

HealthConnections

The School Nutrition Environment— Active Partner in Health Promotion

Children's eating behaviors are influenced by food available in their immediate environments—with the home and school being key.¹ Establishment of healthful eating and active living in school settings can help set the stage for lifelong habits and address nutrient shortfalls in food choices of today's youth. This issue of *Health Connections* describes opportunities for health professionals to actively support the entire school environment as partners in health promotion.

Background

While the primary responsibility of schools is to foster academic achievement, schools have an opportunity to guide children toward healthier lifestyles. An Institute of Medicine (IOM) report identified schools as a focal point for obesity prevention and encouraged strengthening schools as the heart of health.² Professional organizations also support the role of comprehensive nutrition programs and services in schools to help meet current nutrition guidance.³ Inadequate consumption of vegetables, fruits, whole grains, milk and milk products leads to intakes of potassium, dietary fiber, calcium and vitamin D low enough to be of public health concern for both adults and children.⁴ In addition, increased weight dysregulation at both ends of the scale, food insecurity and poverty and low rates of family meals have led to what has been described as a “feeding crisis.”⁵

Multidisciplinary collaborative and comprehensive school nutrition services will be needed to offset these trends, yet at the same time:

- provide consistent nutrition education aligned to curriculum standards
- recognize time constraints on teachers



- meet national nutrition standards for reimbursable school meals
- provide quality, appealing, nutrient-rich meals while maintaining costs.

Connecting With Family and Community

To be a partner in health promotion, schools need to connect with the home, family and community so students receive consistent messages. Each school that participates in the National School Lunch Program (NSLP) is required to establish a local school wellness policy that enables parents and stakeholders to participate in the development, implementation and review of programs/activities (see Interview).

Busy schedules have contributed to the decline in the “family meal” that focuses on eating together around the table. Family mealtime routines and practices are potential factors in the development of child eating habits, family functioning and weight management. Adolescents who

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frequently eat meals with their family have more healthful diets, lower prevalence of obesity and, particularly among girls, fewer disordered eating behaviors.⁶ The declining occurrence of the family meal increases the importance of school meals in fostering healthful habits.

Schools often provide inclusive activities for families and have begun to provide complementary educational activities that emphasize the food, farming and nutrition connection. Teaching children where their food comes from, whether fruits and vegetables, meats, dairy or grains, is critical to help them gain an appreciation for the source and healthfulness of their food choices (see Side bar: Resources and Interview).

Comprehensive and Coordinated Nutrition Education Programs

Approximately 50 hours of nutrition education are recommended during the school year to help facilitate behavior change, yet few students receive this amount.³

Sidebar

Resources

- USDA Team Nutrition
<http://teamnutrition.usda.gov/educators.html>
- USDA Food and Nutrition Services “The School Day Just Got Healthier” toolkit
<http://www.fns.usda.gov/healthierschoolday>
- Dairy Council of California’s K-12 nutrition curriculum <http://HealthyEating.org/Schools.aspx>
- A Mobile Dairy Classroom for K-6 students
<http://HealthyEating.org/Schools/Mobile-Dairy-Classroom.aspx>
- USDA’s Choose MyPlate materials and tips for children over five: <http://www.choosemyplate.gov/children-over-five.html>
- Institute of Medicine’s Consensus Report, “Educating the Study Body: Taking Physical Activity and Physical Education to School” offers recommendations for strengthening physical activity and education programs in the school environment.
<http://www.iom.edu/Reports/2013/Educating-the-Student-Body-Taking-Physical-Activity-and-Physical-Education-to-School.aspx>

Health professionals can help schools meet the minimum by aligning comprehensive, coordinated nutrition education content with common core standards in subjects addressed in testing. Successful nutrition education programs also:

- focus on interests and motivations of targeted youth; as an example see <http://ffhi.ucdavis.edu/prog/ch>
- devote sufficient time and intensity to the topic
- deliver age-appropriate, coherent and focused curricula
- involve multiple components using a social ecological approach
- provide support and professional development to staff.

Making Healthy Choices Available and Easy

Approximately 31 million children participate in the NSLP daily, creating an opportunity to help establish lifelong healthy eating habits.⁷ Availability of healthful food choices is a critical component of the school nutrition environment, and the recent nutrition guidelines for snack foods and beverages sold in school stores, vending machines and snack bars help reinforce this access (<http://www.fns.usda.gov/cnd/governance/legislation/allfoods.htm>).

