



**Testimony before the  
Committee on Agriculture, Nutrition  
& Forestry  
United States Senate**

**Benefits of Farm-to-School Projects, Healthy  
Eating and Physical Activity for School  
Children**

*Statement of*

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## **Introduction**

Chairman Harkin and Senator Chambliss, welcome to the Centers for Disease Control and Prevention, and thank you for the opportunity to provide this statement on the benefits for farm to school projects, and child nutrition and physical activity. I am Dr. Bill Dietz, Director of the Division of Nutrition, Physical Activity, and Obesity, located in CDC's National Center for Chronic Disease Prevention and Health Promotion. My statement emphasizes the importance of incorporating nutrition standards for foods in schools and childcare settings; highlights data about the need to increase consumption of fruits and vegetables; and outlines CDC strategies to improve healthy eating, active living and healthy weight.

## **Background**

Prevention is the key to improving the health and quality of life for all Americans, now and for future generations. At every stage of life, eating a nutritious, balanced diet and staying physically active are essential for health and well-being. This is especially true for children and adolescents who are developing the habits they will likely maintain throughout their lives. Developing effective population-level interventions that create supportive healthful environments for young people and their families is an opportunity to effect positive health outcomes throughout the lifespan.

The reauthorization of the Child Nutrition Act provides an important opportunity to assess federal policies for child nutrition, for we recognize healthy eating in childhood

and adolescence is important for overall growth and development. We are concerned that recent tracking data indicate that for too many children and their families, proper nutrition is not part of their daily lives. Between 1999 and 2007, the percentage of U.S. youth in grades 9 through 12 who reported eating fruits and vegetables five or more times per day declined from 23.9 to 21.4 percent. In addition, the need to promote healthy eating has intensified as a result of the growing national epidemic of childhood obesity.

### **Improving the Health of Youth through Nutrition Standards for Foods in Childcare Settings and Schools**

Childcare settings and schools are in a unique position to influence and promote healthy dietary behaviors and to help ensure appropriate nutrient intake. Of the approximately 21 million preschool children, 13 million spend a substantial part of their day in childcare facilities. Each day, the nation's 126,000 schools provide an opportunity for 56 million students to learn about health and practice healthy behaviors.

Meals and snacks served in childcare and school settings should be consistent with the *2005 Dietary Guidelines for Americans (DGA)*. The Dietary Guidelines prescribe that a healthy meal is composed of lean meats, poultry, fish, beans, eggs, and nuts; foods low in saturated fats, trans fats, cholesterol, salt (sodium), and added sugars; and stays within the individual's daily calorie needs.

The Dietary Guidelines recommend that children consume 2 – 6 ½ cups of fruits and vegetables per day. Meals provided in childcare and school settings should work toward meeting this recommendation. In addition, the Institute of Medicine recommends that use of fruit juices for elementary and middle school-aged children should be limited to four fluid ounces, and contain no added sugars. This would also be consistent with recent proposed changes to the WIC food package, which eliminates all fruit juice from the infant food package.

Meals should also address other key nutritional recommendations for children: (1) At least half of grains should be whole grains; (2) the *2005 Dietary Guidelines* recommend that children aged 2 years and older should drink fat-free or low-fat (1%) milk; and (3) the *Dietary Guidelines* recommend drinking beverages without added sugar, and drinking water.

The low proportion of youth meeting nutritional guidelines coupled with the obesity epidemic highlight the need for school-based nutrition education and supportive school environments to help youth eat more healthfully (O'Toole 2007). Research has shown a relationship between the availability of low nutrient, high calorie snacks and drinks sold in schools to students' high intakes of total calories, soft drinks, total fat, and saturated fat, and lower intake of fruits and vegetables (Story 2009). Conversely, students in schools with restricted snack availability had higher intakes of fruits and vegetables than those in schools without restricted snack availability (Gonzalez 2009). System-level interventions, policy, and environmental approaches have potential to influence

individual dietary behavior through improvements to the food environment (McKinnon 2009, Story 2009).

