation*. Washington, DC: National Academies Press; 2012.
5. Bridging the Gap Research Program. *Strategies for Creating Supportive School Nutrition Environments*. Atlanta, GA: US Dept of Health and Human Services; 2014.
6. US Department of Agriculture. School Meals: Child Nutrition Programs website. <http://www.fns.usda.gov/school-meals/child-nutrition-programs>. Accessed September 21, 2015.
7. US Department of Agriculture. School Meals: Nutrition Standards for School Meals website. <http://www.fns.usda.gov/school-meals/nutrition-standards-school-meals>. Accessed September 21, 2015.
8. US Department of Agriculture. School Meals: Income Eligibility Guidelines website. <http://www.fns.usda.gov/school-meals/income-eligibility-guidelines>. Accessed September 21, 2015.
9. US Department of Agriculture. Tools for Schools: Focusing on Smart Snacks website. <http://www.fns.usda.gov/healthierschoolday/tools-schools-focusing-smart-snacks>. Accessed September 21, 2015.
10. Institute of Medicine. *Nutrition Standards for Foods in Schools: Leading the Way Toward Healthier Youth*. Washington, DC: Institute of Medicine of the National Academies; 2007.
11. O'Toole TP, Anderson S, Miller C, Guthrie J. Nutrition services and foods and beverages available at school: results from the School Health Policies and Programs Study 2006. *J Sch Health.* 2007;77:500–521.
12. US Department of Agriculture. *School Nutrition Dietary Assessment Study IV: Summary of Findings*. http://www.fns.usda.gov/sites/default/files/SNDA-IV_Findings_0.pdf. Accessed September 21, 2015.
13. Merlo CL, Harris DM, Lane KG. Nutrition services and the school nutrition environment. In: *Results from the School Health Policies and Practices Study 2012*. Atlanta, GA: Centers for Disease Control and Prevention, US Dept of Health and Human Services; 2013:75–90.
14. National School Lunch Program and School Breakfast Program: Nutrition Standards for All Foods Sold in School as Required by the Healthy, Hunger-Free Kids Act of 2010. *Fed Regist.* 2013;78(125):To be codified at 7 CFR §210.10(a)(1). <http://www.gpo.gov/fdsys/pkg/FR-2013-06-28/pdf/2013-15249.pdf>. Accessed September 21, 2015.
15. Centers for Disease Control and Prevention. Water Access in Schools website. <http://www.cdc.gov/healthyyouth/npao/wateraccess.htm>. Accessed September 1, 2015.
16. Terry-McElrath YM, Turner L, Sandoval A, Johnston LD, Chaloupka FJ. Commercialism in US elementary and secondary school nutrition environments: trends from 2007 to 2012. *JAMA Pediatrics.* 2014;168(3):234–242.
17. Institute of Medicine, National Research Council. *Food Marketing to Children and Youth: Threat or Opportunity?* Washington, DC: The National Academies Press; 2005.
18. American Academy of Pediatrics, Institute for Healthy Childhood Weight. Policy Opportunities Tool website. http://www2.aap.org/obesity/matrix_1.html. Accessed September 21, 2015.
19. Contento IR. *Nutrition Education: Linking Research, Theory, and Practice*. 2nd ed. Burlington, MA: Jones & Bartlett Learning; 2007.

Suggested Citation: Centers for Disease Control and Prevention. *Comprehensive Framework for Addressing the School Nutrition Environment and Services*. Atlanta, GA: Centers for Disease Control and Prevention, US Dept of Health and Human Services; 2019.