The 2010 Healthy, Hunger-Free Kids Act updated the meal pattern and nutrition standards to reflect the latest Dietary Guidelines for Americans. Current standards provide for lower-fat dairy and leaner protein options; increased availability of fruits, vegetables and whole grains; specify calorie limits to ensure age-appropriate meals for grade levels; and, over time, lower sodium in the meals with sequential target dates through 2022-2023.⁸

Research-based principles that lead children to make healthy choices in the context of a full spectrum of choice—an environment that nudges students toward healthful choices using the carrot, rather than the restrictive stick approach—have been shown to improve child eating behaviors.⁹ As taste and convenience still drive food choices, students may grab a snack or skip lunch altogether, rather than wait in line. Thus, creating a convenience line/window with all types of healthful foods (milk, fruits, vegetables, premade sandwiches and salads and lower-fat/-sodium entrees) preserves choice and can help establish these foods as the healthful norm without specifically identifying them as ‘healthful.’¹⁰

The Healthier U.S. School Challenge, a voluntary certification initiative, recognizes schools that go beyond federal requirements for school meals, and USDA acknowledges these schools on their website (<http://www.teamnutrition.usda.gov/HealthierUS/awardwinners.html>). According to

Sandip Kaur, California Department of Education's Director of Nutrition Services: "Schools are creating an enhanced culture of wellness and are being recognized by the USDA for their extra work through the Challenge award program. California has 697 schools acknowledged for this prestigious award, the second-largest number of Challenge awards of any state. The Challenge supports our state Department of Education's *Team California for Healthy Kids*, which encourages fruits and vegetables and physical activity in

schools. We are thrilled with the strong leadership that our schools and districts have shown in this area, and hope that schools continue to strive for excellence in the Challenge award."

In summary, raising healthy eaters requires a coordinated and multi-faceted approach. Broad, cooperative and sustainable efforts by various sectors of influence are needed to support healthy lifestyle choices, whether at home, school or in the community.

Interview

Marilyn Briggs, Ph.D., R.D., Co-Director, Center for Nutrition in Schools, Department of Nutrition, University of California, Davis



How have health professionals contributed to the development of a comprehensive, healthy school nutrition environment?

Health professionals contribute in many ways, depending on the needs of the school. Because health professionals represent a wide scope of disciplines, have access to families and influence in the community, they contribute to a healthy school environment. For example, a school may need a coordinator for the formation of a school health/wellness advisory council. School districts are required to have a wellness policy, and stakeholders—teachers, administrators, health educators, nurses, coaches, parents—may assist in managing and implementing wellness activities. In this way, the community, health agencies and schools may create ongoing, sustainable partnerships benefitting students.

Historically, USDA's Nutrition Education and Training Program provided funding for nutrition education specialists who served in this role, with positive results such as creating partnerships to enhance classroom instruction and reinforce lessons with healthy food choices available on the school campus.

How can health professionals bring all stakeholders together to strengthen the impact of the school nutrition environment?

Studies suggest that a multi-component intervention across all the different components (classroom, nutrition services, family, community) is needed. Bringing busy disciplines together makes a huge difference in impact, and nutrition educators may serve the role of facilitating this integration. Interestingly, we're seeing signs of a renewed interest in nutrition education in the classroom and the need

for nutrition content standards, coming almost full circle from the early days of the Nutrition Education and Training Program. Health professionals, working with the wellness committee, might seek funding to support this interest.

Teachers are interested in nutrition and health promotion, but report a need for resources, especially lessons that link with the core standards such as science, mathematics, history/social studies and English/language arts. Health professionals also can assist with related activities, such as field trips to a local farm or ranch, assisting with a school garden, or organizing innovative, interactive parent education programs and health fairs.

How do schools balance goals of nutrition education with pressure to restrict access to certain foods in the school environment?

The school environment serves as a laboratory—an opportunity to reinforce nutrition knowledge and skills learned in the classroom. Rather than focusing on food restrictions, positive messages modeling healthful choices may be most successful in actually changing behaviors, as data from USDA's fruit and vegetable snack program suggest. Making the healthy choice the fun and appealing choice, in addition to involvement of students' families, provides positive reinforcement for nutrition lessons. Providing healthy foods as part of an education program that promotes a greater appreciation for growing, preparing and tasting a variety of healthy foods, or "food literacy," is a growing trend. In this way, the school nutrition program serves an important role in the educational community, recognizing agriculture's important role in public health and leading the way in promoting healthier lifestyles for children and their families.

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Practice Points

- Contact your local school foodservice director to become familiar with the school nutrition programs/ services in your area, and encourage participation in the Healthier U.S. School Challenge.
- Encourage families at risk for food insecurity to sign their children up for the school meals program.
- Contribute to the evidence base documenting benefits of a comprehensive school nutrition environment.
- Expand the farm-to-school and school-garden movement beyond fresh fruits and vegetables—take advantage of the Resources section to introduce students to the whole spectrum of agriculture.

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