To provide schools with guidance on improving the foods and beverages offered to students, CDC conducted a study with the Institute of Medicine (IOM) to review the science and make recommendations about nutrition standards for foods and beverages offered in direct competition with school-provided meals and snacks. The study resulted in a report entitled, *Nutrition Standards for Foods in Schools: Leading the Way toward Healthier Youth*, which was released in April 2007. This report emphasizes the importance of offering healthful snack foods and beverages, such as fruits, vegetables, whole grains, and nonfat or low-fat dairy products that are consistent with the *2005 Dietary Guidelines for Americans*. Using the findings of the IOM Report, CDC has developed resources for school staff, parents, and youth to use to support and develop strong nutrition standards that can improve the health of students at school. As examples, recommendations include:

- Review your school wellness policy to help ensure that the nutrition guidelines align with the IOM standards and that students have access to healthy foods like fruits, vegetables, whole grains, and low-fat or nonfat dairy during each school day.
- Examine the actual foods and beverages that are available to students—including foods and beverages sold in vending machines, school stores, snack bars and as a la carte items—and determine if they meet the nutrition standards.

- Educate students about nutrition and offer and promote healthy food and beverage choices that meet the nutrition standards.

### **CDC Activities to Improve Nutrition and Increase Physical Activity through Population-Level Interventions**

Through innovative partnerships and funded state programs, CDC is identifying, implementing and evaluating a variety of policy and environmental strategies to prioritize best and promising practices at the community, state and national levels, in the many places where children live, learn, and play. We frame these strategies around six target behaviors, prioritized because they address a significant disease burden, are supported by reasonable or logical evidence, and can prevent and control obesity at the population-level. These six targets are:

1. increasing physical activity;
2. increasing fruit and vegetable consumption;
3. increasing breastfeeding initiation, duration, and exclusivity;
4. decreasing television viewing;
5. decreasing consumption of sugar-sweetened beverages; and
6. decreasing consumption of foods high in calories and low in nutritional value.

### **Support to States for Nutrition, Physical Activity and Obesity Programs**

CDC provides funding to 23 states to coordinate statewide efforts to address nutrition, physical activity, and obesity through policy and environmental changes focused on CDC's six target behaviors mentioned above. In addition, CDC has identified a number

of strategies that can improve child and family nutrition through the home and community including farm to institution programs, food policy councils, farmers markets, retail food access, and community and home gardens. Below are some examples of how these strategies are making a difference in communities across the U.S.

Success Story: With CDC funding to Washington State, a series of initiatives, now known as *Healthy Communities Moses Lake*, have encouraged good nutrition and physical activity behaviors through environmental and policy change. Accomplishments include developing a community garden which provides residents and participants with greater access to fresh, nutritious produce as well as opportunities to engage in physical activity through gardening. In addition, to encourage good nutrition from birth, *Healthy Communities* informs residents about proper breastfeeding practices and creates supportive environments for nursing mothers throughout the community.

Success Story: Addressing four of the six CDC strategies, New York City's Department of Health and Mental Hygiene has developed and implemented regulations that specifically improve the nutritional and physical activity habits of children in the city's group childcare programs. The regulation prohibits the availability of sugar-sweetened beverages; permits only 6 oz. of 100% juice for children 8 months or older; permits children 12 months to under 2 years to have whole milk and then limits milk to 1% or less for children 2 years of age or older; requires water to be available and accessible to children throughout the day; requires children 12 months and older to participate in 60 minutes of physical activity per day and for children 3 years or older to participate in 30

to 60 minutes of structured physical activity per day; and restricts television viewing for children under 2 years of age, and limits television viewing to no more than 60 minutes per day of educational programming or programs that actively engage children in movement to children 2 years of age or older. CDC, in partnership with the Robert Wood Johnson Foundation is currently conducting a comprehensive evaluation of the impact of these regulations on childhood obesity.

### **Coordinated School Health**

CDC also funds 22 state-based education and health agencies and one tribal government to implement coordinated school health programs. These programs bring together school administrators, teachers, other staff, students, families, and community members to assess health needs; set priorities; and plan, implement, and evaluate school health activities, including those focused on physical activity and healthy eating among school-aged youth. This program fosters collaboration between state and local authorities, as well as between state departments of health and education, and national partners.

Success Story: The Mississippi state Department of Education has worked with CDC, the Bower Foundation, the Alliance for a Healthier Generation, and other partners to strengthen the state's efforts in improving the health of its youth. New nutritional standards for school snacks and meal programs and a ban on full-calorie, carbonated soft drinks with sugar have strengthened these efforts. In addition, special project grants have provided funds for schools to replace fryers with combination oven steamers. In the



2007–2008 school year, 20 schools in 13 districts were awarded grants; 16 districts have been selected for the 2008–2009 grants.

### **Supporting Local Wellness Policies**

School wellness policies – like those created in the Child Nutrition and WIC Reauthorization Act of 2004 – can be a solid foundation for effective school health programs. Optimal wellness policies can mandate physical education requirements, health education requirements, the types of foods and beverages sold on campus, and many other important practices that promote physical activity and healthy eating, though implementation and evaluation of these policies varies by school district.

CDC has developed a strong product line of technical assistance tools that support wellness policy implementation by empowering schools and school districts with guidance on how to effectively implement these recommended policies and practices.

Some examples of these tools include:

- CDC's *School Health Index (SHI)*, a self-assessment and planning tool that enables schools to identify the strengths and weaknesses of their health promotion policies and programs, and use those findings to develop an action plan for improving student health;
- *The Health Education Curriculum Analysis Tool* which is a user-friendly checklist designed by CDC to help schools select or develop curricula based on the extent to which they have characteristics that research has identified as being critical for leading to positive effects on youth health behaviors; and

- *Making It Happen! School Nutrition Success Stories* is a joint project of CDC, the United States Department of Agriculture, and the United States Department of Education. This report tells the stories of 32 schools and school districts from across the United States (grades K-12) that have implemented innovative strategies to improve the nutritional quality of foods and beverages sold outside of federal meal programs.

### **Farm to Institutions – Including Schools – Programs**

CDC has identified Farm to School Programs as an effective mechanism to improve the quality of school meals, enhance effectiveness of nutrition education, and provide opportunities for eco-literacy training of students through hands-on experiences in the outdoors. Farm to school programs support local farmers and economies, and make schools leaders of socially responsible and innovative food policy. Farm to school programs are active in at least 40 states, with over 2000 programs serving nearly 9000 schools (Farm to School, 2006). Of the farm to school programs that have been evaluated, most have demonstrated increased selection or intake of fruits and vegetables by students following the incorporation of farm produce into school salad bars, meal selections, or class-based education (Joshi & Azuma, 2008). In addition, of the five programs that also examined student dietary behavior outside of school, four found increases in the selection or intake of fruits and vegetables by the children (Joshi & Azuma, 2008).

Success Story: *Fresh to You: Rhode Island* is a farm to work initiative developed in a collaborative manner by public and private partners, including Brown University's Institute for Community Health Promotion, the Rhode Island Department of Health, and

the largest fresh fruit and vegetable distributor in Rhode Island. The program addresses many verified barriers to fruits and vegetable consumption, such as high cost, poor quality, and limited time to shop for produce. Employees at more than twenty worksites, childcare centers, schools and community agencies participate in the program.

Success Story: In Charlotte, North Carolina, CDC funding helped establish a farmers market to increase access to fresh fruits and vegetables in a community with high rates of chronic diseases. Since the market opened, 73% of residents said they are eating more fresh fruits and vegetables each day.

### **Conclusion**

In closing, I would like to thank the Committee for its leadership and commitment to the health and nutritional status of our nation's youth. Making balanced nutrition a routine part of life will take a committed, coordinated effort that will need to endure for decades to come.

Positively impacting the health of our youth offers promising prevention opportunities. We know that the young can benefit from better nutrition, as well as from other preventive efforts. While medical treatment for disease management is essential, our nation needs a better balance between treating diseases and preventing them.

Given the challenges ahead, CDC will continue to develop and evaluate policy and environmental strategies to determine effective population-level interventions that will provide a positive impact on the health of our nation's youth. We applaud recent changes in federal policy to support healthier eating; updating WIC program requirements to be more in line with the Dietary Guidelines for Americans, and the inclusion in the 2008 Farm Bill (Food, Conservation and Energy Act of 2008, Public Law 110-246) of the *Healthy Urban Food Enterprise Development Center* and the school-based *Fresh Fruit and Vegetables* Program provisions. These provisions, like others implemented through the 2008 Farm Bill, will help incentivize the consumption of fruits and vegetables. Agricultural policies like these support American families in making healthy food choices, thereby ensuring healthier diets among some of our most at-risk children.

There is much we can do to prevent the consequences of poor diet, such as obesity, disability and death, the need for long-term care, and escalating health care costs. Our youth have an urgent need for more and better prevention policies and environmental change initiatives. I look forward to working with my colleagues in the United States Department of Agriculture to further discuss policies and their impact on the public's health.

Thank you.

**Citations:**

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